

## 6. Anhang

### 6.1. Messgrößen der Gehäuse der *C. marmoreus*-Gruppe

**Tabelle 6.1** Messgrößen zur Ermittlung der Indices von *C. araneosus*

| <i>C. araneosus</i> | 1     | 2     | 3     | 4     | 5     | 6     | 7     |
|---------------------|-------|-------|-------|-------|-------|-------|-------|
| Länge (mm)          | 74,4  | 71    | 76,5  | 70,1  | 83,3  | 72,9  | 76,4  |
| MD (mm)             | 42,84 | 43,25 | 44,33 | 39,74 | 50,83 | 41,65 | 44,34 |
| Höhe MD (mm)        | 60,23 | 57,52 | 64,86 | 57,95 | 64,21 | 56,72 | 62,95 |
| Spitze (mm)         | 7,61  | 4,91  | 5,75  | 5,81  | 10,67 | 5,91  | 6,66  |
| Öffnung (mm)        | 64,76 | 64,78 | 68,20 | 62,91 | 72,63 | 64,58 | 68,83 |
| Gewicht (g)         | 62,07 | 61,96 | 66,53 | 59,2  | 88,96 | 60,59 | 70,84 |

**Tabelle 6.2** Messgrößen zur Ermittlung der Indices von *C. bandanus*

| <i>C. bandanus</i> | 1     | 2     | 3     | 4     | 5     | 6     |
|--------------------|-------|-------|-------|-------|-------|-------|
| Länge (mm)         | 78,8  | 73,1  | 64,7  | 71,2  | 50    | 72,1  |
| MD (mm)            | 42,16 | 38,85 | 37,29 | 40,55 | 27,35 | 41,70 |
| Höhe MD (mm)       | 62,40 | 59,20 | 52,59 | 54,58 | 39,40 | 61,61 |
| Spitze (mm)        | 10,02 | 6,44  | 3,61  | 6,67  | 4,95  | 3,87  |
| Öffnung (mm)       | 66,25 | 64,21 | 60,96 | 62,57 | 44,18 | 66,04 |
| Gewicht (g)        | 72,67 | 51,24 | 45,63 | 64,6  | 22,02 | 70,11 |

**Tabelle 6.3** Messgrößen zur Ermittlung der Indices von *C. marmoreus*

| <i>C. marmoreus</i> | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Länge (mm)          | 40,9  | 60,4  | 74,3  | 74,4  | 78,8  | 76,1  | 66,6  | 57,7  | 39,4  | 84,7  |
| MD (mm)             | 23,37 | 33,97 | 41,89 | 41,17 | 42,40 | 44,30 | 36,24 | 33,55 | 20,68 | 45,65 |
| Höhe MD (mm)        | 30,22 | 49,04 | 62,12 | 60,21 | 62,84 | 62,35 | 51,04 | 47,76 | 31,08 | 67,93 |
| Spitze (mm)         | 6,68  | 4,16  | 5,18  | 5,04  | 6,64  | 6,61  | 7,51  | 4,62  | 4,65  | 7,51  |
| Öffnung (mm)        | 35,32 | 56,35 | 67,61 | 66,52 | 68,05 | 68,02 | 57,42 | 52,53 | 33,82 | 73,76 |
| Gewicht (g)         | 8,3   | 40,78 | 59,54 | 55,2  | 69,28 | 79,78 | 32,16 | 37,44 | 9,32  | 80,43 |

**Tabelle 6.4.** Messgrößen zur Ermittlung der Indices von *C. nicobaricus*

| <i>C. nicobaricus</i> | 1     | 2     | 3     | 4     | 5     | 6     | 7     |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|
| Länge (mm)            | 67,9  | 81,1  | 79,2  | 82    | 72,4  | 78,1  | 66,7  |
| MD (mm)               | 38,65 | 43,31 | 45,35 | 42,64 | 39,59 | 44,83 | 37,30 |
| Höhe MD (mm)          | 52,80 | 65,16 | 63,65 | 61,88 | 58,77 | 62,48 | 54,93 |
| Spitze (mm)           | 6,76  | 8,26  | 6,00  | 10,28 | 5,23  | 7,28  | 6,72  |
| Öffnung (mm)          | 59,32 | 71,51 | 69,89 | 70,39 | 64,37 | 69,41 | 59,66 |
| Gewicht (g)           | 50,42 | 63,4  | 72,07 | 61,76 | 49,46 | 69,58 | 41,45 |

**Tabelle 6.5.** Messgrößen zur Ermittlung der Indices von *C. nigrescens*

|                      |       |       |
|----------------------|-------|-------|
| <i>C. nigrescens</i> | 1     | 2     |
| Länge (mm)           | 26,7  | 32,6  |
| MD (mm)              | 14,82 | 18,29 |
| Höhe MD (mm)         | 20,55 | 25,43 |
| Spitze (mm)          | 3,16  | 3,9   |
| Öffnung (mm)         | 23,63 | 29,03 |
| Gewicht (g)          | 2,97  | 4,04  |

**Tabelle 6.6** Messgrößen zur Ermittlung der Indices von *C. nocturnus*

|                     |       |       |       |       |       |       |       |       |       |       |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <i>C. nocturnus</i> | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    |
| Länge (mm)          | 51,5  | 61,5  | 54,6  | 52,7  | 38,1  | 39,8  | 33,8  | 31,3  | 28,6  | 46,1  |
| MD (mm)             | 26,42 | 28,65 | 27,98 | 26,65 | 19,28 | 19,40 | 17,18 | 16,47 | 13,19 | 22,30 |
| Höhe MD (mm)        | 39,86 | 43,87 | 43,00 | 39,72 | 28,91 | 29,07 | 25,41 | 22,51 | 19,38 | 36,86 |
| Spitze (mm)         | 5,08  | 9,53  | 8,04  | 8,78  | 4,12  | 6,72  | 4,78  | 5,58  | 5,51  | 5,46  |
| Öffnung (mm)        | 45,88 | 51,57 | 46,81 | 44,22 | 32,13 | 33,43 | 28,97 | 25,72 | 22,52 | 37,46 |
| Gewicht (g)         | 21,83 | 25,96 | 24,1  | 21,22 | 7,93  | 8     | 4,97  | 4,55  | 2,81  | 13,45 |

**Tabelle 6.7** Messgrößen zur Ermittlung der Indices bei *C. vidua*

|                 |       |       |       |       |       |       |
|-----------------|-------|-------|-------|-------|-------|-------|
| <i>C. vidua</i> | 1     | 2     | 3     | 4     | 5     | 6     |
| Länge (mm)      | 57,3  | 89,1  | 42,5  | 32,1  | 30,4  | 35,5  |
| MD (mm)         | 34,20 | 48,64 | 23,89 | 17,44 | 15,91 | 17,21 |
| höhe MD (mm)    | 48,51 | 68,67 | 35,94 | 26,60 | 24,89 | 26,68 |
| Spitze (mm)     | 1,13  | 9,14  | 2,93  | 2,82  | 2,61  | 4,60  |
| Öffnung (mm)    | 54,92 | 76,14 | 38,79 | 28,76 | 26,89 | 29,92 |
| Gewicht (g)     | 40,42 | 100,5 | 13,63 | 5,97  | 4,19  | 6,01  |

## 6.2 Molekulare Phylogenie

### 6.2.1 Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes

**Tabelle 6.8** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|    |                        | 1 marmoreus | 2 marmoreus1 | 3 aureus | 4 araneosus | 5 textile | 6 nigrescens | 7 pennaceus | 8 canonicus |
|----|------------------------|-------------|--------------|----------|-------------|-----------|--------------|-------------|-------------|
| 1  | <i>marmoreus</i>       | -           |              |          |             |           |              |             |             |
| 2  | <i>marmoreus1</i>      | 0,00%       | -            |          |             |           |              |             |             |
| 3  | <i>aureus</i>          | 5,98%       | 5,98%        | -        |             |           |              |             |             |
| 4  | <i>araneosus</i>       | 3,61%       | 3,61%        | 6,49%    | -           |           |              |             |             |
| 5  | <i>textile</i>         | 6,44%       | 6,44%        | 5,27%    | 6,70%       | -         |              |             |             |
| 6  | <i>nigrescens</i>      | 1,19%       | 1,19%        | 6,70%    | 4,32%       | 6,68%     | -            |             |             |
| 7  | <i>pennaceus</i>       | 8,14%       | 8,14%        | 6,91%    | 8,17%       | 7,19%     | 8,85%        | -           |             |
| 8  | <i>canonicus</i>       | 6,92%       | 6,92%        | 5,98%    | 7,19%       | 2,86%     | 7,16%        | 6,46%       | -           |
| 9  | <i>distans</i>         | 11,05%      | 11,05%       | 10,12%   | 10,62%      | 11,31%    | 10,80%       | 12,75%      | 11,55%      |
| 10 | <i>gloriamaris</i>     | 5,73%       | 5,73%        | 4,29%    | 5,99%       | 4,31%     | 5,97%        | 6,91%       | 5,02%       |
| 11 | <i>ammiralis</i>       | 6,21%       | 6,21%        | 5,26%    | 6,47%       | 3,10%     | 6,92%        | 7,65%       | 3,10%       |
| 12 | <i>aulicus</i>         | 7,19%       | 7,19%        | 6,68%    | 6,26%       | 5,77%     | 7,20%        | 6,46%       | 5,27%       |
| 13 | <i>magnificus</i>      | 6,20%       | 6,20%        | 5,73%    | 6,73%       | 7,17%     | 6,92%        | 7,39%       | 6,93%       |
| 14 | <i>bandanus</i>        | 1,43%       | 1,43%        | 6,93%    | 4,09%       | 6,92%     | 1,19%        | 8,61%       | 7,39%       |
| 15 | <i>dalli</i>           | 6,70%       | 6,70%        | 5,76%    | 7,45%       | 2,63%     | 6,94%        | 6,47%       | 1,20%       |
| 16 | <i>natalis</i>         | 6,93%       | 6,93%        | 7,19%    | 7,43%       | 6,68%     | 7,64%        | 8,86%       | 7,16%       |
| 17 | <i>nocturnus2</i>      | 0,95%       | 0,95%        | 6,46%    | 3,61%       | 6,45%     | 1,19%        | 9,09%       | 6,92%       |
| 18 | <i>nocturnus1</i>      | 1,19%       | 1,19%        | 6,70%    | 3,85%       | 6,68%     | 0,95%        | 8,85%       | 7,16%       |
| 19 | <i>vidua</i>           | 0,71%       | 0,71%        | 6,70%    | 4,33%       | 7,16%     | 1,43%        | 8,85%       | 7,16%       |
| 20 | <i>legatus</i>         | 6,69%       | 6,69%        | 3,36%    | 5,99%       | 3,81%     | 7,40%        | 5,98%       | 3,58%       |
| 21 | <i>victoriae</i>       | 6,00%       | 6,00%        | 3,59%    | 6,04%       | 4,81%     | 5,76%        | 6,45%       | 5,04%       |
| 22 | <i>omaria</i>          | 7,18%       | 7,18%        | 5,72%    | 6,26%       | 5,28%     | 7,90%        | 6,43%       | 5,74%       |
| 23 | <i>anemone</i>         | 9,11%       | 9,11%        | 8,35%    | 8,88%       | 8,85%     | 9,35%        | 10,48%      | 9,33%       |
| 24 | <i>aurisiacus</i>      | 8,60%       | 8,60%        | 7,40%    | 8,65%       | 8,37%     | 8,84%        | 8,35%       | 8,36%       |
| 25 | <i>brunneus</i>        | 8,62%       | 8,62%        | 8,88%    | 9,38%       | 10,06%    | 8,14%        | 9,12%       | 9,83%       |
| 26 | <i>burryae</i>         | 10,31%      | 10,31%       | 10,07%   | 9,86%       | 10,54%    | 10,77%       | 11,73%      | 10,30%      |
| 27 | <i>cargilei</i>        | 9,82%       | 9,82%        | 10,09%   | 9,60%       | 9,82%     | 10,30%       | 10,80%      | 9,35%       |
| 28 | <i>cedonuli</i>        | 8,17%       | 8,17%        | 9,36%    | 9,41%       | 10,32%    | 8,64%        | 10,55%      | 10,09%      |
| 29 | <i>cingulatus</i>      | 8,18%       | 8,18%        | 6,77%    | 8,24%       | 6,98%     | 8,89%        | 10,12%      | 7,49%       |
| 30 | <i>sanderi</i>         | 9,12%       | 9,12%        | 8,91%    | 8,67%       | 9,12%     | 9,60%        | 10,34%      | 9,85%       |
| 31 | <i>donnae</i>          | 9,60%       | 9,60%        | 9,87%    | 8,90%       | 9,59%     | 10,07%       | 10,81%      | 9,13%       |
| 32 | <i>daucus</i>          | 8,94%       | 8,94%        | 9,69%    | 8,70%       | 9,39%     | 9,17%        | 10,85%      | 8,92%       |
| 33 | <i>flavescens</i>      | 10,56%      | 10,56%       | 10,35%   | 10,10%      | 8,63%     | 11,03%       | 10,81%      | 8,86%       |
| 34 | <i>fontonae</i>        | 6,95%       | 6,95%        | 6,73%    | 6,97%       | 7,66%     | 7,90%        | 9,35%       | 7,67%       |
| 35 | <i>caribbaeus</i>      | 11,32%      | 11,32%       | 11,59%   | 10,85%      | 9,61%     | 11,79%       | 12,27%      | 9,85%       |
| 36 | <i>frigidus</i>        | 8,64%       | 8,64%        | 8,68%    | 9,12%       | 9,12%     | 9,60%        | 10,10%      | 9,61%       |
| 37 | <i>ermineus</i>        | 6,71%       | 6,71%        | 7,22%    | 7,44%       | 7,91%     | 7,67%        | 8,41%       | 7,67%       |
| 38 | <i>generalis</i>       | 9,86%       | 9,86%        | 10,17%   | 10,63%      | 10,60%    | 10,10%       | 11,83%      | 10,13%      |
| 39 | <i>geographus</i>      | 7,69%       | 7,69%        | 8,69%    | 8,68%       | 8,17%     | 8,65%        | 9,87%       | 9,12%       |
| 40 | <i>gladiator</i>       | 8,63%       | 8,63%        | 8,18%    | 8,18%       | 8,16%     | 9,10%        | 11,04%      | 8,64%       |
| 41 | <i>gradatulus</i>      | 8,40%       | 8,40%        | 7,96%    | 8,21%       | 9,64%     | 8,64%        | 10,61%      | 9,62%       |
| 42 | <i>jaspideus</i>       | 14,33%      | 14,33%       | 14,83%   | 14,38%      | 13,85%    | 14,32%       | 14,56%      | 14,59%      |
| 43 | <i>lindae</i>          | 8,18%       | 8,18%        | 6,77%    | 8,23%       | 6,75%     | 8,90%        | 9,89%       | 7,48%       |
| 44 | <i>litoglyphus</i>     | 8,18%       | 8,18%        | 9,81%    | 7,23%       | 9,83%     | 8,41%        | 11,24%      | 10,08%      |
| 45 | <i>mahogani</i>        | 14,92%      | 14,92%       | 15,42%   | 15,18%      | 14,90%    | 14,90%       | 15,65%      | 15,40%      |
| 46 | <i>mus</i>             | 9,15%       | 9,15%        | 9,19%    | 8,69%       | 8,66%     | 9,38%        | 11,32%      | 9,38%       |
| 47 | <i>nux</i>             | 9,36%       | 9,36%        | 8,93%    | 8,42%       | 9,84%     | 9,85%        | 10,12%      | 10,57%      |
| 48 | <i>obscurus</i>        | 6,70%       | 6,70%        | 8,39%    | 8,40%       | 7,89%     | 7,89%        | 9,83%       | 8,13%       |
| 49 | <i>patricius</i>       | 8,13%       | 8,13%        | 7,90%    | 8,16%       | 6,96%     | 8,38%        | 9,55%       | 6,70%       |
| 50 | <i>planorbis</i>       | 8,50%       | 8,50%        | 10,67%   | 9,23%       | 11,15%    | 7,78%        | 12,84%      | 12,12%      |
| 51 | <i>princeps</i>        | 8,92%       | 8,92%        | 8,70%    | 8,22%       | 9,15%     | 9,16%        | 10,84%      | 8,66%       |
| 52 | <i>purpurascens</i>    | 5,77%       | 5,77%        | 6,73%    | 6,74%       | 7,68%     | 6,01%        | 8,43%       | 7,44%       |
| 53 | <i>quercinus</i>       | 6,48%       | 6,48%        | 6,27%    | 6,48%       | 6,96%     | 7,20%        | 8,42%       | 6,47%       |
| 54 | <i>richardbinghami</i> | 8,92%       | 8,92%        | 9,42%    | 8,44%       | 9,15%     | 8,91%        | 10,63%      | 8,42%       |
| 55 | <i>stimpsoni</i>       | 8,63%       | 8,63%        | 8,17%    | 7,93%       | 7,91%     | 8,87%        | 10,56%      | 8,63%       |
| 56 | <i>tinianus</i>        | 9,57%       | 9,57%        | 8,64%    | 8,63%       | 9,80%     | 9,81%        | 10,30%      | 10,75%      |
| 57 | <i>vanhyningi</i>      | 15,23%      | 15,23%       | 14,97%   | 15,26%      | 13,74%    | 15,20%       | 14,43%      | 14,23%      |
| 58 | <i>varius</i>          | 8,68%       | 8,68%        | 8,18%    | 8,69%       | 9,63%     | 9,16%        | 9,61%       | 9,39%       |
| 59 | <i>vexillum</i>        | 11,31%      | 11,31%       | 10,12%   | 10,61%      | 11,54%    | 11,30%       | 11,55%      | 12,26%      |
| 60 | <i>villepinii</i>      | 8,87%       | 8,87%        | 8,41%    | 8,17%       | 8,15%     | 9,11%        | 10,80%      | 8,87%       |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|    |                        | 9 <i>distant</i> | 10 <i>gloriamaris</i> | 11 <i>ammiralis</i> | 12 <i>aulicus</i> | 13 <i>magnificus</i> | 14 <i>bandanus</i> | 15 <i>dalli</i> | 16 <i>natalis</i> |
|----|------------------------|------------------|-----------------------|---------------------|-------------------|----------------------|--------------------|-----------------|-------------------|
| 9  | <i>distant</i>         | -                |                       |                     |                   |                      |                    |                 |                   |
| 10 | <i>gloriamaris</i>     | 10,57%           | -                     |                     |                   |                      |                    |                 |                   |
| 11 | <i>ammiralis</i>       | 11,07%           | 5,02%                 | -                   |                   |                      |                    |                 |                   |
| 12 | <i>aulicus</i>         | 11,80%           | 6,45%                 | 6,48%               | -                 |                      |                    |                 |                   |
| 13 | <i>magnificus</i>      | 11,01%           | 6,91%                 | 6,69%               | 5,26%             | -                    |                    |                 |                   |
| 14 | <i>bandanus</i>        | 11,76%           | 6,20%                 | 6,68%               | 6,95%             | 6,67%                | -                  |                 |                   |
| 15 | <i>dalli</i>           | 11,82%           | 4,32%                 | 2,87%               | 6,02%             | 7,19%                | 7,17%              | -               |                   |
| 16 | <i>natalis</i>         | 11,80%           | 6,94%                 | 5,73%               | 8,42%             | 8,37%                | 7,40%              | 6,94%           | -                 |
| 17 | <i>nocturnus2</i>      | 11,28%           | 5,73%                 | 6,68%               | 6,71%             | 7,16%                | 1,43%              | 6,70%           | 7,40%             |
| 18 | <i>nocturnus1</i>      | 11,28%           | 5,96%                 | 6,92%               | 6,71%             | 6,92%                | 1,19%              | 6,94%           | 7,64%             |
| 19 | <i>vidua</i>           | 10,81%           | 6,45%                 | 6,92%               | 7,91%             | 6,92%                | 2,14%              | 6,94%           | 7,64%             |
| 20 | <i>legatus</i>         | 10,58%           | 3,60%                 | 4,53%               | 5,55%             | 5,99%                | 7,86%              | 4,06%           | 7,16%             |
| 21 | <i>victoriae</i>       | 11,09%           | 2,63%                 | 4,80%               | 6,24%             | 6,22%                | 5,99%              | 5,28%           | 7,21%             |
| 22 | <i>omaria</i>          | 10,83%           | 6,20%                 | 5,98%               | 5,26%             | 7,15%                | 8,13%              | 6,48%           | 6,95%             |
| 23 | <i>anemone</i>         | 12,06%           | 8,83%                 | 8,62%               | 8,86%             | 9,79%                | 9,59%              | 8,87%           | 10,06%            |
| 24 | <i>aurisiacus</i>      | 12,27%           | 7,63%                 | 8,36%               | 9,10%             | 10,04%               | 9,77%              | 8,38%           | 9,33%             |
| 25 | <i>brunneus</i>        | 11,03%           | 8,13%                 | 9,82%               | 10,58%            | 8,85%                | 9,33%              | 9,85%           | 10,53%            |
| 26 | <i>burryae</i>         | 12,71%           | 10,31%                | 10,31%              | 10,34%            | 9,81%                | 11,49%             | 10,33%          | 11,50%            |
| 27 | <i>carqilei</i>        | 12,77%           | 9,61%                 | 9,58%               | 10,12%            | 10,30%               | 11,02%             | 10,34%          | 10,53%            |
| 28 | <i>cedonuli</i>        | 12,07%           | 10,55%                | 9,61%               | 10,33%            | 9,59%                | 9,36%              | 10,59%          | 11,04%            |
| 29 | <i>cingulatus</i>      | 12,55%           | 8,66%                 | 7,24%               | 7,74%             | 7,69%                | 9,38%              | 7,98%           | 9,88%             |
| 30 | <i>sanderi</i>         | 11,86%           | 9,38%                 | 9,13%               | 9,18%             | 9,60%                | 10,32%             | 9,85%           | 10,79%            |
| 31 | <i>donnae</i>          | 12,55%           | 9,38%                 | 8,88%               | 9,42%             | 9,84%                | 10,32%             | 10,12%          | 10,07%            |
| 32 | <i>daucus</i>          | 13,14%           | 9,18%                 | 9,41%               | 9,21%             | 10,14%               | 9,42%              | 9,92%           | 10,13%            |
| 33 | <i>flavescens</i>      | 13,98%           | 9,86%                 | 9,34%               | 9,90%             | 10,55%               | 11,95%             | 9,36%           | 11,49%            |
| 34 | <i>fontonae</i>        | 13,26%           | 7,67%                 | 6,95%               | 7,23%             | 6,48%                | 7,66%              | 7,69%           | 8,86%             |
| 35 | <i>caribbaeus</i>      | 15,24%           | 11,33%                | 10,34%              | 10,64%            | 11,77%               | 12,51%             | 9,87%           | 12,50%            |
| 36 | <i>frigidus</i>        | 12,31%           | 9,38%                 | 8,16%               | 9,67%             | 9,14%                | 8,87%              | 8,91%           | 11,03%            |
| 37 | <i>ermineus</i>        | 12,09%           | 7,70%                 | 7,66%               | 7,24%             | 8,39%                | 7,91%              | 8,17%           | 9,09%             |
| 38 | <i>generalis</i>       | 13,72%           | 9,40%                 | 10,36%              | 10,17%            | 10,34%               | 11,06%             | 10,40%          | 12,53%            |
| 39 | <i>geographus</i>      | 13,29%           | 8,90%                 | 8,88%               | 8,93%             | 9,64%                | 8,88%              | 9,14%           | 10,81%            |
| 40 | <i>gladiator</i>       | 11,58%           | 8,42%                 | 7,68%               | 8,45%             | 8,12%                | 9,35%              | 8,65%           | 10,30%            |
| 41 | <i>gradatulus</i>      | 12,11%           | 8,65%                 | 8,92%               | 8,93%             | 8,43%                | 8,89%              | 9,66%           | 10,60%            |
| 42 | <i>jaspideus</i>       | 16,24%           | 15,33%                | 14,08%              | 13,82%            | 13,60%               | 14,58%             | 14,61%          | 14,56%            |
| 43 | <i>lindae</i>          | 12,82%           | 8,41%                 | 7,24%               | 7,74%             | 7,93%                | 9,38%              | 7,74%           | 9,65%             |
| 44 | <i>litoglyphus</i>     | 13,70%           | 10,28%                | 9,36%               | 9,83%             | 10,55%               | 8,65%              | 10,10%          | 10,80%            |
| 45 | <i>mahogani</i>        | 16,23%           | 15,37%                | 15,41%              | 14,67%            | 13,72%               | 15,14%             | 15,71%          | 15,14%            |
| 46 | <i>mus</i>             | 11,87%           | 9,17%                 | 8,91%               | 8,47%             | 8,16%                | 9,87%              | 9,40%           | 10,34%            |
| 47 | <i>nux</i>             | 13,07%           | 9,16%                 | 9,12%               | 9,44%             | 8,43%                | 9,61%              | 9,87%           | 10,56%            |
| 48 | <i>obscurus</i>        | 12,04%           | 9,35%                 | 7,41%               | 8,89%             | 8,15%                | 7,88%              | 8,14%           | 9,09%             |
| 49 | <i>patricius</i>       | 12,02%           | 7,89%                 | 7,19%               | 6,94%             | 8,33%                | 9,07%              | 7,20%           | 9,34%             |
| 50 | <i>planorbis</i>       | 12,86%           | 11,63%                | 11,13%              | 11,41%            | 9,92%                | 8,51%              | 12,15%          | 11,38%            |
| 51 | <i>princeps</i>        | 11,88%           | 8,69%                 | 8,19%               | 8,23%             | 8,92%                | 9,40%              | 8,93%           | 10,60%            |
| 52 | <i>purpurascens</i>    | 10,88%           | 7,21%                 | 7,19%               | 6,99%             | 7,44%                | 6,25%              | 7,44%           | 8,64%             |
| 53 | <i>quercinus</i>       | 10,59%           | 6,48%                 | 5,76%               | 7,01%             | 6,03%                | 6,95%              | 6,24%           | 7,70%             |
| 54 | <i>richardbinghami</i> | 12,58%           | 8,93%                 | 9,15%               | 8,95%             | 9,65%                | 9,64%              | 9,42%           | 9,63%             |
| 55 | <i>stimpsoni</i>       | 11,08%           | 8,65%                 | 8,15%               | 8,43%             | 9,59%                | 9,59%              | 8,65%           | 9,83%             |
| 56 | <i>tinianus</i>        | 13,22%           | 9,35%                 | 9,80%               | 8,65%             | 10,03%               | 10,06%             | 10,30%          | 10,03%            |
| 57 | <i>vanhyningi</i>      | 17,35%           | 15,44%                | 14,22%              | 14,22%            | 13,76%               | 15,45%             | 14,54%          | 15,19%            |
| 58 | <i>varius</i>          | 12,09%           | 8,64%                 | 9,38%               | 9,87%             | 9,39%                | 9,63%              | 9,63%           | 10,35%            |
| 59 | <i>vexillum</i>        | 14,93%           | 11,54%                | 11,30%              | 9,89%             | 10,08%               | 11,79%             | 12,28%          | 12,97%            |
| 60 | <i>vilipinii</i>       | 11,08%           | 8,88%                 | 8,39%               | 8,67%             | 9,82%                | 9,83%              | 8,89%           | 9,59%             |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|    |                        | 17 nocturnus2 | 18 nocturnus1 | 19 vidua | 20 legatus | 21 victoriae | 22 omaria | 23 anemone | 24 aurisiacus |
|----|------------------------|---------------|---------------|----------|------------|--------------|-----------|------------|---------------|
| 17 | <i>nocturnus2</i>      | -             |               |          |            |              |           |            |               |
| 18 | <i>nocturnus1</i>      | 0,24%         | -             |          |            |              |           |            |               |
| 19 | <i>vidua</i>           | 1,67%         | 1,91%         | -        |            |              |           |            |               |
| 20 | <i>legatus</i>         | 7,16%         | 7,40%         | 7,40%    | -          |              |           |            |               |
| 21 | <i>victoriae</i>       | 6,00%         | 5,76%         | 6,72%    | 3,85%      | -            |           |            |               |
| 22 | <i>omaria</i>          | 7,18%         | 7,42%         | 7,90%    | 5,76%      | 6,22%        | -         |            |               |
| 23 | <i>anemone</i>         | 9,59%         | 9,83%         | 8,87%    | 7,66%      | 8,61%        | 10,01%    | -          |               |
| 24 | <i>aurisiacus</i>      | 9,08%         | 9,32%         | 8,84%    | 6,68%      | 7,41%        | 8,60%     | 9,54%      | -             |
| 25 | <i>brunneus</i>        | 9,33%         | 9,09%         | 8,38%    | 8,40%      | 8,88%        | 10,54%    | 10,54%     | 10,29%        |
| 26 | <i>burryae</i>         | 10,77%        | 11,01%        | 10,06%   | 10,31%     | 10,56%       | 10,03%    | 8,11%      | 9,80%         |
| 27 | <i>cargilei</i>        | 10,07%        | 10,30%        | 9,59%    | 9,33%      | 10,36%       | 9,83%     | 9,12%      | 8,65%         |
| 28 | <i>cedonuli</i>        | 8,89%         | 9,12%         | 7,92%    | 9,84%      | 10,09%       | 9,83%     | 9,34%      | 10,54%        |
| 29 | <i>cingulatus</i>      | 8,42%         | 8,66%         | 8,66%    | 7,24%      | 7,00%        | 7,70%     | 9,16%      | 8,20%         |
| 30 | <i>sanderi</i>         | 9,60%         | 9,84%         | 8,89%    | 9,35%      | 9,64%        | 9,13%     | 7,20%      | 8,16%         |
| 31 | <i>donnae</i>          | 9,84%         | 10,08%        | 9,36%    | 9,12%      | 10,13%       | 9,84%     | 8,64%      | 8,41%         |
| 32 | <i>daucus</i>          | 9,18%         | 9,18%         | 9,19%    | 9,39%      | 9,69%        | 9,40%     | 9,40%      | 8,91%         |
| 33 | <i>flavescens</i>      | 11,03%        | 11,27%        | 10,32%   | 9,33%      | 10,85%       | 10,08%    | 9,58%      | 9,09%         |
| 34 | <i>fontonae</i>        | 7,41%         | 7,65%         | 7,67%    | 6,47%      | 7,45%        | 7,67%     | 7,46%      | 8,60%         |
| 35 | <i>caribbaeus</i>      | 11,80%        | 12,03%        | 11,08%   | 10,82%     | 12,08%       | 10,83%    | 10,31%     | 10,58%        |
| 36 | <i>frigidus</i>        | 9,36%         | 9,60%         | 9,36%    | 9,13%      | 8,45%        | 9,87%     | 8,42%      | 11,05%        |
| 37 | <i>ermineus</i>        | 7,43%         | 7,67%         | 7,44%    | 6,71%      | 7,48%        | 7,45%     | 7,22%      | 8,16%         |
| 38 | <i>generalis</i>       | 9,86%         | 10,10%        | 9,63%    | 9,87%      | 10,66%       | 9,90%     | 9,42%      | 10,36%        |
| 39 | <i>geographus</i>      | 7,69%         | 7,93%         | 8,41%    | 8,65%      | 8,93%        | 8,20%     | 9,89%      | 9,86%         |
| 40 | <i>gladiator</i>       | 9,35%         | 9,58%         | 8,39%    | 7,90%      | 8,92%        | 8,89%     | 5,77%      | 9,83%         |
| 41 | <i>gradatulus</i>      | 8,40%         | 8,64%         | 8,64%    | 7,47%      | 8,71%        | 10,36%    | 6,31%      | 9,63%         |
| 42 | <i>jaspideus</i>       | 14,83%        | 14,82%        | 14,59%   | 14,81%     | 15,09%       | 14,56%    | 15,82%     | 14,24%        |
| 43 | <i>lindae</i>          | 8,42%         | 8,66%         | 8,67%    | 7,00%      | 6,99%        | 7,70%     | 9,39%      | 8,19%         |
| 44 | <i>litoglyphus</i>     | 8,42%         | 8,65%         | 7,46%    | 9,83%      | 10,79%       | 9,81%     | 10,27%     | 11,25%        |
| 45 | <i>mahogani</i>        | 15,65%        | 15,64%        | 15,16%   | 14,90%     | 15,20%       | 15,63%    | 16,14%     | 14,63%        |
| 46 | <i>mus</i>             | 9,87%         | 10,11%        | 8,91%    | 8,66%      | 9,92%        | 9,15%     | 6,99%      | 10,08%        |
| 47 | <i>nux</i>             | 10,09%        | 9,85%         | 10,09%   | 8,88%      | 9,18%        | 10,60%    | 7,96%      | 10,10%        |
| 48 | <i>obscurus</i>        | 7,65%         | 7,89%         | 7,41%    | 8,61%      | 8,41%        | 8,88%     | 10,31%     | 10,06%        |
| 49 | <i>patricius</i>       | 8,37%         | 8,61%         | 8,37%    | 6,68%      | 7,68%        | 7,64%     | 7,85%      | 9,04%         |
| 50 | <i>planorbis</i>       | 8,74%         | 8,50%         | 8,26%    | 11,13%     | 11,17%       | 11,87%    | 10,40%     | 13,55%        |
| 51 | <i>princeps</i>        | 9,15%         | 9,39%         | 8,67%    | 7,71%      | 8,47%        | 9,39%     | 8,82%      | 9,17%         |
| 52 | <i>purpurascens</i>    | 6,25%         | 6,01%         | 6,50%    | 6,49%      | 6,50%        | 7,45%     | 6,98%      | 8,64%         |
| 53 | <i>quercinus</i>       | 6,96%         | 7,20%         | 7,19%    | 5,77%      | 6,28%        | 7,45%     | 7,97%      | 8,17%         |
| 54 | <i>richardbinghami</i> | 8,92%         | 8,92%         | 9,17%    | 9,14%      | 9,44%        | 8,93%     | 9,62%      | 8,67%         |
| 55 | <i>stimpsoni</i>       | 8,87%         | 9,11%         | 8,39%    | 8,63%      | 8,92%        | 8,39%     | 6,94%      | 7,44%         |
| 56 | <i>tinianus</i>        | 10,05%        | 10,29%        | 9,33%    | 8,84%      | 9,14%        | 8,86%     | 3,34%      | 9,35%         |
| 57 | <i>vanhyningi</i>      | 15,71%        | 15,71%        | 15,48%   | 14,71%     | 15,26%       | 14,94%    | 15,96%     | 14,41%        |
| 58 | <i>varius</i>          | 8,91%         | 9,15%         | 9,16%    | 7,96%      | 8,64%        | 9,61%     | 9,85%      | 8,90%         |
| 59 | <i>vexillum</i>        | 11,79%        | 11,55%        | 11,55%   | 11,06%     | 10,12%       | 10,33%    | 11,05%     | 11,06%        |
| 60 | <i>vilipinii</i>       | 9,11%         | 9,35%         | 8,63%    | 8,86%      | 9,16%        | 8,63%     | 7,18%      | 7,68%         |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|    |                        | 25 <i>brunneus</i> | 26 <i>burryae</i> | 27 <i>cargilei</i> | 28 <i>cedonuli</i> | 29 <i>cingulatus</i> | 30 <i>sanderi</i> | 31 <i>donnae</i> | 32 <i>daucus</i> |
|----|------------------------|--------------------|-------------------|--------------------|--------------------|----------------------|-------------------|------------------|------------------|
| 25 | <i>brunneus</i>        | -                  |                   |                    |                    |                      |                   |                  |                  |
| 26 | <i>burryae</i>         | 10,74%             | -                 |                    |                    |                      |                   |                  |                  |
| 27 | <i>cargilei</i>        | 9,10%              | 6,70%             | -                  |                    |                      |                   |                  |                  |
| 28 | <i>cedonuli</i>        | 8,84%              | 9,56%             | 8,44%              | -                  |                      |                   |                  |                  |
| 29 | <i>cingulatus</i>      | 11,51%             | 8,18%             | 8,90%              | 9,15%              | -                    |                   |                  |                  |
| 30 | <i>sanderi</i>         | 9,82%              | 4,28%             | 5,50%              | 8,66%              | 7,70%                | -                 |                  |                  |
| 31 | <i>donnae</i>          | 9,12%              | 6,70%             | 0,96%              | 8,45%              | 8,68%                | 5,51%             | -                |                  |
| 32 | <i>daucus</i>          | 9,65%              | 7,22%             | 2,65%              | 8,47%              | 7,98%                | 6,00%             | 2,64%            | -                |
| 33 | <i>flavescens</i>      | 10,77%             | 7,13%             | 6,45%              | 10,56%             | 8,65%                | 5,70%             | 6,46%            | 6,97%            |
| 34 | <i>fontonae</i>        | 9,81%              | 8,87%             | 10,29%             | 10,32%             | 8,41%                | 8,85%             | 9,84%            | 9,86%            |
| 35 | <i>caribbaeus</i>      | 11,99%             | 7,87%             | 7,90%              | 11,32%             | 9,40%                | 6,43%             | 7,91%            | 7,92%            |
| 36 | <i>frigidus</i>        | 11,96%             | 11,00%            | 12,68%             | 10,80%             | 8,39%                | 11,47%            | 12,22%           | 11,81%           |
| 37 | <i>ermineus</i>        | 11,00%             | 10,06%            | 10,04%             | 9,12%              | 8,67%                | 9,57%             | 10,07%           | 9,38%            |
| 38 | <i>generalis</i>       | 11,02%             | 9,59%             | 10,55%             | 11,09%             | 9,84%                | 8,88%             | 10,58%           | 10,11%           |
| 39 | <i>geographus</i>      | 11,49%             | 11,25%            | 11,99%             | 12,03%             | 9,14%                | 10,28%            | 12,02%           | 11,33%           |
| 40 | <i>gladiator</i>       | 10,04%             | 7,38%             | 7,62%              | 10,09%             | 9,60%                | 6,43%             | 7,16%            | 8,15%            |
| 41 | <i>gradatulus</i>      | 11,02%             | 10,10%            | 10,84%             | 10,15%             | 8,93%                | 9,85%             | 10,39%           | 10,88%           |
| 42 | <i>jaspideus</i>       | 16,47%             | 15,02%            | 14,98%             | 17,34%             | 14,53%               | 15,45%            | 14,75%           | 13,77%           |
| 43 | <i>lindae</i>          | 11,77%             | 8,19%             | 8,91%              | 9,63%              | 0,24%                | 8,19%             | 8,69%            | 8,68%            |
| 44 | <i>litoglyphus</i>     | 10,77%             | 10,51%            | 10,56%             | 10,34%             | 10,57%               | 8,64%             | 9,84%            | 9,91%            |
| 45 | <i>mahogani</i>        | 16,05%             | 16,10%            | 16,55%             | 17,15%             | 15,87%               | 16,35%            | 15,85%           | 15,13%           |
| 46 | <i>mus</i>             | 11,04%             | 8,37%             | 8,12%              | 10,84%             | 10,12%               | 6,92%             | 7,65%            | 9,10%            |
| 47 | <i>nux</i>             | 12,25%             | 12,03%            | 13,38%             | 11,79%             | 10,58%               | 12,22%            | 12,69%           | 12,04%           |
| 48 | <i>obscurus</i>        | 10,33%             | 11,04%            | 10,10%             | 10,10%             | 8,22%                | 9,16%             | 9,61%            | 9,20%            |
| 49 | <i>patricius</i>       | 9,58%              | 8,34%             | 9,11%              | 9,35%              | 6,76%                | 7,42%             | 8,63%            | 8,88%            |
| 50 | <i>planorbis</i>       | 11,86%             | 13,05%            | 12,33%             | 10,68%             | 11,38%               | 11,62%            | 11,57%           | 11,47%           |
| 51 | <i>princeps</i>        | 10,62%             | 7,20%             | 8,41%              | 8,74%              | 8,95%                | 6,03%             | 7,64%            | 8,47%            |
| 52 | <i>purpurascens</i>    | 10,35%             | 10,59%            | 11,05%             | 9,18%              | 8,47%                | 9,13%             | 10,83%           | 9,92%            |
| 53 | <i>quercinus</i>       | 10,07%             | 9,84%             | 9,87%              | 9,64%              | 8,46%                | 9,14%             | 9,16%            | 10,18%           |
| 54 | <i>richardbinghami</i> | 9,87%              | 7,69%             | 2,41%              | 8,71%              | 7,99%                | 6,25%             | 2,42%            | 0,48%            |
| 55 | <i>stimpsoni</i>       | 9,36%              | 4,28%             | 5,50%              | 8,44%              | 6,77%                | 1,19%             | 5,26%            | 5,78%            |
| 56 | <i>tinianus</i>        | 11,24%             | 8,58%             | 9,77%              | 10,33%             | 9,37%                | 7,15%             | 8,82%            | 9,60%            |
| 57 | <i>vanhyningi</i>      | 17,32%             | 15,15%            | 16,11%             | 17,97%             | 14,92%               | 15,86%            | 15,39%           | 14,42%           |
| 58 | <i>varius</i>          | 10,83%             | 11,06%            | 10,12%             | 9,42%              | 10,15%               | 10,12%            | 10,14%           | 9,72%            |
| 59 | <i>vexillum</i>        | 11,80%             | 12,29%            | 12,75%             | 11,57%             | 9,21%                | 10,62%            | 11,81%           | 12,14%           |
| 60 | <i>villepinii</i>      | 9,60%              | 4,52%             | 5,74%              | 8,68%              | 7,01%                | 1,43%             | 5,50%            | 6,02%            |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|    |                        | 33 <i>flavescens</i> | 34 <i>fontonae</i> | 35 <i>caribbaeus</i> | 36 <i>frigidus</i> | 37 <i>ermineus</i> | 38 <i>generalis</i> | 39 <i>geographus</i> | 40 <i>gladiator</i> |
|----|------------------------|----------------------|--------------------|----------------------|--------------------|--------------------|---------------------|----------------------|---------------------|
| 33 | <i>flavescens</i>      | -                    |                    |                      |                    |                    |                     |                      |                     |
| 34 | <i>fontonae</i>        | 9,54%                | -                  |                      |                    |                    |                     |                      |                     |
| 35 | <i>caribbaeus</i>      | 1,42%                | 10,30%             | -                    |                    |                    |                     |                      |                     |
| 36 | <i>frigidus</i>        | 13,36%               | 9,79%              | 14,11%               | -                  |                    |                     |                      |                     |
| 37 | <i>ermineus</i>        | 10,27%               | 7,65%              | 11,02%               | 9,55%              | -                  |                     |                      |                     |
| 38 | <i>generalis</i>       | 11,73%               | 10,05%             | 12,49%               | 11,27%             | 9,34%              | -                   |                      |                     |
| 39 | <i>geographus</i>      | 11,45%               | 7,65%              | 12,21%               | 10,51%             | 9,80%              | 11,03%              | -                    |                     |
| 40 | <i>gladiator</i>       | 9,04%                | 8,11%              | 9,76%                | 9,80%              | 9,57%              | 9,56%               | 10,75%               | -                   |
| 41 | <i>gradatulus</i>      | 10,80%               | 7,46%              | 12,01%               | 10,59%             | 8,17%              | 8,39%               | 8,89%                | 9,37%               |
| 42 | <i>jaspideus</i>       | 15,19%               | 15,44%             | 16,46%               | 14,78%             | 15,96%             | 14,22%              | 16,55%               | 14,19%              |
| 43 | <i>lindae</i>          | 8,18%                | 8,64%              | 9,14%                | 8,43%              | 8,65%              | 9,84%               | 9,16%                | 9,85%               |
| 44 | <i>litoglyphus</i>     | 10,31%               | 9,13%              | 11,05%               | 11,51%             | 11,51%             | 9,60%               | 12,28%               | 7,22%               |
| 45 | <i>mahogani</i>        | 16,06%               | 16,31%             | 17,31%               | 15,32%             | 16,31%             | 15,58%              | 17,61%               | 15,80%              |
| 46 | <i>mus</i>             | 9,76%                | 8,84%              | 10,71%               | 10,56%             | 10,32%             | 9,60%               | 11,51%               | 1,67%               |
| 47 | <i>nux</i>             | 12,92%               | 7,17%              | 13,67%               | 8,85%              | 7,67%              | 11,51%              | 10,78%               | 10,28%              |
| 48 | <i>obscurus</i>        | 10,33%               | 7,70%              | 11,08%               | 9,62%              | 9,84%              | 12,06%              | 7,46%                | 10,10%              |
| 49 | <i>patricius</i>       | 9,53%                | 7,65%              | 10,05%               | 9,87%              | 7,92%              | 7,91%               | 9,61%                | 7,67%               |
| 50 | <i>planorbis</i>       | 13,07%               | 11,14%             | 13,83%               | 14,04%             | 11,40%             | 11,67%              | 11,63%               | 10,68%              |
| 51 | <i>princeps</i>        | 9,36%                | 8,44%              | 10,11%               | 10,35%             | 7,74%              | 8,94%               | 10,87%               | 6,26%               |
| 52 | <i>purpurascens</i>    | 10,82%               | 7,20%              | 11,58%               | 8,67%              | 2,15%              | 9,88%               | 9,38%                | 7,95%               |
| 53 | <i>quercinus</i>       | 9,35%                | 7,20%              | 10,57%               | 7,90%              | 9,11%              | 11,06%              | 8,64%                | 7,69%               |
| 54 | <i>richardbinghami</i> | 7,44%                | 9,61%              | 8,40%                | 12,51%             | 9,83%              | 10,36%              | 11,80%               | 8,17%               |
| 55 | <i>stimpsoni</i>       | 4,77%                | 8,15%              | 5,51%                | 11,52%             | 9,35%              | 8,64%               | 10,57%               | 5,75%               |
| 56 | <i>tinianus</i>        | 10,24%               | 8,85%              | 10,98%               | 10,78%             | 8,36%              | 10,30%              | 11,26%               | 6,45%               |
| 57 | <i>vanhyningi</i>      | 15,32%               | 15,83%             | 16,58%               | 14,89%             | 16,12%             | 14,61%              | 16,67%               | 15,06%              |
| 58 | <i>varius</i>          | 10,85%               | 8,91%              | 12,31%               | 11,79%             | 8,19%              | 9,90%               | 11,36%               | 11,34%              |
| 59 | <i>vexillum</i>        | 13,01%               | 10,37%             | 13,76%               | 11,56%             | 10,83%             | 11,59%              | 11,36%               | 10,35%              |
| 60 | <i>villepinii</i>      | 5,00%                | 8,40%              | 5,74%                | 11,76%             | 9,59%              | 8,89%               | 10,81%               | 5,99%               |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|    |                        | 41 <i>gradatulus</i> | 42 <i>jaspideus</i> | 43 <i>lindae</i> | 44 <i>litoglyphus</i> | 45 <i>mahogani</i> | 46 <i>mus</i> | 47 <i>nux</i> | 48 <i>obscurus</i> | 49 <i>patricius</i> |
|----|------------------------|----------------------|---------------------|------------------|-----------------------|--------------------|---------------|---------------|--------------------|---------------------|
| 41 | <i>gradatulus</i>      | -                    |                     |                  |                       |                    |               |               |                    |                     |
| 42 | <i>jaspideus</i>       | 14,95%               | -                   |                  |                       |                    |               |               |                    |                     |
| 43 | <i>lindae</i>          | 8,92%                | 14,48%              | -                |                       |                    |               |               |                    |                     |
| 44 | <i>litoglyphus</i>     | 11,31%               | 14,72%              | 10,62%           | -                     |                    |               |               |                    |                     |
| 45 | <i>mahogani</i>        | 15,81%               | 5,71%               | 15,86%           | 16,06%                | -                  |               |               |                    |                     |
| 46 | <i>mus</i>             | 10,33%               | 14,19%              | 10,34%           | 7,97%                 | 15,07%             | -             |               |                    |                     |
| 47 | <i>nux</i>             | 9,18%                | 15,76%              | 10,60%           | 11,06%                | 15,63%             | 11,03%        | -             |                    |                     |
| 48 | <i>obscurus</i>        | 9,41%                | 16,13%              | 8,47%            | 11,52%                | 17,19%             | 10,63%        | 10,83%        | -                  |                     |
| 49 | <i>patricius</i>       | 8,17%                | 14,79%              | 7,23%            | 8,88%                 | 15,39%             | 7,43%         | 9,88%         | 9,12%              | -                   |
| 50 | <i>planorbis</i>       | 9,99%                | 15,75%              | 11,44%           | 10,36%                | 16,55%             | 10,47%        | 12,09%        | 11,35%             | 10,19%              |
| 51 | <i>princeps</i>        | 7,53%                | 14,90%              | 8,75%            | 9,62%                 | 14,95%             | 7,23%         | 9,63%         | 10,37%             | 6,24%               |
| 52 | <i>purpurascens</i>    | 8,69%                | 16,05%              | 8,23%            | 10,32%                | 16,16%             | 8,21%         | 7,70%         | 9,13%              | 6,97%               |
| 53 | <i>quercinus</i>       | 7,97%                | 14,87%              | 8,48%            | 11,29%                | 14,43%             | 7,98%         | 9,40%         | 8,41%              | 7,21%               |
| 54 | <i>richardbinghami</i> | 11,31%               | 13,79%              | 8,47%            | 10,10%                | 14,63%             | 8,42%         | 11,57%        | 9,64%              | 8,17%               |
| 55 | <i>stimpsoni</i>       | 9,39%                | 14,32%              | 7,02%            | 8,38%                 | 15,39%             | 6,00%         | 11,52%        | 8,88%              | 6,45%               |
| 56 | <i>tinianus</i>        | 7,69%                | 15,74%              | 9,16%            | 9,80%                 | 15,56%             | 6,23%         | 9,36%         | 11,95%             | 7,86%               |
| 57 | <i>vanhyningi</i>      | 15,35%               | 2,49%               | 14,87%           | 15,35%                | 4,94%              | 15,06%        | 16,13%        | 17,26%             | 15,17%              |
| 58 | <i>varius</i>          | 9,19%                | 13,05%              | 9,93%            | 9,56%                 | 12,92%             | 11,86%        | 10,86%        | 10,84%             | 9,38%               |
| 59 | <i>vexillum</i>        | 9,45%                | 16,42%              | 9,44%            | 11,97%                | 17,20%             | 10,39%        | 11,53%        | 12,00%             | 11,04%              |
| 60 | <i>villepinii</i>      | 9,63%                | 14,57%              | 7,26%            | 8,62%                 | 15,63%             | 6,24%         | 11,77%        | 9,12%              | 6,69%               |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|    |                        | 50 <i>planorbis</i> | 51 <i>princeps</i> | 52 <i>purpurascens</i> | 53 <i>quercinus</i> | 54 <i>richardbinghami</i> | 55 <i>stimpsoni</i> | 56 <i>tinianus</i> |
|----|------------------------|---------------------|--------------------|------------------------|---------------------|---------------------------|---------------------|--------------------|
| 50 | <i>planorbis</i>       | -                   |                    |                        |                     |                           |                     |                    |
| 51 | <i>princeps</i>        | 10,65%              | -                  |                        |                     |                           |                     |                    |
| 52 | <i>purpurascens</i>    | 9,91%               | 7,94%              | -                      |                     |                           |                     |                    |
| 53 | <i>quercinus</i>       | 11,62%              | 7,71%              | 8,16%                  | -                   |                           |                     |                    |
| 54 | <i>richardbinghami</i> | 11,87%              | 8,90%              | 10,08%                 | 10,09%              | -                         |                     |                    |
| 55 | <i>stimpsoni</i>       | 11,09%              | 6,20%              | 8,85%                  | 8,38%               | 5,50%                     | -                   |                    |
| 56 | <i>tinianus</i>        | 11,57%              | 5,96%              | 8,13%                  | 9,09%               | 9,56%                     | 6,65%               | -                  |
| 57 | <i>vanhyningi</i>      | 16,63%              | 15,29%             | 16,50%                 | 15,01%              | 14,19%                    | 14,71%              | 15,89%             |
| 58 | <i>varius</i>          | 10,38%              | 8,94%              | 8,41%                  | 10,61%              | 10,14%                    | 10,10%              | 10,55%             |
| 59 | <i>vexillum</i>        | 13,46%              | 11,06%             | 10,78%                 | 11,32%              | 12,75%                    | 11,01%              | 10,53%             |
| 60 | <i>villepinii</i>      | 11,33%              | 6,44%              | 9,10%                  | 8,61%               | 5,74%                     | 0,24%               | 6,88%              |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|    |                   | 57 <i>vanhyningi</i> | 58 <i>varius</i> | 59 <i>vexillum</i> | 60 <i>villepinii</i> |
|----|-------------------|----------------------|------------------|--------------------|----------------------|
| 57 | <i>vanhyningi</i> | -                    |                  |                    |                      |
| 58 | <i>varius</i>     | 13,98%               | -                |                    |                      |
| 59 | <i>vexillum</i>   | 16,54%               | 12,51%           | -                  |                      |
| 60 | <i>villepinii</i> | 14,96%               | 10,34%           | 11,25%             | -                    |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                       | 1 <i>marmoreus</i> | 2 <i>marmoreus</i> 1 | 3 <i>aureus</i> | 4 <i>araneosus</i> | 5 <i>texile</i> | 6 <i>nigrescens</i> | 7 <i>pennaceus</i> | 8 <i>canonicus</i> |
|-----|-----------------------|--------------------|----------------------|-----------------|--------------------|-----------------|---------------------|--------------------|--------------------|
| 61  | <i>virgo</i>          | 9,33%              | 9,33%                | 7,95%           | 8,90%              | 8,87%           | 9,56%               | 9,86%              | 9,12%              |
| 62  | <i>dorreensis</i>     | 9,45%              | 9,45%                | 9,41%           | 9,24%              | 8,48%           | 10,17%              | 9,16%              | 9,93%              |
| 63  | <i>infrenatus</i>     | 10,10%             | 10,10%               | 10,39%          | 8,73%              | 10,89%          | 10,35%              | 12,09%             | 11,12%             |
| 64  | <i>pertusus</i>       | 11,79%             | 11,79%               | 10,10%          | 10,62%             | 10,82%          | 11,79%              | 11,75%             | 11,08%             |
| 65  | <i>nanus</i>          | 8,67%              | 8,67%                | 8,68%           | 7,96%              | 9,15%           | 9,39%               | 10,87%             | 10,11%             |
| 66  | <i>sanguinolentus</i> | 11,24%             | 11,24%               | 11,30%          | 11,07%             | 9,12%           | 11,95%              | 13,46%             | 10,32%             |
| 67  | <i>tessulatus</i>     | 7,92%              | 7,92%                | 6,26%           | 7,95%              | 5,76%           | 8,64%               | 8,19%              | 8,16%              |
| 68  | <i>arenatus</i>       | 7,46%              | 7,46%                | 6,02%           | 6,05%              | 7,47%           | 8,18%               | 9,61%              | 8,19%              |
| 69  | <i>anemone</i> 2      | 8,65%              | 8,65%                | 7,23%           | 8,44%              | 7,69%           | 8,89%               | 10,59%             | 9,13%              |
| 70  | <i>mustelinus</i>     | 11,61%             | 11,61%               | 10,89%          | 11,15%             | 12,09%          | 11,61%              | 11,59%             | 12,33%             |
| 71  | <i>miles</i>          | 11,35%             | 11,35%               | 10,88%          | 11,12%             | 11,81%          | 11,58%              | 12,52%             | 12,08%             |
| 72  | <i>rattus</i>         | 11,13%             | 11,13%               | 11,13%          | 10,43%             | 11,13%          | 11,12%              | 12,32%             | 12,10%             |
| 73  | <i>ximenes</i>        | 15,65%             | 15,65%               | 15,67%          | 15,43%             | 15,64%          | 15,61%              | 15,63%             | 16,15%             |
| 74  | <i>verrucosus</i>     | 16,22%             | 16,22%               | 16,24%          | 16,26%             | 15,48%          | 16,19%              | 14,94%             | 15,97%             |
| 75  | <i>tabidus</i>        | 9,14%              | 9,14%                | 8,69%           | 8,70%              | 8,43%           | 9,62%               | 11,57%             | 9,16%              |
| 76  | <i>sponsalis</i>      | 8,65%              | 8,65%                | 7,95%           | 7,45%              | 8,89%           | 8,89%               | 9,42%              | 9,85%              |
| 77  | <i>lorenzianus</i>    | 8,42%              | 8,42%                | 8,68%           | 7,96%              | 8,90%           | 9,14%               | 11,33%             | 8,66%              |
| 78  | <i>recurvus</i>       | 7,92%              | 7,92%                | 8,17%           | 7,70%              | 7,68%           | 7,68%               | 9,10%              | 7,93%              |
| 79  | <i>orion</i>          | 8,17%              | 8,17%                | 9,39%           | 8,43%              | 9,37%           | 8,65%               | 10,83%             | 9,14%              |
| 80  | <i>granarius</i>      | 8,45%              | 8,45%                | 9,19%           | 8,74%              | 9,90%           | 8,69%               | 10,63%             | 9,66%              |
| 81  | <i>fergusoni</i>      | 9,10%              | 9,10%                | 9,56%           | 7,43%              | 9,33%           | 8,86%               | 10,02%             | 8,62%              |
| 82  | <i>diadema</i>        | 11,11%             | 11,11%               | 12,07%          | 11,42%             | 11,37%          | 12,06%              | 13,28%             | 11,87%             |
| 83  | <i>centurio</i>       | 9,83%              | 9,83%                | 9,62%           | 9,13%              | 10,07%          | 9,59%               | 10,32%             | 10,07%             |
| 84  | <i>violaceus</i>      | 9,59%              | 9,59%                | 9,39%           | 9,39%              | 9,12%           | 10,79%              | 10,59%             | 9,38%              |
| 85  | <i>puncticulatus</i>  | 16,36%             | 16,36%               | 16,60%          | 17,62%             | 16,59%          | 16,33%              | 16,60%             | 17,09%             |
| 86  | <i>poormani</i>       | 9,81%              | 9,81%                | 9,35%           | 9,12%              | 9,10%           | 9,57%               | 10,31%             | 9,34%              |
| 87  | <i>perplexus</i>      | 15,62%             | 15,62%               | 15,37%          | 16,38%             | 15,13%          | 15,59%              | 15,61%             | 15,38%             |
| 88  | <i>nussatella</i>     | 6,51%              | 6,51%                | 7,27%           | 7,02%              | 6,76%           | 7,23%               | 8,70%              | 7,73%              |
| 89  | <i>capitaneus</i>     | 10,41%             | 10,41%               | 9,93%           | 10,40%             | 11,12%          | 9,93%               | 11,60%             | 11,62%             |
| 90  | <i>carinatus</i>      | 6,47%              | 6,47%                | 7,23%           | 7,47%              | 7,92%           | 6,71%               | 8,92%              | 7,93%              |
| 91  | <i>muriculatus</i>    | 11,30%             | 11,30%               | 10,63%          | 10,34%             | 9,87%           | 12,25%              | 11,35%             | 9,64%              |
| 92  | <i>imperialis</i>     | 11,51%             | 11,51%               | 12,99%          | 11,33%             | 13,21%          | 11,75%              | 12,24%             | 12,74%             |
| 93  | <i>striatellus</i>    | 9,89%              | 9,89%                | 11,32%          | 9,42%              | 11,57%          | 9,41%               | 12,27%             | 11,58%             |
| 94  | <i>striatus</i>       | 7,24%              | 7,24%                | 6,78%           | 7,75%              | 7,24%           | 7,96%               | 9,45%              | 8,46%              |
| 95  | <i>vulpinus</i>       | 7,77%              | 7,77%                | 10,17%          | 8,01%              | 10,18%          | 7,05%               | 11,61%             | 10,43%             |
| 96  | <i>cuneolus</i>       | 6,49%              | 6,49%                | 6,02%           | 6,28%              | 6,97%           | 7,21%               | 8,91%              | 7,21%              |
| 97  | <i>bartschi</i>       | 7,96%              | 7,96%                | 7,51%           | 8,97%              | 8,92%           | 7,73%               | 7,52%              | 8,46%              |
| 98  | <i>ateralbus</i>      | 8,17%              | 8,17%                | 6,99%           | 8,20%              | 7,45%           | 8,89%               | 9,89%              | 8,42%              |
| 99  | <i>arcuatus</i>       | 15,63%             | 15,63%               | 17,17%          | 16,17%             | 16,65%          | 15,61%              | 17,59%             | 16,91%             |
| 100 | <i>lineolatus</i>     | 8,49%              | 8,49%                | 8,74%           | 8,27%              | 9,21%           | 9,21%               | 10,67%             | 8,50%              |
| 101 | <i>catus</i>          | 6,94%              | 6,94%                | 7,44%           | 8,42%              | 8,14%           | 7,65%               | 9,61%              | 7,91%              |
| 102 | <i>compressus</i>     | 9,62%              | 9,62%                | 8,44%           | 8,91%              | 9,14%           | 9,85%               | 10,36%             | 9,86%              |
| 103 | <i>tenuistriatus</i>  | 10,10%             | 10,10%               | 11,31%          | 10,85%             | 12,03%          | 9,86%               | 13,24%             | 11,06%             |
| 104 | <i>episcopatus</i>    | 6,25%              | 6,25%                | 6,25%           | 7,00%              | 7,48%           | 6,97%               | 7,67%              | 7,45%              |
| 105 | <i>memiae</i>         | 15,45%             | 15,45%               | 15,20%          | 14,72%             | 14,96%          | 15,18%              | 15,64%             | 15,46%             |
| 106 | <i>tribblei</i>       | 10,49%             | 10,49%               | 9,53%           | 9,55%              | 9,52%           | 10,50%              | 12,00%             | 9,51%              |
| 107 | <i>coffae</i>         | 9,83%              | 9,83%                | 10,56%          | 10,57%             | 11,27%          | 9,83%               | 12,73%             | 10,31%             |
| 108 | <i>magus</i>          | 6,23%              | 6,23%                | 7,47%           | 7,23%              | 7,69%           | 6,47%               | 9,16%              | 8,18%              |
| 109 | <i>corallinus</i>     | 7,92%              | 7,92%                | 7,95%           | 7,45%              | 8,64%           | 7,92%               | 9,14%              | 8,16%              |
| 110 | <i>monachus</i>       | 6,04%              | 6,04%                | 6,77%           | 6,06%              | 6,78%           | 6,77%               | 7,50%              | 6,52%              |
| 111 | <i>californicus</i>   | 13,40%             | 13,40%               | 14,19%          | 13,91%             | 15,14%          | 13,39%              | 14,18%             | 14,88%             |
| 112 | <i>proximus</i>       | 7,91%              | 7,91%                | 7,21%           | 7,48%              | 8,90%           | 8,14%               | 10,08%             | 9,14%              |
| 113 | <i>parvulus</i>       | 8,68%              | 8,68%                | 7,96%           | 8,70%              | 6,99%           | 8,45%               | 9,41%              | 6,99%              |
| 114 | <i>musicus</i>        | 10,27%             | 10,27%               | 10,06%          | 10,53%             | 10,04%          | 10,99%              | 10,80%             | 11,48%             |
| 115 | <i>miliaris</i>       | 8,48%              | 8,48%                | 8,47%           | 9,46%              | 8,73%           | 9,68%               | 9,66%              | 9,46%              |
| 116 | <i>lividus</i>        | 11,28%             | 11,28%               | 10,85%          | 10,87%             | 9,63%           | 12,00%              | 13,26%             | 10,36%             |
| 117 | <i>bullatus</i>       | 9,40%              | 9,40%                | 8,71%           | 10,41%             | 9,40%           | 9,64%               | 11,84%             | 9,88%              |
| 118 | <i>coronatus</i>      | 9,66%              | 9,66%                | 9,20%           | 9,44%              | 9,14%           | 10,38%              | 9,15%              | 9,43%              |
| 119 | <i>circumactus</i>    | 7,25%              | 7,25%                | 7,02%           | 7,78%              | 8,47%           | 7,47%               | 8,45%              | 7,77%              |
| 120 | <i>cinereus</i>       | 7,73%              | 7,73%                | 8,00%           | 6,80%              | 8,48%           | 7,96%               | 9,91%              | 8,24%              |
| 121 | <i>chaldeus</i>       | 9,65%              | 9,65%                | 9,15%           | 9,19%              | 9,17%           | 10,38%              | 9,63%              | 9,17%              |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                       | 9 <i>distan</i> | 10 <i>gloriamaris</i> | 11 <i>ammiralis</i> | 12 <i>alucius</i> | 13 <i>magnificus</i> | 14 <i>bandanus</i> | 15 <i>dalli</i> | 16 <i>natalis</i> |
|-----|-----------------------|-----------------|-----------------------|---------------------|-------------------|----------------------|--------------------|-----------------|-------------------|
| 61  | <i>virgo</i>          | 12,21%          | 8,88%                 | 8,40%               | 8,46%             | 8,16%                | 8,83%              | 8,41%           | 10,09%            |
| 62  | <i>dorreensis</i>     | 14,02%          | 9,40%                 | 8,72%               | 9,44%             | 7,50%                | 9,43%              | 9,46%           | 9,21%             |
| 63  | <i>infrenatus</i>     | 13,78%          | 10,85%                | 10,40%              | 9,93%             | 10,62%               | 10,59%             | 11,16%          | 12,32%            |
| 64  | <i>pertusus</i>       | 13,99%          | 10,81%                | 10,58%              | 9,86%             | 11,30%               | 12,27%             | 11,09%          | 12,74%            |
| 65  | <i>nanus</i>          | 13,07%          | 9,89%                 | 9,38%               | 9,92%             | 9,89%                | 9,15%              | 9,89%           | 10,83%            |
| 66  | <i>sanguinolentus</i> | 13,69%          | 10,80%                | 10,08%              | 10,38%            | 9,80%                | 11,72%             | 10,58%          | 11,99%            |
| 67  | <i>tessulatus</i>     | 12,27%          | 7,70%                 | 7,43%               | 7,26%             | 8,65%                | 8,88%              | 7,93%           | 8,64%             |
| 68  | <i>arenatus</i>       | 12,76%          | 6,97%                 | 6,98%               | 6,99%             | 7,20%                | 7,94%              | 8,20%           | 8,42%             |
| 69  | <i>anemone2</i>       | 12,32%          | 7,95%                 | 7,68%               | 8,47%             | 8,41%                | 9,14%              | 8,43%           | 9,13%             |
| 70  | <i>mustelinus</i>     | 14,52%          | 11,60%                | 11,60%              | 10,91%            | 10,62%               | 12,10%             | 12,35%          | 12,33%            |
| 71  | <i>miles</i>          | 15,23%          | 11,83%                | 10,38%              | 10,41%            | 11,10%               | 12,06%             | 12,10%          | 12,54%            |
| 72  | <i>rattus</i>         | 13,80%          | 12,08%                | 11,37%              | 11,14%            | 12,34%               | 11,61%             | 12,36%          | 12,58%            |
| 73  | <i>ximenes</i>        | 16,45%          | 15,60%                | 15,90%              | 15,16%            | 13,71%               | 15,87%             | 16,43%          | 16,14%            |
| 74  | <i>verrucosus</i>     | 17,05%          | 16,19%                | 16,22%              | 15,25%            | 14,76%               | 16,94%             | 16,26%          | 16,47%            |
| 75  | <i>tabidus</i>        | 12,09%          | 8,94%                 | 8,19%               | 8,49%             | 8,15%                | 9,87%              | 9,17%           | 10,57%            |
| 76  | <i>sponsalis</i>      | 12,33%          | 8,19%                 | 8,64%               | 8,47%             | 7,95%                | 8,66%              | 9,15%           | 9,84%             |
| 77  | <i>lorenzianus</i>    | 12,28%          | 8,68%                 | 9,38%               | 8,21%             | 8,19%                | 9,38%              | 9,40%           | 9,86%             |
| 78  | <i>recurvus</i>       | 10,84%          | 8,15%                 | 7,44%               | 7,23%             | 8,14%                | 8,40%              | 8,43%           | 9,12%             |
| 79  | <i>orion</i>          | 10,37%          | 9,40%                 | 9,61%               | 9,91%             | 10,32%               | 9,37%              | 9,64%           | 9,60%             |
| 80  | <i>granarius</i>      | 11,85%          | 9,90%                 | 8,71%               | 9,93%             | 9,19%                | 8,93%              | 9,67%           | 9,68%             |
| 81  | <i>fergusoni</i>      | 12,00%          | 9,32%                 | 8,62%               | 7,92%             | 8,82%                | 9,11%              | 9,35%           | 10,54%            |
| 82  | <i>diadema</i>        | 13,53%          | 10,58%                | 10,42%              | 12,10%            | 10,37%               | 11,82%             | 11,65%          | 12,36%            |
| 83  | <i>centurio</i>       | 13,24%          | 9,85%                 | 10,06%              | 8,92%             | 9,82%                | 10,07%             | 9,62%           | 11,26%            |
| 84  | <i>violaceus</i>      | 12,99%          | 10,34%                | 7,67%               | 9,66%             | 9,60%                | 10,55%             | 8,67%           | 11,05%            |
| 85  | <i>puncticulatus</i>  | 18,39%          | 17,32%                | 16,84%              | 17,10%            | 15,65%               | 17,07%             | 17,39%          | 16,60%            |
| 86  | <i>poormani</i>       | 11,33%          | 9,83%                 | 9,08%               | 8,92%             | 9,82%                | 10,30%             | 9,84%           | 10,27%            |
| 87  | <i>perplexus</i>      | 17,40%          | 15,59%                | 14,88%              | 16,13%            | 13,93%               | 15,84%             | 15,67%          | 15,86%            |
| 88  | <i>nussatella</i>     | 11,87%          | 7,74%                 | 7,24%               | 8,03%             | 8,71%                | 7,47%              | 7,49%           | 8,18%             |
| 89  | <i>capitaneus</i>     | 14,51%          | 10,16%                | 10,15%              | 10,44%            | 10,37%               | 10,42%             | 11,15%          | 11,85%            |
| 90  | <i>carinatus</i>      | 12,07%          | 7,95%                 | 7,68%               | 8,21%             | 8,19%                | 6,93%              | 7,95%           | 8,16%             |
| 91  | <i>muriculatus</i>    | 12,53%          | 10,33%                | 8,43%               | 9,95%             | 8,67%                | 12,02%             | 10,14%          | 10,59%            |
| 92  | <i>imperialis</i>     | 15,16%          | 12,47%                | 12,24%              | 12,30%            | 12,00%               | 11,97%             | 13,25%          | 12,23%            |
| 93  | <i>striatellus</i>    | 11,82%          | 11,32%                | 11,57%              | 11,36%            | 10,80%               | 10,62%             | 11,61%          | 11,33%            |
| 94  | <i>striatus</i>       | 12,84%          | 6,76%                 | 7,26%               | 8,01%             | 8,46%                | 7,71%              | 8,48%           | 9,16%             |
| 95  | <i>vulpinus</i>       | 12,11%          | 10,41%                | 9,68%               | 10,43%            | 8,95%                | 7,77%              | 10,20%          | 11,37%            |
| 96  | <i>cuneolus</i>       | 12,81%          | 6,97%                 | 6,50%               | 6,54%             | 6,50%                | 6,97%              | 7,22%           | 8,65%             |
| 97  | <i>bartschi</i>       | 10,86%          | 7,00%                 | 8,45%               | 9,74%             | 7,75%                | 8,93%              | 8,49%           | 9,63%             |
| 98  | <i>ateralbus</i>      | 13,27%          | 7,70%                 | 7,21%               | 7,49%             | 7,47%                | 8,65%              | 8,19%           | 9,63%             |
| 99  | <i>arcuatus</i>       | 17,86%          | 17,05%                | 16,42%              | 16,90%            | 15,10%               | 15,86%             | 17,21%          | 17,12%            |
| 100 | <i>lineolatus</i>     | 11,68%          | 8,74%                 | 7,99%               | 8,29%             | 8,47%                | 9,45%              | 8,75%           | 10,42%            |
| 101 | <i>catus</i>          | 12,05%          | 8,64%                 | 7,66%               | 8,67%             | 9,36%                | 7,88%              | 8,16%           | 8,37%             |
| 102 | <i>compressus</i>     | 12,14%          | 8,93%                 | 9,13%               | 8,97%             | 10,09%               | 10,10%             | 9,40%           | 9,85%             |
| 103 | <i>tenuistriatus</i>  | 13,33%          | 11,57%                | 10,58%              | 10,15%            | 11,54%               | 10,35%             | 10,61%          | 12,51%            |
| 104 | <i>episcopatus</i>    | 11,58%          | 7,18%                 | 7,21%               | 6,01%             | 0,72%                | 6,72%              | 7,71%           | 7,72%             |
| 105 | <i>memiae</i>         | 16,76%          | 15,92%                | 14,71%              | 14,22%            | 13,47%               | 15,43%             | 15,75%          | 15,43%            |
| 106 | <i>tribblei</i>       | 11,51%          | 10,05%                | 9,27%               | 10,04%            | 10,49%               | 11,00%             | 9,78%           | 10,74%            |
| 107 | <i>coffae</i>         | 13,49%          | 10,82%                | 9,59%               | 9,89%             | 10,76%               | 10,32%             | 9,86%           | 11,74%            |
| 108 | <i>magus</i>          | 12,06%          | 7,71%                 | 7,45%               | 8,46%             | 8,19%                | 6,70%              | 8,19%           | 7,68%             |
| 109 | <i>corallinus</i>     | 10,67%          | 7,71%                 | 8,15%               | 7,02%             | 8,40%                | 8,41%              | 8,43%           | 8,88%             |
| 110 | <i>monachus</i>       | 11,58%          | 6,51%                 | 7,02%               | 7,03%             | 6,04%                | 7,49%              | 7,03%           | 7,74%             |
| 111 | <i>californicus</i>   | 14,43%          | 14,58%                | 14,65%              | 14,44%            | 12,44%               | 13,65%             | 15,42%          | 13,66%            |
| 112 | <i>proximus</i>       | 13,47%          | 8,63%                 | 8,41%               | 7,95%             | 8,63%                | 8,37%              | 9,15%           | 10,56%            |
| 113 | <i>parvulus</i>       | 11,64%          | 7,24%                 | 7,47%               | 7,26%             | 8,18%                | 8,69%              | 7,25%           | 9,63%             |
| 114 | <i>musicus</i>        | 14,43%          | 9,59%                 | 10,04%              | 11,06%            | 10,53%               | 11,24%             | 10,79%          | 10,99%            |
| 115 | <i>miliaris</i>       | 13,52%          | 9,39%                 | 8,72%               | 9,45%             | 8,47%                | 8,94%              | 9,47%           | 10,44%            |
| 116 | <i>lividus</i>        | 13,47%          | 10,82%                | 10,11%              | 10,39%            | 9,58%                | 11,75%             | 10,61%          | 12,03%            |
| 117 | <i>bullatus</i>       | 14,51%          | 10,87%                | 10,36%              | 9,46%             | 10,87%               | 9,88%              | 10,39%          | 10,86%            |
| 118 | <i>coronatus</i>      | 14,32%          | 9,65%                 | 9,41%               | 9,44%             | 9,67%                | 10,40%             | 9,44%           | 10,88%            |
| 119 | <i>circumactus</i>    | 11,37%          | 7,95%                 | 8,00%               | 7,50%             | 6,52%                | 8,20%              | 8,27%           | 8,71%             |
| 120 | <i>cinereus</i>       | 12,53%          | 7,72%                 | 7,75%               | 7,52%             | 7,71%                | 8,20%              | 8,49%           | 9,69%             |
| 121 | <i>chaldeus</i>       | 13,31%          | 9,58%                 | 9,40%               | 9,65%             | 8,92%                | 10,13%             | 8,70%           | 10,63%            |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                | 17 nocturnus2 | 18 nocturnus1 | 19 vidua | 20 legatus | 21 victoriae | 22 omaria | 23 anemone | 24 aurisiacus |
|-----|----------------|---------------|---------------|----------|------------|--------------|-----------|------------|---------------|
| 61  | virgo          | 9,80%         | 9,56%         | 10,04%   | 8,39%      | 8,20%        | 8,90%     | 9,38%      | 10,58%        |
| 62  | dorrensensis   | 10,42%        | 10,17%        | 10,17%   | 9,21%      | 9,18%        | 10,13%    | 11,80%     | 10,13%        |
| 63  | infrenatus     | 9,62%         | 9,87%         | 10,35%   | 9,42%      | 11,16%       | 10,41%    | 9,47%      | 11,14%        |
| 64  | pertusus       | 11,79%        | 12,03%        | 11,31%   | 10,35%     | 10,36%       | 10,57%    | 9,59%      | 9,87%         |
| 65  | nanus          | 9,15%         | 9,39%         | 9,40%    | 9,11%      | 9,44%        | 9,42%     | 8,21%      | 9,89%         |
| 66  | sanguinolentus | 10,76%        | 11,00%        | 11,24%   | 11,03%     | 11,09%       | 10,11%    | 11,08%     | 12,00%        |
| 67  | tessulatus     | 8,16%         | 8,40%         | 8,64%    | 6,96%      | 7,25%        | 6,03%     | 9,38%      | 9,63%         |
| 68  | arenatus       | 7,46%         | 7,70%         | 8,18%    | 6,26%      | 6,03%        | 6,25%     | 6,24%      | 7,70%         |
| 69  | anemone2       | 9,13%         | 9,37%         | 8,41%    | 7,68%      | 7,49%        | 9,63%     | 2,40%      | 9,64%         |
| 70  | mustelinus     | 12,58%        | 12,34%        | 11,61%   | 11,36%     | 10,17%       | 10,63%    | 11,10%     | 10,15%        |
| 71  | miles          | 12,06%        | 12,30%        | 11,59%   | 11,59%     | 11,13%       | 10,62%    | 11,10%     | 10,61%        |
| 72  | rattus         | 11,61%        | 11,85%        | 11,37%   | 11,14%     | 11,38%       | 11,36%    | 11,10%     | 10,65%        |
| 73  | ximenes        | 16,39%        | 16,37%        | 15,90%   | 14,92%     | 15,44%       | 16,63%    | 16,38%     | 14,64%        |
| 74  | verrucosus     | 16,71%        | 16,69%        | 16,47%   | 15,74%     | 16,02%       | 15,46%    | 17,19%     | 15,44%        |
| 75  | tabidus        | 9,86%         | 10,10%        | 8,90%    | 8,42%      | 9,46%        | 9,16%     | 6,03%      | 10,12%        |
| 76  | sponsalis      | 9,13%         | 8,89%         | 9,38%    | 7,91%      | 8,23%        | 9,65%     | 7,48%      | 9,40%         |
| 77  | lorenzianus    | 8,65%         | 8,89%         | 8,66%    | 8,66%      | 9,43%        | 8,44%     | 10,85%     | 10,11%        |
| 78  | recurvus       | 8,16%         | 7,92%         | 8,16%    | 7,95%      | 7,95%        | 7,91%     | 7,41%      | 7,45%         |
| 79  | orion          | 8,65%         | 8,89%         | 7,94%    | 9,61%      | 9,67%        | 9,38%     | 7,68%      | 9,40%         |
| 80  | granarius      | 8,69%         | 8,93%         | 8,69%    | 9,42%      | 9,92%        | 9,90%     | 9,18%      | 10,64%        |
| 81  | ferqusoni      | 9,58%         | 9,34%         | 8,62%    | 8,39%      | 9,11%        | 9,30%     | 5,47%      | 9,55%         |
| 82  | diadema        | 11,35%        | 11,58%        | 11,35%   | 11,87%     | 11,60%       | 11,09%    | 11,82%     | 11,57%        |
| 83  | centurio       | 10,07%        | 9,83%         | 9,59%    | 9,83%      | 10,12%       | 9,59%     | 7,65%      | 7,91%         |
| 84  | violaceus      | 10,55%        | 10,79%        | 10,31%   | 9,34%      | 10,63%       | 9,88%     | 10,59%     | 10,84%        |
| 85  | puncticulatus  | 17,10%        | 17,09%        | 16,61%   | 16,34%     | 17,13%       | 17,31%    | 17,81%     | 16,83%        |
| 86  | poormani       | 10,05%        | 9,81%         | 9,57%    | 9,82%      | 9,39%        | 9,11%     | 7,65%      | 8,14%         |
| 87  | perplexus      | 16,35%        | 16,34%        | 15,87%   | 14,88%     | 15,66%       | 16,34%    | 16,84%     | 15,12%        |
| 88  | nussatella     | 6,75%         | 6,99%         | 6,74%    | 7,48%      | 7,52%        | 7,28%     | 9,43%      | 9,18%         |
| 89  | capitaneus     | 10,90%        | 10,66%        | 10,42%   | 10,17%     | 9,69%        | 10,88%    | 10,63%     | 11,36%        |
| 90  | carinatus      | 6,95%         | 6,71%         | 7,19%    | 7,45%      | 6,78%        | 7,48%     | 8,45%      | 6,03%         |
| 91  | muriculatus    | 11,54%        | 11,78%        | 12,02%   | 9,39%      | 10,42%       | 9,90%     | 11,59%     | 10,38%        |
| 92  | imperialis     | 11,75%        | 11,99%        | 11,75%   | 12,77%     | 13,71%       | 12,24%    | 12,97%     | 12,99%        |
| 93  | striatellus    | 10,13%        | 10,12%        | 9,65%    | 11,07%     | 11,35%       | 12,02%    | 10,57%     | 12,28%        |
| 94  | striatus       | 7,24%         | 7,48%         | 7,97%    | 7,48%      | 6,56%        | 7,03%     | 8,48%      | 5,57%         |
| 95  | vulpinus       | 8,01%         | 7,77%         | 7,53%    | 9,92%      | 10,19%       | 10,64%    | 9,41%      | 12,58%        |
| 96  | cuneolus       | 6,73%         | 6,97%         | 7,21%    | 5,78%      | 6,76%        | 6,99%     | 7,22%      | 8,18%         |
| 97  | bartschi       | 8,92%         | 8,68%         | 7,71%    | 7,23%      | 7,52%        | 9,21%     | 9,92%      | 8,98%         |
| 98  | ateralbus      | 8,17%         | 8,41%         | 8,90%    | 7,45%      | 7,74%        | 8,93%     | 9,17%      | 9,40%         |
| 99  | arcuatus       | 16,11%        | 16,11%        | 15,88%   | 16,89%     | 17,20%       | 17,34%    | 17,78%     | 16,36%        |
| 100 | lineolatus     | 9,21%         | 9,45%         | 8,24%    | 7,74%      | 8,54%        | 9,47%     | 4,85%      | 9,48%         |
| 101 | catus          | 7,42%         | 7,65%         | 7,66%    | 7,67%      | 7,71%        | 7,70%     | 9,12%      | 6,97%         |
| 102 | compressus     | 10,09%        | 10,33%        | 9,37%    | 7,92%      | 8,71%        | 9,64%     | 0,24%      | 9,67%         |
| 103 | tenuistriatus  | 10,58%        | 10,58%        | 9,38%    | 11,79%     | 12,57%       | 11,79%    | 9,62%      | 12,75%        |
| 104 | episcopatus    | 7,22%         | 6,97%         | 6,97%    | 6,30%      | 6,27%        | 7,22%     | 10,07%     | 10,09%        |
| 105 | memiae         | 15,69%        | 15,68%        | 15,69%   | 15,44%     | 15,50%       | 14,41%    | 16,11%     | 14,67%        |
| 106 | tribblei       | 10,49%        | 10,74%        | 9,76%    | 8,78%      | 10,32%       | 9,28%     | 6,60%      | 10,29%        |
| 107 | coffae         | 10,31%        | 10,55%        | 9,11%    | 11,03%     | 12,05%       | 11,28%    | 9,09%      | 11,98%        |
| 108 | magus          | 6,71%         | 6,47%         | 6,95%    | 7,69%      | 6,54%        | 8,21%     | 8,93%      | 6,98%         |
| 109 | corallinus     | 8,40%         | 8,64%         | 8,17%    | 6,97%      | 8,24%        | 8,18%     | 5,27%      | 9,40%         |
| 110 | monachus       | 7,01%         | 7,26%         | 6,28%    | 5,82%      | 7,02%        | 6,52%     | 8,47%      | 7,51%         |
| 111 | californicus   | 14,37%        | 14,13%        | 13,64%   | 13,91%     | 14,46%       | 13,92%    | 16,13%     | 14,39%        |
| 112 | proximus       | 8,38%         | 8,62%         | 8,15%    | 7,71%      | 8,67%        | 8,65%     | 8,15%      | 7,93%         |
| 113 | parvulus       | 8,68%         | 8,44%         | 9,41%    | 6,73%      | 6,79%        | 8,20%     | 6,73%      | 8,92%         |
| 114 | musicus        | 11,23%        | 10,99%        | 11,00%   | 10,02%     | 10,10%       | 11,76%    | 10,79%     | 11,26%        |
| 115 | miliaris       | 9,45%         | 9,68%         | 9,19%    | 8,25%      | 9,69%        | 9,44%     | 12,30%     | 9,18%         |
| 116 | lividus        | 10,80%        | 11,04%        | 11,28%   | 10,58%     | 10,63%       | 10,37%    | 11,10%     | 12,04%        |
| 117 | bullatus       | 8,44%         | 8,68%         | 9,89%    | 10,36%     | 9,94%        | 8,46%     | 10,65%     | 9,39%         |
| 118 | coronatus      | 10,15%        | 10,39%        | 10,39%   | 8,92%      | 10,41%       | 9,39%     | 11,59%     | 8,93%         |
| 119 | circumactus    | 7,96%         | 7,95%         | 7,49%    | 7,29%      | 7,50%        | 7,96%     | 9,16%      | 8,45%         |
| 120 | cinereus       | 8,21%         | 8,45%         | 7,97%    | 7,77%      | 7,75%        | 7,98%     | 8,46%      | 7,75%         |
| 121 | chaldeus       | 10,14%        | 10,38%        | 9,90%    | 8,93%      | 10,37%       | 9,63%     | 10,82%     | 9,16%         |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                       | 25 <i>brunneus</i> | 26 <i>burryae</i> | 27 <i>cargilei</i> | 28 <i>cedonuli</i> | 29 <i>cingulatus</i> | 30 <i>sanderi</i> | 31 <i>donnae</i> | 32 <i>daucus</i> |
|-----|-----------------------|--------------------|-------------------|--------------------|--------------------|----------------------|-------------------|------------------|------------------|
| 61  | <i>virgo</i>          | 10,07%             | 11,04%            | 11,96%             | 11,80%             | 8,62%                | 10,80%            | 11,73%           | 10,87%           |
| 62  | <i>dorreensis</i>     | 8,71%              | 10,90%            | 9,92%              | 10,18%             | 8,73%                | 9,46%             | 9,19%            | 9,27%            |
| 63  | <i>infrenatus</i>     | 12,50%             | 11,34%            | 11,36%             | 11,89%             | 10,41%               | 10,61%            | 10,91%           | 10,67%           |
| 64  | <i>pertusus</i>       | 11,06%             | 11,05%            | 11,34%             | 10,37%             | 10,43%               | 9,42%             | 10,39%           | 11,44%           |
| 65  | <i>nanus</i>          | 12,30%             | 11,29%            | 13,20%             | 10,66%             | 9,91%                | 11,05%            | 12,50%           | 11,89%           |
| 66  | <i>sanguinolentus</i> | 11,49%             | 10,55%            | 11,72%             | 12,75%             | 11,33%               | 11,50%            | 10,77%           | 11,83%           |
| 67  | <i>tessulatus</i>     | 8,90%              | 10,32%            | 11,06%             | 9,40%              | 7,47%                | 8,91%             | 10,84%           | 10,18%           |
| 68  | <i>arenatus</i>       | 10,10%             | 8,66%             | 9,89%              | 8,69%              | 6,57%                | 7,98%             | 8,93%            | 8,76%            |
| 69  | <i>anemone2</i>       | 9,88%              | 7,92%             | 9,11%              | 9,42%              | 7,97%                | 6,48%             | 8,62%            | 9,18%            |
| 70  | <i>mustelinus</i>     | 12,09%             | 12,35%            | 12,82%             | 11,63%             | 10,94%               | 11,38%            | 11,87%           | 12,67%           |
| 71  | <i>miles</i>          | 13,72%             | 12,75%            | 13,47%             | 12,05%             | 10,59%               | 11,30%            | 12,77%           | 13,53%           |
| 72  | <i>rattus</i>         | 12,33%             | 12,80%            | 12,33%             | 9,94%              | 11,14%               | 10,86%            | 11,59%           | 11,68%           |
| 73  | <i>ximenes</i>        | 15,57%             | 15,85%            | 16,28%             | 16,92%             | 15,82%               | 16,37%            | 15,57%           | 15,20%           |
| 74  | <i>verrucosus</i>     | 16,91%             | 15,41%            | 16,32%             | 18,00%             | 15,39%               | 15,90%            | 16,10%           | 14,75%           |
| 75  | <i>tabidus</i>        | 9,83%              | 7,64%             | 7,88%              | 10,85%             | 9,64%                | 6,69%             | 7,42%            | 8,42%            |
| 76  | <i>sponsalis</i>      | 11,80%             | 11,54%            | 12,94%             | 11,60%             | 9,90%                | 11,52%            | 12,23%           | 11,36%           |
| 77  | <i>lorenzianus</i>    | 10,60%             | 11,07%            | 9,85%              | 11,38%             | 9,21%                | 9,65%             | 9,64%            | 8,49%            |
| 78  | <i>recurvus</i>       | 8,44%              | 5,28%             | 5,74%              | 7,94%              | 7,04%                | 3,63%             | 5,53%            | 5,56%            |
| 79  | <i>orion</i>          | 9,39%              | 6,46%             | 6,69%              | 8,20%              | 9,19%                | 5,25%             | 6,22%            | 6,74%            |
| 80  | <i>granarius</i>      | 8,68%              | 9,17%             | 9,68%              | 1,94%              | 9,22%                | 8,97%             | 8,94%            | 8,79%            |
| 81  | <i>fergusoni</i>      | 10,29%             | 8,81%             | 8,85%              | 9,33%              | 9,89%                | 6,95%             | 8,14%            | 8,67%            |
| 82  | <i>diadema</i>        | 12,51%             | 11,55%            | 12,30%             | 13,51%             | 12,74%               | 11,80%            | 11,60%           | 13,09%           |
| 83  | <i>centurio</i>       | 10,10%             | 5,26%             | 7,42%              | 8,91%              | 8,70%                | 4,30%             | 7,18%            | 6,02%            |
| 84  | <i>violaceus</i>      | 11,80%             | 10,86%            | 12,00%             | 12,07%             | 8,45%                | 10,37%            | 11,04%           | 11,36%           |
| 85  | <i>puncticulatus</i>  | 16,53%             | 17,03%            | 17,52%             | 16,59%             | 16,49%               | 17,31%            | 17,31%           | 15,86%           |
| 86  | <i>poormani</i>       | 9,38%              | 5,26%             | 6,44%              | 9,14%              | 7,97%                | 2,63%             | 6,21%            | 6,25%            |
| 87  | <i>perplexus</i>      | 16,27%             | 15,79%            | 16,26%             | 17,59%             | 16,01%               | 16,31%            | 15,55%           | 15,15%           |
| 88  | <i>nussatella</i>     | 9,90%              | 10,62%            | 11,03%             | 10,41%             | 7,73%                | 9,87%             | 10,80%           | 10,16%           |
| 89  | <i>capitaneus</i>     | 10,64%             | 12,58%            | 13,52%             | 10,66%             | 10,44%               | 11,60%            | 12,57%           | 12,90%           |
| 90  | <i>carinatus</i>      | 8,65%              | 7,92%             | 8,90%              | 9,21%              | 7,76%                | 7,70%             | 8,92%            | 8,02%            |
| 91  | <i>muriculatus</i>    | 12,52%             | 12,07%            | 11,77%             | 13,06%             | 10,41%               | 11,10%            | 11,08%           | 11,92%           |
| 92  | <i>imperialis</i>     | 10,56%             | 12,98%            | 10,14%             | 10,57%             | 12,56%               | 11,80%            | 9,67%            | 9,46%            |
| 93  | <i>striatellus</i>    | 10,64%             | 11,07%            | 11,07%             | 9,43%              | 11,66%               | 9,91%             | 10,84%           | 10,42%           |
| 94  | <i>striatus</i>       | 10,15%             | 9,63%             | 9,39%              | 10,22%             | 7,02%                | 7,95%             | 8,66%            | 9,22%            |
| 95  | <i>vulpinus</i>       | 10,68%             | 11,84%            | 11,63%             | 9,47%              | 10,74%               | 11,15%            | 11,16%           | 11,20%           |
| 96  | <i>cuneolus</i>       | 9,17%              | 8,41%             | 9,84%              | 10,14%             | 7,75%                | 8,41%             | 9,13%            | 9,20%            |
| 97  | <i>bartschi</i>       | 1,24%              | 9,67%             | 8,18%              | 8,00%              | 10,41%               | 8,95%             | 7,97%            | 8,48%            |
| 98  | <i>ateralbus</i>      | 10,83%             | 10,35%            | 11,52%             | 9,20%              | 7,28%                | 9,88%             | 10,82%           | 9,23%            |
| 99  | <i>arcuatus</i>       | 16,77%             | 17,03%            | 16,98%             | 18,12%             | 17,24%               | 17,81%            | 16,51%           | 15,89%           |
| 100 | <i>lineolatus</i>     | 10,43%             | 7,72%             | 8,21%              | 9,01%              | 8,98%                | 6,52%             | 7,46%            | 8,47%            |
| 101 | <i>catus</i>          | 10,32%             | 10,30%            | 9,86%              | 10,60%             | 9,21%                | 10,11%            | 9,64%            | 9,93%            |
| 102 | <i>compressus</i>     | 10,86%             | 8,41%             | 9,63%              | 9,68%              | 9,47%                | 7,71%             | 9,15%            | 9,91%            |
| 103 | <i>tenuistriatus</i>  | 12,08%             | 11,09%            | 11,58%             | 11,85%             | 11,45%               | 10,13%            | 10,88%           | 9,96%            |
| 104 | <i>episcopatus</i>    | 9,16%              | 9,88%             | 10,61%             | 10,12%             | 8,02%                | 9,90%             | 9,90%            | 10,43%           |
| 105 | <i>memiae</i>         | 15,46%             | 14,17%            | 14,86%             | 16,01%             | 14,47%               | 14,94%            | 14,89%           | 13,76%           |
| 106 | <i>tribblei</i>       | 11,50%             | 9,25%             | 10,49%             | 10,29%             | 10,58%               | 8,28%             | 9,53%            | 10,33%           |
| 107 | <i>coffae</i>         | 11,78%             | 10,07%            | 10,09%             | 11,34%             | 10,92%               | 9,59%             | 9,37%            | 9,42%            |
| 108 | <i>magus</i>          | 8,42%              | 8,89%             | 8,89%              | 9,68%              | 8,24%                | 7,96%             | 8,90%            | 8,02%            |
| 109 | <i>corallinus</i>     | 9,17%              | 8,63%             | 9,32%              | 9,17%              | 8,94%                | 7,64%             | 8,61%            | 8,88%            |
| 110 | <i>monachus</i>       | 8,47%              | 9,20%             | 9,22%              | 8,25%              | 8,30%                | 8,52%             | 9,00%            | 9,05%            |
| 111 | <i>californicus</i>   | 14,33%             | 17,31%            | 16,13%             | 16,59%             | 15,90%               | 17,56%            | 15,44%           | 15,69%           |
| 112 | <i>proximus</i>       | 11,04%             | 9,59%             | 10,84%             | 9,62%              | 7,49%                | 8,69%             | 10,12%           | 10,19%           |
| 113 | <i>parvulus</i>       | 10,13%             | 10,10%            | 10,81%             | 9,70%              | 8,25%                | 8,87%             | 10,33%           | 9,64%            |
| 114 | <i>musicus</i>        | 13,42%             | 12,68%            | 13,85%             | 12,98%             | 10,31%               | 12,87%            | 13,87%           | 12,52%           |
| 115 | <i>miliaris</i>       | 8,45%              | 11,35%            | 10,16%             | 9,20%              | 9,74%                | 9,94%             | 9,19%            | 9,54%            |
| 116 | <i>lividus</i>        | 11,53%             | 10,58%            | 11,54%             | 12,56%             | 10,41%               | 11,32%            | 10,59%           | 11,64%           |
| 117 | <i>bullatus</i>       | 12,80%             | 11,34%            | 11,31%             | 10,91%             | 9,46%                | 10,14%            | 11,34%           | 10,71%           |
| 118 | <i>coronatus</i>      | 10,14%             | 10,60%            | 10,59%             | 10,38%             | 9,41%                | 10,39%            | 10,36%           | 10,17%           |
| 119 | <i>circumactus</i>    | 9,38%              | 10,61%            | 10,61%             | 9,65%              | 8,93%                | 10,14%            | 10,16%           | 10,43%           |
| 120 | <i>cinereus</i>       | 10,38%             | 9,16%             | 9,68%              | 8,46%              | 7,03%                | 8,47%             | 8,96%            | 8,54%            |
| 121 | <i>chaldeus</i>       | 10,11%             | 10,60%            | 10,37%             | 9,93%              | 9,44%                | 9,67%             | 9,89%            | 9,99%            |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                       | 33 <i>flavescens</i> | 34 <i>fontonae</i> | 35 <i>caribbaeus</i> | 36 <i>frigidus</i> | 37 <i>ermineus</i> | 38 <i>generalis</i> | 39 <i>geographus</i> | 40 <i>gladiator</i> |
|-----|-----------------------|----------------------|--------------------|----------------------|--------------------|--------------------|---------------------|----------------------|---------------------|
| 61  | <i>virgo</i>          | 12,45%               | 8,62%              | 13,21%               | 3,82%              | 11,02%             | 11,95%              | 9,82%                | 8,86%               |
| 62  | <i>dorreensis</i>     | 9,93%                | 8,72%              | 11,16%               | 10,67%             | 10,21%             | 11,89%              | 10,46%               | 10,89%              |
| 63  | <i>infrenatus</i>     | 11,32%               | 9,63%              | 12,55%               | 11,81%             | 10,59%             | 9,87%               | 10,12%               | 11,31%              |
| 64  | <i>pertusus</i>       | 12,07%               | 9,40%              | 12,83%               | 12,29%             | 10,87%             | 10,41%              | 11,10%               | 9,15%               |
| 65  | <i>nanus</i>          | 12,25%               | 8,16%              | 12,78%               | 10,09%             | 9,36%              | 12,29%              | 10,13%               | 9,89%               |
| 66  | <i>sanguinolentus</i> | 11,49%               | 10,06%             | 12,24%               | 11,50%             | 11,76%             | 11,51%              | 9,83%                | 10,29%              |
| 67  | <i>tessulatus</i>     | 9,37%                | 6,97%              | 10,12%               | 10,34%             | 9,13%              | 10,60%              | 8,68%                | 8,43%               |
| 68  | <i>arenatus</i>       | 9,90%                | 6,03%              | 10,65%               | 7,71%              | 7,00%              | 8,47%               | 8,71%                | 7,48%               |
| 69  | <i>anemone2</i>       | 9,10%                | 7,21%              | 9,84%                | 8,90%              | 7,95%              | 9,41%               | 10,35%               | 6,49%               |
| 70  | <i>mustelinus</i>     | 13,30%               | 10,40%             | 14,05%               | 13,06%             | 11,14%             | 12,15%              | 12,58%               | 10,15%              |
| 71  | <i>miles</i>          | 13,43%               | 10,31%             | 14,19%               | 12,96%             | 11,06%             | 12,03%              | 12,00%               | 10,30%              |
| 72  | <i>rattus</i>         | 13,25%               | 11,59%             | 14,02%               | 13,53%             | 11,64%             | 13,06%              | 12,57%               | 11,37%              |
| 73  | <i>ximenes</i>        | 16,05%               | 15,56%             | 17,35%               | 15,08%             | 16,05%             | 15,06%              | 17,14%               | 15,58%              |
| 74  | <i>verrucosus</i>     | 16,08%               | 16,34%             | 17,40%               | 15,66%             | 16,14%             | 14,06%              | 17,18%               | 16,12%              |
| 75  | <i>tabidus</i>        | 9,31%                | 8,36%              | 10,04%               | 10,06%             | 9,85%              | 9,34%               | 11,02%               | 0,72%               |
| 76  | <i>sponsalis</i>      | 12,48%               | 7,18%              | 13,25%               | 8,42%              | 7,43%              | 11,30%              | 10,33%               | 9,64%               |
| 77  | <i>lorenzianus</i>    | 10,59%               | 9,40%              | 11,35%               | 11,32%             | 9,87%              | 11,10%              | 8,91%                | 9,66%               |
| 78  | <i>recurvus</i>       | 5,54%                | 7,93%              | 6,28%                | 10,61%             | 7,69%              | 9,16%               | 9,64%                | 7,23%               |
| 79  | <i>orion</i>          | 8,58%                | 9,84%              | 9,32%                | 10,83%             | 8,91%              | 9,61%               | 12,00%               | 6,70%               |
| 80  | <i>granarius</i>      | 10,36%               | 9,18%              | 11,14%               | 10,41%             | 9,69%              | 11,91%              | 12,13%               | 9,71%               |
| 81  | <i>fergusoni</i>      | 8,83%                | 7,45%              | 9,57%                | 10,31%             | 7,20%              | 9,16%               | 10,56%               | 5,76%               |
| 82  | <i>diadema</i>        | 12,27%               | 10,34%             | 13,51%               | 12,27%             | 12,79%             | 12,51%              | 10,61%               | 10,59%              |
| 83  | <i>centurio</i>       | 7,16%                | 8,18%              | 7,91%                | 11,55%             | 9,12%              | 8,17%               | 10,59%               | 6,93%               |
| 84  | <i>violaceus</i>      | 11,54%               | 9,13%              | 12,30%               | 4,82%              | 10,10%             | 11,78%              | 9,89%                | 9,38%               |
| 85  | <i>puncticulatus</i>  | 17,74%               | 17,23%             | 18,74%               | 16,75%             | 17,48%             | 16,01%              | 17,82%               | 17,51%              |
| 86  | <i>poormani</i>       | 5,25%                | 8,64%              | 5,99%                | 12,24%             | 9,59%              | 9,15%               | 11,29%               | 6,95%               |
| 87  | <i>perplexus</i>      | 16,25%               | 15,75%             | 17,76%               | 15,03%             | 15,76%             | 15,26%              | 16,83%               | 16,02%              |
| 88  | <i>nussatella</i>     | 9,84%                | 7,69%              | 10,61%               | 9,40%              | 8,44%              | 11,59%              | 8,67%                | 9,63%               |
| 89  | <i>capitaneus</i>     | 13,03%               | 9,91%              | 13,79%               | 12,58%             | 10,41%             | 12,13%              | 11,60%               | 10,63%              |
| 90  | <i>carinatus</i>      | 9,87%                | 7,22%              | 10,62%               | 8,92%              | 7,47%              | 8,70%               | 8,20%                | 8,18%               |
| 91  | <i>muriculatus</i>    | 10,59%               | 10,38%             | 12,07%               | 11,76%             | 10,33%             | 10,62%              | 10,84%               | 10,61%              |
| 92  | <i>imperialis</i>     | 11,79%               | 11,80%             | 12,79%               | 13,23%             | 13,00%             | 13,25%              | 14,21%               | 12,98%              |
| 93  | <i>striatellus</i>    | 11,82%               | 10,90%             | 12,57%               | 13,53%             | 10,15%             | 10,22%              | 12,58%               | 11,34%              |
| 94  | <i>striatus</i>       | 9,17%                | 7,24%              | 10,41%               | 8,94%              | 7,49%              | 8,73%               | 8,49%                | 8,48%               |
| 95  | <i>vulpinus</i>       | 12,35%               | 9,92%              | 13,11%               | 11,64%             | 10,45%             | 10,23%              | 10,43%               | 10,20%              |
| 96  | <i>cuneolus</i>       | 9,12%                | 0,48%              | 9,88%                | 9,39%              | 7,21%              | 9,89%               | 7,22%                | 7,24%               |
| 97  | <i>bartschi</i>       | 9,70%                | 8,95%              | 10,94%               | 11,63%             | 9,42%              | 10,39%              | 11,16%               | 9,66%               |
| 98  | <i>ateralbus</i>      | 10,33%               | 6,73%              | 11,10%               | 9,39%              | 9,13%              | 9,89%               | 9,66%                | 9,17%               |
| 99  | <i>arcuatus</i>       | 17,24%               | 16,80%             | 18,56%               | 15,82%             | 16,29%             | 15,55%              | 17,10%               | 17,29%              |
| 100 | <i>lineolatus</i>     | 9,62%                | 8,69%              | 10,36%               | 10,36%             | 7,77%              | 9,21%               | 10,88%               | 6,47%               |
| 101 | <i>catus</i>          | 10,59%               | 8,15%              | 11,82%               | 9,37%              | 8,14%              | 9,42%               | 8,67%                | 8,64%               |
| 102 | <i>compressus</i>     | 10,10%               | 7,94%              | 10,85%               | 8,68%              | 7,50%              | 9,94%               | 10,39%               | 6,28%               |
| 103 | <i>tenuistriatus</i>  | 12,06%               | 11,87%             | 12,81%               | 10,41%             | 10,39%             | 10,18%              | 13,06%               | 9,18%               |
| 104 | <i>episcopatus</i>    | 10,86%               | 7,23%              | 12,09%               | 9,65%              | 8,21%              | 10,65%              | 10,61%               | 8,41%               |
| 105 | <i>memiae</i>         | 15,64%               | 14,68%             | 16,46%               | 13,73%             | 15,42%             | 13,67%              | 16,54%               | 14,17%              |
| 106 | <i>tribblei</i>       | 10,72%               | 9,28%              | 11,48%               | 11,75%             | 9,29%              | 9,05%               | 11,47%               | 6,36%               |
| 107 | <i>coffae</i>         | 11,50%               | 10,84%             | 12,24%               | 10,84%             | 9,86%              | 8,93%               | 12,26%               | 8,15%               |
| 108 | <i>magus</i>          | 9,86%                | 6,97%              | 10,63%               | 9,63%              | 7,95%              | 9,42%               | 8,68%                | 9,15%               |
| 109 | <i>corallinus</i>     | 9,07%                | 8,39%              | 9,82%                | 9,62%              | 6,02%              | 8,91%               | 10,32%               | 7,20%               |
| 110 | <i>monachus</i>       | 9,24%                | 6,81%              | 10,45%               | 9,20%              | 5,33%              | 8,75%               | 8,03%                | 8,48%               |
| 111 | <i>californicus</i>   | 18,00%               | 15,58%             | 19,21%               | 15,56%             | 14,85%             | 16,33%              | 17,30%               | 15,59%              |
| 112 | <i>proximus</i>       | 10,61%               | 6,96%              | 11,36%               | 8,67%              | 7,49%              | 9,19%               | 9,41%                | 8,45%               |
| 113 | <i>parvulus</i>       | 9,82%                | 8,65%              | 10,57%               | 10,62%             | 6,98%              | 9,63%               | 10,60%               | 7,46%               |
| 114 | <i>musicus</i>        | 13,33%               | 10,02%             | 14,33%               | 11,22%             | 10,02%             | 12,94%              | 11,69%               | 12,91%              |
| 115 | <i>miliaris</i>       | 10,91%               | 8,73%              | 12,14%               | 11,58%             | 9,70%              | 11,65%              | 10,18%               | 10,37%              |
| 116 | <i>lividus</i>        | 11,78%               | 10,34%             | 12,54%               | 10,60%             | 11,57%             | 11,33%              | 9,89%                | 10,57%              |
| 117 | <i>bullatus</i>       | 11,79%               | 8,67%              | 12,56%               | 10,84%             | 9,85%              | 11,11%              | 8,68%                | 10,64%              |
| 118 | <i>coronatus</i>      | 10,85%               | 8,61%              | 12,11%               | 10,65%             | 9,88%              | 11,15%              | 10,39%               | 11,81%              |
| 119 | <i>circumactus</i>    | 10,61%               | 7,70%              | 11,84%               | 10,58%             | 6,04%              | 9,88%               | 9,17%                | 10,08%              |
| 120 | <i>cinereus</i>       | 10,15%               | 7,01%              | 10,91%               | 8,22%              | 7,26%              | 9,43%               | 9,67%                | 8,47%               |
| 121 | <i>chaldeus</i>       | 9,91%                | 8,95%              | 11,14%               | 9,41%              | 9,92%              | 11,39%              | 10,67%               | 10,18%              |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                       | 41 <i>gradatulus</i> | 42 <i>jaspideus</i> | 43 <i>lindae</i> | 44 <i>litoglyphus</i> | 45 <i>mahogani</i> | 46 <i>mus</i> | 47 <i>nux</i> | 48 <i>obscurus</i> | 49 <i>patricius</i> |
|-----|-----------------------|----------------------|---------------------|------------------|-----------------------|--------------------|---------------|---------------|--------------------|---------------------|
| 61  | <i>virgo</i>          | 10,57%               | 14,56%              | 8,42%            | 10,78%                | 15,84%             | 9,16%         | 8,88%         | 9,13%              | 8,90%               |
| 62  | <i>dorreensis</i>     | 11,66%               | 13,81%              | 8,99%            | 11,80%                | 14,47%             | 11,15%        | 10,14%        | 8,49%              | 10,37%              |
| 63  | <i>infrenatus</i>     | 3,82%                | 14,22%              | 10,38%           | 11,84%                | 15,56%             | 11,79%        | 11,82%        | 10,66%             | 9,39%               |
| 64  | <i>pertusus</i>       | 9,21%                | 16,10%              | 10,67%           | 11,05%                | 17,42%             | 10,17%        | 11,56%        | 12,28%             | 10,59%              |
| 65  | <i>nanus</i>          | 9,92%                | 15,34%              | 9,70%            | 9,86%                 | 15,94%             | 10,65%        | 3,84%         | 10,36%             | 9,92%               |
| 66  | <i>sanguinolentus</i> | 10,77%               | 16,21%              | 11,31%           | 13,46%                | 17,07%             | 11,52%        | 11,26%        | 11,27%             | 11,26%              |
| 67  | <i>tessulatus</i>     | 9,90%                | 15,54%              | 7,25%            | 10,33%                | 16,59%             | 8,94%         | 9,39%         | 9,36%              | 7,45%               |
| 68  | <i>arenatus</i>       | 6,79%                | 14,07%              | 6,55%            | 9,11%                 | 14,65%             | 8,48%         | 6,99%         | 8,65%              | 6,97%               |
| 69  | <i>anemone2</i>       | 6,53%                | 15,06%              | 7,98%            | 9,83%                 | 14,89%             | 7,46%         | 7,45%         | 10,09%             | 7,67%               |
| 70  | <i>mustelinus</i>     | 9,96%                | 16,37%              | 11,42%           | 12,53%                | 17,75%             | 10,66%        | 11,10%        | 12,33%             | 11,32%              |
| 71  | <i>miles</i>          | 10,14%               | 16,99%              | 11,08%           | 11,53%                | 17,59%             | 10,08%        | 11,74%        | 12,10%             | 11,33%              |
| 72  | <i>rattus</i>         | 9,94%                | 16,09%              | 11,39%           | 11,28%                | 15,96%             | 11,16%        | 12,51%        | 11,60%             | 11,58%              |
| 73  | <i>ximenes</i>        | 15,46%               | 5,26%               | 15,90%           | 16,04%                | 2,48%              | 15,38%        | 15,79%        | 17,40%             | 15,64%              |
| 74  | <i>verrucosus</i>     | 15,99%               | 3,73%               | 15,43%           | 16,08%                | 5,71%              | 16,18%        | 16,80%        | 17,20%             | 15,14%              |
| 75  | <i>tabidus</i>        | 9,87%                | 14,42%              | 9,89%            | 7,48%                 | 15,81%             | 1,91%         | 10,30%        | 10,62%             | 7,69%               |
| 76  | <i>sponsalis</i>      | 8,93%                | 14,81%              | 9,68%            | 10,58%                | 15,14%             | 10,38%        | 0,24%         | 10,82%             | 9,42%               |
| 77  | <i>lorenzianus</i>    | 11,82%               | 15,55%              | 9,48%            | 11,29%                | 15,61%             | 9,68%         | 10,11%        | 10,36%             | 7,95%               |
| 78  | <i>recurvus</i>       | 8,68%                | 13,34%              | 7,76%            | 8,86%                 | 13,45%             | 7,97%         | 10,07%        | 8,41%              | 6,22%               |
| 79  | <i>orion</i>          | 11,06%               | 14,71%              | 9,66%            | 9,58%                 | 14,62%             | 7,19%         | 12,02%        | 9,86%              | 7,67%               |
| 80  | <i>granarius</i>      | 9,97%                | 16,41%              | 9,25%            | 10,13%                | 16,24%             | 10,71%        | 10,65%        | 10,39%             | 8,70%               |
| 81  | <i>fergusoni</i>      | 8,43%                | 15,27%              | 9,88%            | 8,11%                 | 15,37%             | 6,49%         | 8,15%         | 10,54%             | 7,14%               |
| 82  | <i>diadema</i>        | 10,36%               | 16,49%              | 13,01%           | 12,54%                | 16,35%             | 10,83%        | 10,84%        | 9,96%              | 12,54%              |
| 83  | <i>centurio</i>       | 9,16%                | 13,29%              | 8,95%            | 9,34%                 | 15,10%             | 7,44%         | 10,35%        | 10,29%             | 7,88%               |
| 84  | <i>violaceus</i>      | 11,34%               | 15,06%              | 8,94%            | 10,59%                | 16,39%             | 9,91%         | 8,16%         | 9,13%              | 10,12%              |
| 85  | <i>puncticulatus</i>  | 17,31%               | 7,00%               | 16,31%           | 17,48%                | 5,69%              | 17,27%        | 17,48%        | 17,84%             | 17,13%              |
| 86  | <i>poormani</i>       | 10,36%               | 14,76%              | 8,21%            | 9,12%                 | 15,36%             | 7,21%         | 11,28%        | 9,83%              | 7,41%               |
| 87  | <i>perplexus</i>      | 15,88%               | 5,99%               | 15,82%           | 16,97%                | 4,46%              | 15,56%        | 16,50%        | 17,60%             | 16,11%              |
| 88  | <i>nussatella</i>     | 9,93%                | 14,84%              | 7,76%            | 8,92%                 | 15,16%             | 10,15%        | 9,85%         | 7,72%              | 8,96%               |
| 89  | <i>capitaneus</i>     | 9,48%                | 17,41%              | 10,92%           | 11,33%                | 17,75%             | 10,66%        | 10,86%        | 10,86%             | 11,80%              |
| 90  | <i>carinatus</i>      | 9,17%                | 14,02%              | 7,77%            | 9,39%                 | 13,66%             | 9,66%         | 9,13%         | 8,21%              | 7,94%               |
| 91  | <i>muriculatus</i>    | 9,89%                | 14,61%              | 10,22%           | 12,53%                | 15,45%             | 10,16%        | 10,80%        | 10,88%             | 10,38%              |
| 92  | <i>imperialis</i>     | 12,30%               | 15,57%              | 13,02%           | 12,26%                | 16,45%             | 13,51%        | 14,45%        | 12,26%             | 13,17%              |
| 93  | <i>striatellus</i>    | 9,98%                | 16,12%              | 12,13%           | 9,40%                 | 15,21%             | 11,16%        | 10,90%        | 12,08%             | 9,85%               |
| 94  | <i>striatus</i>       | 9,22%                | 14,82%              | 6,81%            | 10,16%                | 15,19%             | 8,96%         | 9,38%         | 9,22%              | 8,71%               |
| 95  | <i>vulpinus</i>       | 8,78%                | 14,91%              | 11,43%           | 9,44%                 | 15,54%             | 10,47%        | 10,92%        | 9,69%              | 10,36%              |
| 96  | <i>cuneolus</i>       | 7,23%                | 14,79%              | 7,75%            | 8,44%                 | 15,68%             | 8,46%         | 7,41%         | 7,72%              | 7,92%               |
| 97  | <i>bartschi</i>       | 10,40%               | 16,03%              | 10,90%           | 9,71%                 | 15,17%             | 10,65%        | 11,81%        | 9,70%              | 9,16%               |
| 98  | <i>ateralbus</i>      | 8,68%                | 14,07%              | 7,05%            | 10,56%                | 14,36%             | 9,93%         | 7,44%         | 9,87%              | 8,18%               |
| 99  | <i>arcuatus</i>       | 16,65%               | 6,62%               | 17,32%           | 17,27%                | 5,29%              | 17,36%        | 16,49%        | 18,35%             | 17,05%              |
| 100 | <i>lineolatus</i>     | 7,53%                | 15,79%              | 8,75%            | 9,69%                 | 15,45%             | 7,68%         | 9,61%         | 9,73%              | 6,52%               |
| 101 | <i>catus</i>          | 9,89%                | 14,81%              | 9,20%            | 10,36%                | 15,15%             | 9,63%         | 9,12%         | 8,89%              | 8,39%               |
| 102 | <i>compressus</i>     | 6,56%                | 16,12%              | 9,70%            | 10,15%                | 16,48%             | 7,51%         | 7,72%         | 10,84%             | 8,16%               |
| 103 | <i>tenuistriatus</i>  | 11,88%               | 14,62%              | 11,69%           | 10,14%                | 14,96%             | 9,46%         | 11,86%        | 12,77%             | 9,85%               |
| 104 | <i>episcopatus</i>    | 8,95%                | 13,81%              | 8,50%            | 10,80%                | 13,95%             | 8,69%         | 8,92%         | 8,66%              | 8,64%               |
| 105 | <i>memiae</i>         | 15,24%               | 3,80%               | 14,53%           | 14,88%                | 2,74%              | 13,98%        | 15,16%        | 16,69%             | 14,37%              |
| 106 | <i>tribblei</i>       | 8,58%                | 15,23%              | 10,36%           | 9,81%                 | 15,35%             | 6,62%         | 11,06%        | 12,23%             | 7,78%               |
| 107 | <i>coffae</i>         | 11,34%               | 14,54%              | 10,45%           | 9,34%                 | 15,12%             | 8,18%         | 11,32%        | 11,98%             | 8,84%               |
| 108 | <i>magus</i>          | 9,66%                | 14,54%              | 8,27%            | 9,39%                 | 13,64%             | 10,14%        | 8,89%         | 7,95%              | 7,70%               |
| 109 | <i>corallinus</i>     | 6,75%                | 14,26%              | 8,95%            | 8,66%                 | 14,15%             | 7,45%         | 9,34%         | 9,14%              | 7,41%               |
| 110 | <i>monachus</i>       | 7,52%                | 14,91%              | 8,05%            | 10,38%                | 13,98%             | 9,24%         | 8,02%         | 8,47%              | 6,75%               |
| 111 | <i>californicus</i>   | 16,68%               | 12,48%              | 16,10%           | 14,89%                | 10,67%             | 15,10%        | 14,89%        | 16,14%             | 13,88%              |
| 112 | <i>proximus</i>       | 8,46%                | 15,87%              | 7,74%            | 9,62%                 | 16,46%             | 9,43%         | 8,67%         | 9,38%              | 9,12%               |
| 113 | <i>parvulus</i>       | 8,93%                | 16,07%              | 8,25%            | 11,07%                | 15,91%             | 8,42%         | 9,15%         | 9,89%              | 6,00%               |
| 114 | <i>musicus</i>        | 11,24%               | 17,44%              | 10,12%           | 12,69%                | 17,82%             | 13,67%        | 5,27%         | 11,50%             | 12,46%              |
| 115 | <i>miliaris</i>       | 11,44%               | 15,39%              | 10,01%           | 12,72%                | 16,00%             | 10,68%        | 10,86%        | 9,42%              | 11,14%              |
| 116 | <i>lividus</i>        | 10,11%               | 16,54%              | 10,40%           | 13,75%                | 17,39%             | 11,82%        | 11,34%        | 11,31%             | 10,80%              |
| 117 | <i>bullatus</i>       | 11,84%               | 17,16%              | 9,49%            | 11,56%                | 16,95%             | 10,93%        | 11,55%        | 9,63%              | 10,13%              |
| 118 | <i>coronatus</i>      | 12,43%               | 13,07%              | 9,91%            | 11,82%                | 14,80%             | 11,58%        | 11,31%        | 10,37%             | 10,39%              |
| 119 | <i>circumactus</i>    | 8,19%                | 16,01%              | 9,16%            | 11,31%                | 14,88%             | 10,83%        | 8,19%         | 7,80%              | 7,23%               |
| 120 | <i>cinereus</i>       | 8,23%                | 15,15%              | 6,80%            | 10,60%                | 15,22%             | 8,99%         | 7,99%         | 8,97%              | 8,47%               |
| 121 | <i>chaldeus</i>       | 11,15%               | 14,86%              | 9,71%            | 10,78%                | 16,16%             | 10,46%        | 9,19%         | 9,92%              | 10,64%              |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                | 50 planorbis | 51 princeps | 52 purpurascens | 53 quercinus | 54 richardbinghami | 55 stimpsoni | 56 tinianus |
|-----|----------------|--------------|-------------|-----------------|--------------|--------------------|--------------|-------------|
| 61  | virgo          | 14,04%       | 11,07%      | 9,12%           | 7,91%        | 11,06%             | 10,04%       | 9,79%       |
| 62  | dorreensis     | 12,59%       | 11,43%      | 9,94%           | 8,79%        | 9,49%              | 8,72%        | 11,85%      |
| 63  | infrenatus     | 12,20%       | 9,50%       | 11,13%          | 9,18%        | 11,11%             | 10,14%       | 10,34%      |
| 64  | pertusus       | 13,56%       | 10,17%      | 11,12%          | 10,64%       | 11,63%             | 9,65%        | 10,33%      |
| 65  | nanus          | 11,61%       | 10,11%      | 9,11%           | 10,57%       | 12,02%             | 10,29%       | 8,86%       |
| 66  | sanguinolentus | 14,53%       | 10,35%      | 12,50%          | 8,63%        | 12,03%             | 11,26%       | 11,96%      |
| 67  | tessulatus     | 11,83%       | 10,62%      | 8,67%           | 9,16%        | 10,38%             | 8,65%        | 9,10%       |
| 68  | arenatus       | 10,61%       | 7,00%       | 7,00%           | 7,24%        | 9,20%              | 7,95%        | 6,71%       |
| 69  | anemone2       | 10,82%       | 5,99%       | 8,64%           | 8,15%        | 9,84%              | 6,91%        | 4,53%       |
| 70  | mustelinus     | 13,80%       | 10,94%      | 11,14%          | 11,18%       | 12,87%             | 11,12%       | 11,33%      |
| 71  | miles          | 14,28%       | 10,68%      | 10,63%          | 10,87%       | 13,06%             | 10,37%       | 10,11%      |
| 72  | rattus         | 12,53%       | 10,14%      | 11,82%          | 11,13%       | 11,86%             | 10,83%       | 10,59%      |
| 73  | ximenes        | 17,40%       | 15,58%      | 16,82%          | 15,13%       | 15,37%             | 16,05%       | 16,54%      |
| 74  | verrucosus     | 17,73%       | 16,65%      | 17,14%          | 16,21%       | 14,94%             | 15,61%       | 17,60%      |
| 75  | tabidus        | 10,95%       | 6,52%       | 8,71%           | 8,19%        | 8,44%              | 6,01%        | 6,22%       |
| 76  | sponsalis      | 11,58%       | 9,61%       | 7,18%           | 9,35%        | 11,51%             | 11,23%       | 8,61%       |
| 77  | lorenzianus    | 11,37%       | 10,34%      | 9,38%           | 9,12%        | 8,66%              | 9,35%        | 11,25%      |
| 78  | recurvus       | 10,34%       | 6,22%       | 7,46%           | 7,93%        | 5,52%              | 3,34%        | 7,39%       |
| 79  | orion          | 10,86%       | 6,71%       | 9,12%           | 9,35%        | 6,96%              | 5,00%        | 6,90%       |
| 80  | granarius      | 10,91%       | 8,47%       | 9,43%           | 9,42%        | 9,21%              | 8,92%        | 10,12%      |
| 81  | fergusoni      | 9,65%        | 5,06%       | 6,73%           | 7,94%        | 8,65%              | 6,45%        | 6,19%       |
| 82  | diadema        | 15,55%       | 11,15%      | 12,83%          | 7,99%        | 12,60%             | 10,88%       | 10,86%      |
| 83  | centurio       | 11,15%       | 7,91%       | 9,14%           | 9,86%        | 6,72%              | 4,04%        | 7,37%       |
| 84  | violaceus      | 14,50%       | 11,81%      | 9,39%           | 8,91%        | 11,56%             | 10,32%       | 10,78%      |
| 85  | puncticulatus  | 18,34%       | 18,55%      | 18,02%          | 17,78%       | 16,03%             | 17,26%       | 18,98%      |
| 86  | poormani       | 11,16%       | 6,97%       | 8,90%           | 9,14%        | 5,51%              | 0,95%        | 7,15%       |
| 87  | perplexus      | 17,10%       | 16,81%      | 16,54%          | 15,81%       | 15,30%             | 16,26%       | 17,24%      |
| 88  | nussatella     | 10,65%       | 9,90%       | 8,21%           | 7,01%        | 10,15%             | 9,15%        | 10,10%      |
| 89  | capitaneus     | 11,85%       | 10,68%      | 9,70%           | 10,95%       | 12,87%             | 11,11%       | 10,61%      |
| 90  | carinatus      | 11,67%       | 7,98%       | 6,99%           | 8,19%        | 8,70%              | 7,93%        | 9,11%       |
| 91  | muriculatus    | 14,96%       | 11,81%      | 10,80%          | 7,22%        | 12,09%             | 11,07%       | 11,99%      |
| 92  | imperialis     | 14,29%       | 11,36%      | 13,52%          | 12,52%       | 9,42%              | 11,07%       | 13,46%      |
| 93  | striatellus    | 6,30%        | 9,71%       | 9,69%           | 11,45%       | 10,44%             | 9,66%        | 10,83%      |
| 94  | striatus       | 12,61%       | 8,97%       | 7,24%           | 8,21%        | 9,67%              | 7,71%        | 7,93%       |
| 95  | vulpinus       | 2,92%        | 9,52%       | 9,24%           | 9,99%        | 11,44%             | 10,43%       | 11,15%      |
| 96  | cuneolus       | 10,84%       | 8,41%       | 6,74%           | 7,22%        | 9,40%              | 7,93%        | 8,15%       |
| 97  | bartschi       | 11,26%       | 9,96%       | 9,47%           | 8,99%        | 8,26%              | 8,25%        | 10,38%      |
| 98  | ateralbus      | 12,32%       | 9,13%       | 8,89%           | 8,88%        | 9,38%              | 9,57%        | 9,80%       |
| 99  | arcuatus       | 17,15%       | 17,26%      | 17,58%          | 16,64%       | 15,84%             | 17,50%       | 18,71%      |
| 100 | lineolatus     | 10,71%       | 0,48%       | 7,76%           | 7,50%        | 8,67%              | 6,26%        | 6,00%       |
| 101 | catus          | 12,15%       | 8,93%       | 7,69%           | 8,42%        | 9,42%              | 8,89%        | 9,58%       |
| 102 | compressus     | 10,70%       | 5,32%       | 7,50%           | 8,46%        | 10,14%             | 7,45%        | 3,60%       |
| 103 | tenuistriatus  | 12,69%       | 9,20%       | 9,93%           | 11,15%       | 10,17%             | 9,61%        | 9,61%       |
| 104 | episcopatus    | 10,45%       | 8,97%       | 7,48%           | 6,55%        | 9,92%              | 9,66%        | 10,10%      |
| 105 | memiae         | 16,78%       | 15,13%      | 16,42%          | 14,97%       | 13,68%             | 14,61%       | 16,55%      |
| 106 | tribblei       | 11,11%       | 7,09%       | 9,05%           | 8,06%        | 10,05%             | 7,54%        | 6,31%       |
| 107 | coffae         | 12,59%       | 9,13%       | 9,62%           | 10,82%       | 9,84%              | 9,31%        | 9,04%       |
| 108 | magus          | 11,20%       | 7,99%       | 7,01%           | 8,20%        | 8,23%              | 7,94%        | 9,59%       |
| 109 | corallinus     | 9,17%        | 6,01%       | 6,27%           | 7,73%        | 8,66%              | 7,17%        | 5,74%       |
| 110 | monachus       | 10,74%       | 8,04%       | 5,82%           | 6,80%        | 9,22%              | 8,48%        | 9,17%       |
| 111 | californicus   | 14,29%       | 15,24%      | 13,72%          | 15,37%       | 15,41%             | 16,40%       | 16,57%      |
| 112 | proximus       | 12,12%       | 8,47%       | 7,26%           | 8,21%        | 10,43%             | 8,44%        | 8,41%       |
| 113 | parvulus       | 10,68%       | 6,97%       | 6,26%           | 7,71%        | 9,84%              | 8,60%        | 7,65%       |
| 114 | musicus        | 13,49%       | 12,25%      | 10,06%          | 12,20%       | 12,96%             | 12,65%       | 11,92%      |
| 115 | miliaris       | 13,79%       | 11,39%      | 10,42%          | 9,19%        | 10,44%             | 9,66%        | 12,04%      |
| 116 | lividus        | 13,88%       | 9,69%       | 12,32%          | 8,20%        | 11,86%             | 11,08%       | 11,78%      |
| 117 | bullatus       | 13,80%       | 10,85%      | 9,84%           | 11,30%       | 11,32%             | 10,30%       | 11,26%      |
| 118 | coronatus      | 13,43%       | 11,95%      | 10,89%          | 10,21%       | 10,67%             | 9,65%        | 12,32%      |
| 119 | circumactus    | 11,19%       | 8,29%       | 5,56%           | 7,77%        | 9,96%              | 9,22%        | 9,89%       |
| 120 | cinereus       | 12,36%       | 8,72%       | 7,50%           | 8,44%        | 8,95%              | 8,20%        | 8,43%       |
| 121 | chaldeus       | 13,74%       | 11,36%      | 10,60%          | 10,12%       | 10,64%             | 9,61%        | 11,30%      |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                | 57 vanhyningi | 58 varius | 59 vexillum | 60 villepinii | 61 virgo | 62 dorreensis | 63 infrenatus | 64 pertusus |
|-----|----------------|---------------|-----------|-------------|---------------|----------|---------------|---------------|-------------|
| 61  | virgo          | 15,68%        | 11,78%    | 12,00%      | 10,29%        | -        |               |               |             |
| 62  | dorreensis     | 14,69%        | 10,87%    | 10,63%      | 8,97%         | 9,20%    | -             |               |             |
| 63  | infrenatus     | 14,63%        | 10,92%    | 11,19%      | 10,39%        | 12,03%   | 11,86%        | -             |             |
| 64  | pertusus       | 16,46%        | 11,84%    | 4,33%       | 9,89%         | 12,77%   | 12,04%        | 10,65%        | -           |
| 65  | nanus          | 15,72%        | 10,61%    | 12,23%      | 10,54%        | 10,32%   | 11,63%        | 12,58%        | 11,80%      |
| 66  | sanguinolentus | 16,09%        | 12,76%    | 13,22%      | 11,51%        | 11,71%   | 11,55%        | 11,91%        | 11,24%      |
| 67  | tessulatus     | 16,15%        | 11,34%    | 9,63%       | 8,89%         | 9,13%    | 9,40%         | 11,81%        | 9,83%       |
| 68  | arenatus       | 14,46%        | 8,44%     | 8,89%       | 8,19%         | 8,65%    | 9,63%         | 8,00%         | 8,38%       |
| 69  | anemone2       | 15,21%        | 10,12%    | 11,04%      | 7,15%         | 9,60%    | 9,91%         | 9,18%         | 9,86%       |
| 70  | mustelinus     | 17,00%        | 13,05%    | 4,09%       | 11,37%        | 12,82%   | 12,04%        | 12,37%        | 5,03%       |
| 71  | miles          | 17,11%        | 12,59%    | 3,62%       | 10,62%        | 12,51%   | 11,31%        | 12,06%        | 5,28%       |
| 72  | rattus         | 16,48%        | 11,60%    | 5,53%       | 11,07%        | 14,00%   | 11,78%        | 11,38%        | 5,53%       |
| 73  | ximenes        | 3,98%         | 13,87%    | 16,59%      | 16,30%        | 16,55%   | 14,15%        | 15,45%        | 16,91%      |
| 74  | verrucosus     | 2,96%         | 14,16%    | 17,15%      | 15,86%        | 17,12%   | 15,15%        | 15,24%        | 16,71%      |
| 75  | tabidus        | 15,28%        | 11,13%    | 10,38%      | 6,25%         | 9,12%    | 10,38%        | 11,53%        | 9,37%       |
| 76  | sponsalis      | 15,18%        | 10,36%    | 11,73%      | 11,48%        | 8,17%    | 10,14%        | 12,07%        | 11,77%      |
| 77  | lorenzianus    | 15,68%        | 11,33%    | 13,22%      | 9,59%         | 10,33%   | 10,14%        | 11,79%        | 12,28%      |
| 78  | recurvus       | 13,49%        | 8,67%     | 10,55%      | 3,58%         | 9,61%    | 7,46%         | 9,38%         | 9,60%       |
| 79  | orion          | 15,34%        | 10,11%    | 11,28%      | 4,75%         | 11,27%   | 10,61%        | 12,25%        | 10,32%      |
| 80  | granarius      | 17,05%        | 9,69%     | 11,56%      | 9,16%         | 11,11%   | 9,90%         | 11,90%        | 10,81%      |
| 81  | fergusoni      | 15,39%        | 10,08%    | 10,30%      | 6,69%         | 10,08%   | 10,79%        | 10,60%        | 10,01%      |
| 82  | diadema        | 16,35%        | 13,32%    | 13,59%      | 11,13%        | 11,56%   | 11,80%        | 11,74%        | 12,55%      |
| 83  | centurio       | 14,42%        | 9,87%     | 11,27%      | 4,28%         | 9,83%    | 8,20%         | 9,89%         | 10,08%      |
| 84  | violaceus      | 15,45%        | 12,07%    | 11,52%      | 10,57%        | 4,56%    | 9,66%         | 12,29%        | 12,26%      |
| 85  | puncticulatus  | 5,98%         | 15,09%    | 18,78%      | 17,51%        | 17,50%   | 15,86%        | 17,32%        | 18,13%      |
| 86  | poormani       | 14,89%        | 10,60%    | 11,30%      | 1,19%         | 10,32%   | 8,91%         | 10,81%        | 10,55%      |
| 87  | perplexus      | 4,46%         | 13,60%    | 17,80%      | 16,51%        | 16,26%   | 15,12%        | 15,88%        | 17,62%      |
| 88  | nussatella     | 14,96%        | 10,41%    | 11,85%      | 9,40%         | 8,90%    | 9,90%         | 11,11%        | 11,81%      |
| 89  | capitaneus     | 17,51%        | 13,29%    | 5,05%       | 11,36%        | 11,86%   | 11,08%        | 11,66%        | 6,46%       |
| 90  | carinatus      | 14,66%        | 9,21%     | 10,12%      | 8,17%         | 8,91%    | 8,93%         | 10,13%        | 9,13%       |
| 91  | muriculatus    | 15,27%        | 11,35%    | 13,48%      | 11,31%        | 11,55%   | 10,19%        | 11,28%        | 13,23%      |
| 92  | imperialis     | 16,20%        | 13,31%    | 13,23%      | 11,31%        | 13,70%   | 12,56%        | 12,57%        | 12,97%      |
| 93  | striatellus    | 16,75%        | 9,42%     | 12,79%      | 9,90%         | 13,55%   | 12,79%        | 11,65%        | 12,50%      |
| 94  | striatus       | 14,96%        | 9,95%     | 10,16%      | 7,95%         | 9,41%    | 8,24%         | 11,13%        | 9,89%       |
| 95  | vulpinus       | 15,77%        | 8,99%     | 12,34%      | 10,68%        | 11,91%   | 12,07%        | 10,46%        | 12,31%      |
| 96  | cuneolus       | 15,18%        | 8,46%     | 10,35%      | 8,17%         | 8,20%    | 9,15%         | 9,40%         | 9,13%       |
| 97  | bartschi       | 16,41%        | 9,51%     | 10,93%      | 8,49%         | 10,40%   | 7,74%         | 11,80%        | 10,40%      |
| 98  | ateralbus      | 14,45%        | 9,64%     | 11,76%      | 9,81%         | 8,88%    | 8,73%         | 10,12%        | 10,82%      |
| 99  | arcuatus       | 5,78%         | 14,86%    | 18,55%      | 17,75%        | 17,75%   | 15,17%        | 15,95%        | 18,85%      |
| 100 | lineolatus     | 16,16%        | 9,25%     | 10,42%      | 6,50%         | 10,87%   | 11,11%        | 9,47%         | 10,42%      |
| 101 | catus          | 15,71%        | 10,39%    | 11,79%      | 9,13%         | 9,39%    | 10,14%        | 10,84%        | 10,54%      |
| 102 | compressus     | 16,25%        | 9,95%     | 10,87%      | 7,69%         | 9,87%    | 11,86%        | 9,70%         | 9,38%       |
| 103 | tenuistriatus  | 15,75%        | 12,12%    | 13,80%      | 9,86%         | 11,36%   | 13,07%        | 12,35%        | 13,00%      |
| 104 | episcopatus    | 13,96%        | 9,65%     | 10,38%      | 9,90%         | 8,70%    | 7,47%         | 10,63%        | 11,52%      |
| 105 | memiae         | 4,03%         | 13,18%    | 16,45%      | 14,86%        | 14,43%   | 13,95%        | 14,51%        | 16,47%      |
| 106 | tribblei       | 15,37%        | 10,56%    | 12,00%      | 7,78%         | 11,75%   | 12,54%        | 10,29%        | 10,49%      |
| 107 | coffae         | 15,42%        | 11,54%    | 13,45%      | 9,55%         | 11,52%   | 12,28%        | 11,31%        | 12,23%      |
| 108 | magus          | 15,18%        | 9,20%     | 10,63%      | 8,19%         | 9,15%    | 8,22%         | 10,61%        | 10,08%      |
| 109 | corallinus     | 14,39%        | 8,70%     | 10,13%      | 7,41%         | 9,61%    | 10,83%        | 8,67%         | 10,35%      |
| 110 | monachus       | 15,05%        | 8,25%     | 9,91%       | 8,73%         | 9,70%    | 8,20%         | 8,96%         | 10,11%      |
| 111 | californicus   | 12,87%        | 13,00%    | 15,20%      | 16,64%        | 15,12%   | 14,23%        | 17,15%        | 16,41%      |
| 112 | proximus       | 16,49%        | 9,43%     | 10,11%      | 8,68%         | 8,65%    | 9,14%         | 10,62%        | 9,32%       |
| 113 | parvulus       | 16,43%        | 10,38%    | 11,79%      | 8,84%         | 10,36%   | 11,34%        | 11,08%        | 11,81%      |
| 114 | musicus        | 17,80%        | 11,76%    | 13,64%      | 12,89%        | 11,00%   | 11,29%        | 14,60%        | 14,58%      |
| 115 | miliaris       | 16,28%        | 11,08%    | 9,92%       | 9,90%         | 10,62%   | 4,82%         | 11,92%        | 10,38%      |
| 116 | lividus        | 16,42%        | 12,58%    | 12,80%      | 11,32%        | 10,81%   | 11,57%        | 11,26%        | 11,27%      |
| 117 | bullatus       | 17,52%        | 11,35%    | 12,26%      | 10,55%        | 11,30%   | 10,93%        | 12,55%        | 12,04%      |
| 118 | coronatus      | 13,46%        | 11,18%    | 12,33%      | 9,90%         | 10,86%   | 5,42%         | 12,63%        | 12,08%      |
| 119 | circumactus    | 16,38%        | 7,99%     | 9,95%       | 9,47%         | 10,35%   | 9,17%         | 10,33%        | 10,13%      |
| 120 | cinereus       | 15,53%        | 9,21%     | 10,62%      | 8,44%         | 8,19%    | 7,72%         | 10,15%        | 10,37%      |
| 121 | chaldeus       | 15,72%        | 11,29%    | 12,01%      | 9,86%         | 9,66%    | 5,05%         | 12,10%        | 10,60%      |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                       | 65 nanus | 66 sanguinolentus | 67 tessulatus | 68 arenatus | 69 anemone2 | 70 mustelinus | 71 miles | 72 rattus |
|-----|-----------------------|----------|-------------------|---------------|-------------|-------------|---------------|----------|-----------|
| 65  | <i>nanus</i>          | -        |                   |               |             |             |               |          |           |
| 66  | <i>sanguinolentus</i> | 12,22%   | -                 |               |             |             |               |          |           |
| 67  | <i>tessulatus</i>     | 9,59%    | 11,22%            | -             |             |             |               |          |           |
| 68  | <i>arenatus</i>       | 7,44%    | 9,11%             | 6,46%         | -           |             |               |          |           |
| 69  | <i>anemone2</i>       | 9,09%    | 10,52%            | 8,14%         | 5,75%       | -           |               |          |           |
| 70  | <i>mustelinus</i>     | 12,07%   | 13,66%            | 9,64%         | 9,13%       | 11,08%      | -             |          |           |
| 71  | <i>miles</i>          | 12,04%   | 14,38%            | 10,34%        | 10,10%      | 11,09%      | 5,29%         | -        |           |
| 72  | <i>rattus</i>         | 12,02%   | 13,67%            | 10,58%        | 10,31%      | 11,04%      | 6,48%         | 4,57%    | -         |
| 73  | <i>ximenes</i>        | 16,83%   | 17,05%            | 17,56%        | 15,64%      | 15,79%      | 16,96%        | 16,86%   | 16,58%    |
| 74  | <i>verrucosus</i>     | 17,39%   | 17,32%            | 16,62%        | 15,70%      | 16,60%      | 17,46%        | 17,65%   | 17,10%    |
| 75  | <i>tabidus</i>        | 10,36%   | 10,25%            | 8,64%         | 7,70%       | 6,71%       | 10,36%        | 10,04%   | 11,33%    |
| 76  | <i>sponsalis</i>      | 3,59%    | 11,24%            | 9,10%         | 6,95%       | 8,12%       | 11,58%        | 12,01%   | 12,48%    |
| 77  | <i>lorenzianus</i>    | 11,48%   | 11,95%            | 8,86%         | 9,37%       | 10,50%      | 12,29%        | 12,29%   | 12,25%    |
| 78  | <i>recurvus</i>       | 11,02%   | 9,79%             | 8,63%         | 7,20%       | 6,89%       | 10,81%        | 10,33%   | 10,75%    |
| 79  | <i>orion</i>          | 11,71%   | 12,15%            | 9,57%         | 8,86%       | 7,83%       | 11,05%        | 11,29%   | 10,05%    |
| 80  | <i>granarius</i>      |          | 12,50%            | 8,41%         | 7,92%       | 9,37%       | 11,34%        | 11,58%   | 10,08%    |
| 81  | <i>fergusoni</i>      | 9,59%    | 11,24%            | 9,78%         | 7,15%       | 6,44%       | 10,30%        | 10,06%   | 10,32%    |
| 82  | <i>diadema</i>        | 11,86%   | 5,74%             | 12,54%        | 10,63%      | 10,88%      | 13,55%        | 13,18%   | 13,71%    |
| 83  | <i>centurio</i>       | 10,80%   | 11,97%            | 9,80%         | 8,38%       | 7,87%       | 11,57%        | 11,32%   | 12,27%    |
| 84  | <i>violaceus</i>      | 10,07%   | 11,71%            | 9,09%         | 9,11%       | 10,54%      | 12,31%        | 11,53%   | 13,72%    |
| 85  | <i>puncticulatus</i>  | 18,25%   | 18,52%            | 17,52%        | 16,84%      | 17,49%      | 19,43%        | 19,02%   | 19,03%    |
| 86  | <i>poormani</i>       | 11,03%   | 11,69%            | 9,33%         | 8,39%       | 7,61%       | 11,56%        | 11,05%   | 11,56%    |
| 87  | <i>perplexus</i>      | 17,27%   | 17,02%            | 17,51%        | 15,59%      | 16,25%      | 18,43%        | 18,01%   | 18,02%    |
| 88  | <i>nussatella</i>     | 10,11%   | 9,37%             | 7,93%         | 7,72%       | 8,89%       | 12,08%        | 12,50%   | 11,08%    |
| 89  | <i>capitaneus</i>     | 11,80%   | 13,67%            | 10,12%        | 10,10%      | 10,61%      | 5,25%         | 5,29%    | 6,22%     |
| 90  | <i>carinatus</i>      | 9,60%    | 10,24%            | 8,39%         | 6,25%       | 8,38%       | 9,88%         | 10,59%   | 9,86%     |
| 91  | <i>muriculatus</i>    | 11,04%   | 9,29%             | 12,01%        | 9,88%       | 10,79%      | 13,28%        | 13,04%   | 14,19%    |
| 92  | <i>imperialis</i>     | 14,46%   | 14,11%            | 11,56%        | 12,03%      | 13,24%      | 13,73%        | 13,68%   | 11,53%    |
| 93  | <i>striatellus</i>    | 11,84%   | 14,67%            | 12,53%        | 10,12%      | 10,10%      | 13,69%        | 13,53%   | 11,37%    |
| 94  | <i>striatus</i>       | 9,61%    | 8,87%             | 7,94%         | 6,05%       | 8,16%       | 10,64%        | 10,13%   | 10,37%    |
| 95  | <i>vulpinus</i>       | 10,65%   | 13,26%            | 11,84%        | 8,93%       | 10,15%      | 13,23%        | 13,34%   | 12,10%    |
| 96  | <i>cuneolus</i>       | 7,92%    | 9,56%             | 6,47%         | 5,54%       | 7,17%       | 10,35%        | 9,86%    | 11,27%    |
| 97  | <i>bartschi</i>       | 11,88%   | 11,74%            | 8,44%         | 9,66%       | 9,41%       | 11,38%        | 12,31%   | 11,59%    |
| 98  | <i>ateralbus</i>      | 9,09%    | 10,03%            | 7,43%         | 6,98%       | 8,35%       | 11,57%        | 11,31%   | 11,53%    |
| 99  | <i>arcuatus</i>       | 17,30%   | 17,00%            | 18,03%        | 15,58%      | 16,96%      | 19,16%        | 18,58%   | 18,52%    |
| 100 | <i>lineolatus</i>     | 10,37%   | 10,57%            | 10,14%        | 6,77%       | 6,00%       | 10,90%        | 10,85%   | 10,37%    |
| 101 | <i>catus</i>          | 9,60%    | 10,72%            | 8,36%         | 7,18%       | 9,81%       | 11,32%        | 11,53%   | 11,09%    |
| 102 | <i>compressus</i>     | 8,44%    | 11,30%            | 9,60%         | 6,26%       | 2,63%       | 10,65%        | 11,10%   | 10,90%    |
| 103 | <i>tenuistriatus</i>  | 12,33%   | 13,72%            | 13,21%        | 10,60%      | 9,85%       | 14,05%        | 13,56%   | 13,56%    |
| 104 | <i>episcopatus</i>    | 10,61%   | 9,84%             | 8,66%         | 6,96%       | 8,43%       | 10,62%        | 11,79%   | 12,75%    |
| 105 | <i>memiae</i>         | 15,67%   | 15,93%            | 15,63%        | 13,70%      | 15,33%      | 16,30%        | 16,49%   | 16,65%    |
| 106 | <i>tribblei</i>       | 10,53%   | 9,98%             | 10,23%        | 7,06%       | 6,55%       | 11,54%        | 11,97%   | 12,00%    |
| 107 | <i>coffae</i>         | 11,75%   | 12,69%            | 12,40%        | 10,05%      | 9,29%       | 13,73%        | 13,01%   | 13,47%    |
| 108 | <i>magus</i>          | 10,10%   | 10,73%            | 8,61%         | 6,96%       | 7,91%       | 10,62%        | 10,85%   | 9,66%     |
| 109 | <i>corallinus</i>     | 8,89%    | 11,48%            | 9,35%         | 5,77%       | 5,72%       | 10,60%        | 10,81%   | 10,07%    |
| 110 | <i>monachus</i>       | 9,20%    | 10,13%            | 8,18%         | 6,24%       | 7,96%       | 9,43%         | 10,65%   | 11,35%    |
| 111 | <i>californicus</i>   | 15,19%   | 18,87%            | 15,65%        | 14,67%      | 15,89%      | 15,44%        | 16,10%   | 15,91%    |
| 112 | <i>proximus</i>       | 9,15%    | 10,99%            | 8,39%         | 5,98%       | 7,69%       | 10,57%        | 9,37%    | 9,86%     |
| 113 | <i>parvulus</i>       | 10,31%   | 12,21%            | 7,91%         | 6,24%       | 7,86%       | 11,34%        | 12,04%   | 12,00%    |
| 114 | <i>musicus</i>        | 8,12%    | 13,77%            | 10,73%        | 10,04%      | 10,49%      | 14,61%        | 14,34%   | 13,87%    |
| 115 | <i>miliaris</i>       | 11,35%   | 11,80%            | 8,91%         | 9,16%       | 11,80%      | 10,62%        | 9,90%    | 10,85%    |
| 116 | <i>lividus</i>        | 12,28%   | 0,95%             | 11,49%        | 9,13%       | 10,33%      | 13,20%        | 14,21%   | 13,26%    |
| 117 | <i>bullatus</i>       | 11,27%   | 11,23%            | 10,08%        | 8,67%       | 11,49%      | 13,76%        | 12,55%   | 13,48%    |
| 118 | <i>coronatus</i>      | 12,09%   | 12,99%            | 9,79%         | 9,84%       | 12,07%      | 13,28%        | 11,56%   | 12,81%    |
| 119 | <i>circumactus</i>    | 9,20%    | 10,78%            | 8,92%         | 6,99%       | 8,47%       | 9,90%         | 11,01%   | 11,56%    |
| 120 | <i>cinereus</i>       | 9,16%    | 10,08%            | 8,68%         | 5,79%       | 8,18%       | 10,64%        | 10,37%   | 11,52%    |
| 121 | <i>chaldeus</i>       | 10,34%   | 10,81%            | 9,86%         | 9,36%       | 11,26%      | 12,28%        | 11,09%   | 11,75%    |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                      | 73 <i>ximenes</i> | 74 <i>verrucosus</i> | 75 <i>tabidus</i> | 76 <i>sponsalis</i> | 77 <i>lorenzianus</i> | 78 <i>recurvus</i> | 79 <i>orion</i> | 80 <i>granarius</i> |
|-----|----------------------|-------------------|----------------------|-------------------|---------------------|-----------------------|--------------------|-----------------|---------------------|
| 73  | <i>ximenes</i>       | -                 |                      |                   |                     |                       |                    |                 |                     |
| 74  | <i>verrucosus</i>    | 4,43%             | -                    |                   |                     |                       |                    |                 |                     |
| 75  | <i>tabidus</i>       | 15,81%            | 16,35%               | -                 |                     |                       |                    |                 |                     |
| 76  | <i>sponsalis</i>     | 15,53%            | 16,34%               | 10,10%            | -                   |                       |                    |                 |                     |
| 77  | <i>lorenzianus</i>   | 16,27%            | 16,34%               | 9,38%             | 10,02%              | -                     |                    |                 |                     |
| 78  | <i>recurvus</i>      | 14,13%            | 14,16%               | 7,44%             | 10,04%              | 7,89%                 | -                  |                 |                     |
| 79  | <i>orion</i>         | 16,00%            | 16,25%               | 6,92%             | 11,93%              | 9,54%                 | 6,17%              | -               |                     |
| 80  | <i>granarius</i>     | 17,09%            | 18,41%               | 10,41%            | 10,58%              | 11,29%                | 7,91%              | 7,92%           | -                   |
| 81  | <i>fergusoni</i>     | 15,59%            | 16,40%               | 5,97%             | 8,37%               | 9,81%                 | 5,93%              | 6,91%           | 9,12%               |
| 82  | <i>diadema</i>       | 16,05%            | 16,82%               | 10,80%            | 11,11%              | 12,28%                | 10,33%             | 11,79%          | 13,29%              |
| 83  | <i>centurio</i>      | 15,29%            | 14,83%               | 7,17%             | 10,55%              | 10,55%                | 4,55%              | 6,44%           | 9,38%               |
| 84  | <i>violaceus</i>     | 16,33%            | 16,89%               | 9,36%             | 8,38%               | 10,30%                | 10,29%             | 11,28%          | 11,32%              |
| 85  | <i>puncticulatus</i> | 4,92%             | 5,44%                | 17,74%            | 17,22%              | 17,48%                | 16,07%             | 17,98%          | 17,30%              |
| 86  | <i>poormani</i>      | 15,80%            | 15,36%               | 7,16%             | 11,48%              | 9,32%                 | 3,32%              | 5,25%           | 9,15%               |
| 87  | <i>perplexus</i>     | 3,69%             | 5,42%                | 16,24%            | 16,23%              | 16,23%                | 15,08%             | 16,47%          | 17,54%              |
| 88  | <i>nussatella</i>    | 15,82%            | 15,64%               | 9,61%             | 9,37%               | 9,85%                 | 8,17%              | 9,84%           | 10,12%              |
| 89  | <i>capitaneus</i>    | 16,94%            | 17,97%               | 11,34%            | 11,09%              | 11,80%                | 10,82%             | 11,06%          | 10,13%              |
| 90  | <i>carinatus</i>     | 14,10%            | 14,37%               | 8,15%             | 9,10%               | 9,81%                 | 6,94%              | 9,06%           | 9,38%               |
| 91  | <i>muriculatus</i>   | 16,08%            | 15,66%               | 10,34%            | 11,25%              | 12,46%                | 10,34%             | 12,70%          | 13,25%              |
| 92  | <i>imperialis</i>    | 15,89%            | 16,64%               | 13,22%            | 14,43%              | 12,04%                | 10,79%             | 12,45%          | 10,10%              |
| 93  | <i>striatellus</i>   | 15,65%            | 15,98%               | 11,81%            | 11,33%              | 12,03%                | 9,33%              | 9,15%           | 9,94%               |
| 94  | <i>striatus</i>      | 15,60%            | 16,37%               | 8,44%             | 9,11%               | 9,33%                 | 6,49%              | 9,12%           | 10,12%              |
| 95  | <i>vulpinus</i>      | 16,19%            | 16,70%               | 10,67%            | 10,64%              | 11,58%                | 9,86%              | 10,87%          | 9,70%               |
| 96  | <i>cuneolus</i>      | 15,81%            | 16,58%               | 7,47%             | 6,94%               | 8,86%                 | 7,19%              | 9,32%           | 9,13%               |
| 97  | <i>bartschi</i>      | 15,35%            | 16,38%               | 9,39%             | 11,36%              | 10,87%                | 7,46%              | 8,42%           | 7,96%               |
| 98  | <i>ateralbus</i>     | 15,05%            | 16,36%               | 8,91%             | 7,40%               | 8,59%                 | 8,12%              | 10,26%          | 8,42%               |
| 99  | <i>arcuatus</i>      | 5,49%             | 6,77%                | 17,28%            | 16,50%              | 16,79%                | 15,77%             | 16,97%          | 17,34%              |
| 100 | <i>lineolatus</i>    | 15,85%            | 17,10%               | 6,69%             | 9,87%               | 10,36%                | 6,71%              | 6,93%           | 8,47%               |
| 101 | <i>catus</i>         | 15,40%            | 15,96%               | 8,86%             | 9,10%               | 9,56%                 | 9,08%              | 9,33%           | 10,34%              |
| 102 | <i>compressus</i>    | 16,66%            | 17,49%               | 6,52%             | 7,70%               | 11,33%                | 7,65%              | 8,16%           | 9,42%               |
| 103 | <i>tenuistriatus</i> | 15,93%            | 16,74%               | 9,16%             | 12,05%              | 11,31%                | 10,55%             | 9,36%           | 11,61%              |
| 104 | <i>episcopatus</i>   | 14,20%            | 14,96%               | 8,63%             | 8,66%               | 8,88%                 | 8,39%              | 10,54%          | 9,63%               |
| 105 | <i>memiae</i>        | 3,22%             | 4,73%                | 14,17%            | 15,14%              | 15,14%                | 12,66%             | 15,31%          | 15,68%              |
| 106 | <i>tribblei</i>      | 16,05%            | 16,61%               | 6,59%             | 11,00%              | 11,67%                | 8,24%              | 7,29%           | 10,04%              |
| 107 | <i>coffae</i>        | 15,53%            | 16,07%               | 8,14%             | 11,72%              | 10,52%                | 10,01%             | 9,06%           | 11,54%              |
| 108 | <i>magus</i>         | 14,10%            | 14,66%               | 9,11%             | 9,12%               | 9,35%                 | 6,25%              | 8,86%           | 9,40%               |
| 109 | <i>corallinus</i>    | 15,31%            | 15,84%               | 7,43%             | 8,63%               | 9,83%                 | 6,19%              | 7,15%           | 8,43%               |
| 110 | <i>monachus</i>      | 14,53%            | 14,82%               | 8,94%             | 8,48%               | 8,18%                 | 6,98%              | 8,94%           | 8,69%               |
| 111 | <i>californicus</i>  | 11,49%            | 12,49%               | 15,60%            | 14,91%              | 14,17%                | 15,39%             | 15,61%          | 15,93%              |
| 112 | <i>proximus</i>      | 16,95%            | 17,27%               | 8,67%             | 8,42%               | 10,11%                | 7,68%              | 9,85%           | 9,38%               |
| 113 | <i>parvulus</i>      | 17,30%            | 17,08%               | 7,68%             | 8,85%               | 9,56%                 | 7,38%              | 9,03%           | 9,39%               |
| 114 | <i>musicus</i>       | 18,01%            | 18,03%               | 13,12%            | 5,02%               | 12,17%                | 11,70%             | 14,05%          | 12,49%              |
| 115 | <i>miliaris</i>      | 15,94%            | 17,46%               | 10,36%            | 11,58%              | 11,31%                | 9,64%              | 10,83%          | 9,42%               |
| 116 | <i>lividus</i>       | 17,39%            | 17,66%               | 10,54%            | 11,30%              | 11,52%                | 9,60%              | 11,73%          | 12,30%              |
| 117 | <i>bullatus</i>      | 17,60%            | 17,92%               | 10,61%            | 11,72%              | 11,01%                | 9,34%              | 10,99%          | 11,09%              |
| 118 | <i>coronatus</i>     | 14,23%            | 14,74%               | 11,30%            | 11,57%              | 11,57%                | 9,41%              | 10,57%          | 10,40%              |
| 119 | <i>circumactus</i>   | 14,89%            | 15,41%               | 10,53%            | 8,70%               | 10,14%                | 7,95%              | 9,86%           | 9,42%               |
| 120 | <i>cinereus</i>      | 16,12%            | 16,44%               | 8,68%             | 8,41%               | 9,59%                 | 7,68%              | 10,10%          | 8,40%               |
| 121 | <i>chaldeus</i>      | 15,79%            | 16,36%               | 10,15%            | 9,84%               | 10,78%                | 9,07%              | 10,80%          | 10,11%              |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |               | 81 fergusonii | 82 diadema | 83 centurio | 84 violaceus | 85 puncticulatus | 86 poormani | 87 perplexus | 88 nussatella |
|-----|---------------|---------------|------------|-------------|--------------|------------------|-------------|--------------|---------------|
| 81  | fergusoni     | -             |            |             |              |                  |             |              |               |
| 82  | diadema       | 11,54%        | -          |             |              |                  |             |              |               |
| 83  | centurio      | 7,62%         | 11,10%     | -           |              |                  |             |              |               |
| 84  | violaceus     | 10,53%        | 11,09%     | 10,78%      | -            |                  |             |              |               |
| 85  | puncticulatus | 18,04%        | 18,22%     | 17,00%      | 17,77%       | -                |             |              |               |
| 86  | poormani      | 6,17%         | 11,09%     | 4,04%       | 11,22%       | 17,00%           | -           |              |               |
| 87  | perplexus     | 16,54%        | 16,73%     | 15,76%      | 16,05%       | 4,43%            | 16,01%      | -            |               |
| 88  | nussatella    | 9,60%         | 10,11%     | 10,12%      | 9,36%        | 17,53%           | 10,07%      | 16,53%       | -             |
| 89  | capitaneus    | 10,79%        | 12,34%     | 11,09%      | 12,30%       | 18,66%           | 11,31%      | 17,91%       | 10,15%        |
| 90  | carinatus     | 9,07%         | 10,61%     | 7,92%       | 9,87%        | 15,59%           | 7,90%       | 14,83%       | 6,95%         |
| 91  | muriculatus   | 11,03%        | 7,92%      | 12,00%      | 11,07%       | 17,78%           | 11,76%      | 15,54%       | 10,06%        |
| 92  | imperialis    | 12,69%        | 13,44%     | 12,25%      | 14,16%       | 16,35%           | 11,05%      | 16,07%       | 12,05%        |
| 93  | striatellus   | 9,79%         | 14,52%     | 9,63%       | 13,99%       | 17,15%           | 9,57%       | 17,12%       | 11,59%        |
| 94  | striatus      | 8,87%         | 8,93%      | 8,90%       | 8,93%        | 18,29%           | 8,15%       | 15,77%       | 7,20%         |
| 95  | vulpinus      | 9,14%         | 13,55%     | 9,93%       | 13,06%       | 16,94%           | 10,87%      | 15,90%       | 9,46%         |
| 96  | cuneolus      | 7,44%         | 10,59%     | 8,40%       | 8,64%        | 17,26%           | 8,62%       | 15,77%       | 7,21%         |
| 97  | bartschi      | 9,14%         | 12,06%     | 8,93%       | 11,56%       | 16,07%           | 8,42%       | 15,57%       | 9,15%         |
| 98  | ateralbus     | 9,33%         | 10,62%     | 10,06%      | 9,11%        | 16,50%           | 10,04%      | 15,75%       | 8,89%         |
| 99  | arcuatus      | 16,95%        | 17,00%     | 17,04%      | 17,27%       | 7,26%            | 17,03%      | 5,49%        | 17,59%        |
| 100 | lineolatus    | 5,28%         | 11,34%     | 7,94%       | 11,09%       | 18,78%           | 6,95%       | 17,48%       | 9,87%         |
| 101 | catus         | 10,23%        | 10,86%     | 9,81%       | 9,59%        | 16,62%           | 9,53%       | 15,35%       | 8,64%         |
| 102 | compressus    | 5,94%         | 12,13%     | 8,14%       | 10,82%       | 18,38%           | 8,12%       | 17,40%       | 9,65%         |
| 103 | tenuistriatus | 9,35%         | 13,36%     | 9,60%       | 11,30%       | 17,62%           | 10,28%      | 15,90%       | 11,85%        |
| 104 | episcopatus   | 9,06%         | 10,59%     | 9,84%       | 9,85%        | 16,38%           | 9,82%       | 14,41%       | 8,69%         |
| 105 | memiae        | 14,85%        | 15,94%     | 13,85%      | 15,17%       | 5,48%            | 14,14%      | 4,47%        | 14,70%        |
| 106 | tribblei      | 6,56%         | 10,54%     | 8,49%       | 12,23%       | 17,06%           | 8,25%       | 16,03%       | 8,80%         |
| 107 | coffaeae      | 9,27%         | 12,07%     | 8,57%       | 10,29%       | 17,24%           | 9,75%       | 15,26%       | 10,59%        |
| 108 | magus         | 8,83%         | 10,85%     | 8,63%       | 10,32%       | 15,85%           | 7,90%       | 15,08%       | 6,71%         |
| 109 | corallinus    | 5,01%         | 11,79%     | 8,13%       | 10,52%       | 16,76%           | 7,84%       | 15,77%       | 8,40%         |
| 110 | monachus      | 7,69%         | 10,67%     | 8,67%       | 9,66%        | 16,43%           | 8,45%       | 15,22%       | 8,26%         |
| 111 | californicus  | 14,56%        | 17,25%     | 17,13%      | 15,40%       | 13,41%           | 16,11%      | 12,95%       | 16,66%        |
| 112 | proximus      | 8,58%         | 11,79%     | 8,87%       | 9,35%        | 18,39%           | 9,58%       | 17,39%       | 7,94%         |
| 113 | parvulus      | 5,97%         | 12,75%     | 9,08%       | 10,08%       | 18,76%           | 8,58%       | 17,76%       | 8,90%         |
| 114 | musicus       | 11,89%        | 14,39%     | 11,71%      | 11,00%       | 18,97%           | 13,33%      | 17,97%       | 10,51%        |
| 115 | miliaris      | 11,53%        | 11,86%     | 9,65%       | 10,37%       | 16,90%           | 10,36%      | 15,61%       | 10,13%        |
| 116 | lividus       | 11,49%        | 6,25%      | 12,00%      | 11,28%       | 18,87%           | 11,51%      | 17,36%       | 9,19%         |
| 117 | bullatus      | 10,30%        | 12,10%     | 10,57%      | 11,77%       | 18,32%           | 10,31%      | 18,28%       | 9,64%         |
| 118 | coronatus     | 12,01%        | 13,05%     | 8,41%       | 10,87%       | 14,94%           | 10,33%      | 14,40%       | 10,56%        |
| 119 | circumactus   | 8,14%         | 11,00%     | 9,42%       | 10,35%       | 17,05%           | 8,92%       | 15,32%       | 8,68%         |
| 120 | cinereus      | 8,18%         | 10,35%     | 7,96%       | 9,40%        | 17,30%           | 8,43%       | 16,30%       | 8,44%         |
| 121 | chaldeus      | 10,78%        | 11,81%     | 8,66%       | 8,91%        | 16,77%           | 10,08%      | 16,01%       | 9,66%         |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                      | 89 <i>capitaneus</i> | 90 <i>carinatus</i> | 91 <i>muriculatus</i> | 92 <i>imperialis</i> | 93 <i>striatellus</i> | 94 <i>striatus</i> | 95 <i>vulpinus</i> | 96 <i>cuneolus</i> |
|-----|----------------------|----------------------|---------------------|-----------------------|----------------------|-----------------------|--------------------|--------------------|--------------------|
| 89  | <i>capitaneus</i>    | -                    |                     |                       |                      |                       |                    |                    |                    |
| 90  | <i>carinatus</i>     | 10,84%               | -                   |                       |                      |                       |                    |                    |                    |
| 91  | <i>muriculatus</i>   | 13,26%               | 10,54%              | -                     |                      |                       |                    |                    |                    |
| 92  | <i>imperialis</i>    | 13,27%               | 11,54%              | 13,72%                | -                    |                       |                    |                    |                    |
| 93  | <i>striatellus</i>   | 12,25%               | 9,91%               | 13,26%                | 13,99%               | -                     |                    |                    |                    |
| 94  | <i>striatus</i>      | 10,14%               | 5,03%               | 10,07%                | 12,31%               | 12,09%                | -                  |                    |                    |
| 95  | <i>vulpinus</i>      | 11,80%               | 9,90%               | 13,31%                | 13,25%               | 5,03%                 | 12,12%             | -                  |                    |
| 96  | <i>cuneolus</i>      | 9,63%                | 7,17%               | 10,79%                | 11,53%               | 10,85%                | 6,72%              | 9,40%              | -                  |
| 97  | <i>bartschi</i>      | 10,18%               | 8,41%               | 11,79%                | 9,62%                | 9,91%                 | 9,40%              | 9,94%              | 8,41%              |
| 98  | <i>ateralbus</i>     | 11,33%               | 8,87%               | 10,32%                | 12,76%               | 12,55%                | 6,96%              | 11,37%             | 6,23%              |
| 99  | <i>arcuatus</i>      | 19,16%               | 15,56%              | 17,03%                | 16,54%               | 17,06%                | 16,57%             | 15,70%             | 16,80%             |
| 100 | <i>lineolatus</i>    | 11,14%               | 7,94%               | 11,32%                | 11,58%               | 10,16%                | 9,37%              | 9,96%              | 8,90%              |
| 101 | <i>catus</i>         | 12,03%               | 3,82%               | 11,51%                | 12,22%               | 11,78%                | 5,76%              | 11,58%             | 7,90%              |
| 102 | <i>compressus</i>    | 10,65%               | 9,13%               | 11,81%                | 12,52%               | 10,83%                | 9,17%              | 9,67%              | 7,68%              |
| 103 | <i>tenuistriatus</i> | 12,85%               | 10,57%              | 13,51%                | 13,28%               | 11,80%                | 11,58%             | 11,38%             | 11,80%             |
| 104 | <i>episcopatus</i>   | 10,86%               | 8,38%               | 9,16%                 | 12,49%               | 10,82%                | 8,45%              | 9,39%              | 7,20%              |
| 105 | <i>memiae</i>        | 16,83%               | 13,60%              | 15,16%                | 14,70%               | 15,94%                | 15,39%             | 15,03%             | 14,87%             |
| 106 | <i>tribblei</i>      | 11,80%               | 10,20%              | 9,74%                 | 14,44%               | 11,27%                | 9,74%              | 10,59%             | 9,27%              |
| 107 | <i>coffae</i>        | 12,78%               | 10,05%              | 12,21%                | 13,23%               | 11,76%                | 10,81%             | 11,35%             | 11,01%             |
| 108 | <i>magus</i>         | 11,10%               | 0,71%               | 10,80%                | 11,33%               | 9,67%                 | 5,30%              | 9,96%              | 7,19%              |
| 109 | <i>corallinus</i>    | 9,64%                | 8,84%               | 10,78%                | 12,72%               | 8,86%                 | 8,87%              | 8,42%              | 7,89%              |
| 110 | <i>monachus</i>      | 10,15%               | 6,75%               | 10,15%                | 11,63%               | 9,68%                 | 7,97%              | 9,22%              | 7,01%              |
| 111 | <i>californicus</i>  | 15,69%               | 13,63%              | 16,47%                | 16,77%               | 14,23%                | 15,89%             | 13,76%             | 15,63%             |
| 112 | <i>proximus</i>      | 9,63%                | 7,20%               | 11,07%                | 12,68%               | 12,76%                | 6,29%              | 11,10%             | 6,26%              |
| 113 | <i>parvulus</i>      | 11,33%               | 8,14%               | 10,78%                | 13,95%               | 11,08%                | 8,65%              | 10,16%             | 8,14%              |
| 114 | <i>musicus</i>       | 13,65%               | 10,23%              | 13,35%                | 15,33%               | 14,17%                | 10,51%             | 13,50%             | 10,26%             |
| 115 | <i>miliaris</i>      | 10,88%               | 9,43%               | 11,61%                | 10,92%               | 14,46%                | 8,68%              | 12,60%             | 8,71%              |
| 116 | <i>lividus</i>       | 13,21%               | 10,28%              | 9,81%                 | 13,91%               | 14,22%                | 9,16%              | 13,02%             | 10,07%             |
| 117 | <i>bullatus</i>      | 13,28%               | 7,66%               | 12,74%                | 14,49%               | 13,81%                | 7,45%              | 13,12%             | 8,41%              |
| 118 | <i>coronatus</i>     | 12,78%               | 9,15%               | 12,34%                | 13,10%               | 13,53%                | 9,13%              | 12,35%             | 8,61%              |
| 119 | <i>circumactus</i>   | 10,37%               | 6,77%               | 9,18%                 | 12,74%               | 9,67%                 | 8,00%              | 9,93%              | 7,71%              |
| 120 | <i>cinereus</i>      | 10,65%               | 7,71%               | 9,85%                 | 11,55%               | 12,10%                | 7,46%              | 10,43%             | 7,23%              |
| 121 | <i>chaldeus</i>      | 12,04%               | 9,15%               | 12,02%                | 11,58%               | 12,99%                | 8,43%              | 12,07%             | 9,12%              |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                      | 97 <i>bartschi</i> | 98 <i>ateralbus</i> | 99 <i>arcuatus</i> | 100 <i>lineolatus</i> | 101 <i>catus</i> | 102 <i>compressus</i> | 103 <i>tenuistriatus</i> | 104 <i>episcopatus</i> |
|-----|----------------------|--------------------|---------------------|--------------------|-----------------------|------------------|-----------------------|--------------------------|------------------------|
| 97  | <i>bartschi</i>      | -                  |                     |                    |                       |                  |                       |                          |                        |
| 98  | <i>ateralbus</i>     | 9,91%              | -                   |                    |                       |                  |                       |                          |                        |
| 99  | <i>arcuatus</i>      | 16,87%             | 16,56%              | -                  |                       |                  |                       |                          |                        |
| 100 | <i>lineolatus</i>    | 9,43%              | 9,16%               | 17,50%             | -                     |                  |                       |                          |                        |
| 101 | <i>catus</i>         | 9,63%              | 8,86%               | 15,64%             | 8,67%                 | -                |                       |                          |                        |
| 102 | <i>compressus</i>    | 10,38%             | 9,63%               | 17,86%             | 5,55%                 | 9,80%            | -                     |                          |                        |
| 103 | <i>tenuistriatus</i> | 11,13%             | 10,58%              | 16,39%             | 9,20%                 | 10,52%           | 10,10%                | -                        |                        |
| 104 | <i>episcopatus</i>   | 8,19%              | 7,94%               | 15,22%             | 8,72%                 | 9,34%            | 10,13%                | 11,54%                   | -                      |
| 105 | <i>memiae</i>        | 15,65%             | 14,16%              | 5,70%              | 15,61%                | 14,92%           | 16,17%                | 14,68%                   | 13,73%                 |
| 106 | <i>tribblei</i>      | 11,02%             | 9,72%               | 17,28%             | 7,07%                 | 10,68%           | 6,82%                 | 9,06%                    | 10,29%                 |
| 107 | <i>coffae</i>        | 10,62%             | 10,51%              | 16,76%             | 8,90%                 | 9,78%            | 9,56%                 | 3,37%                    | 10,76%                 |
| 108 | <i>magus</i>         | 7,95%              | 8,40%               | 15,57%             | 7,74%                 | 4,78%            | 9,38%                 | 11,52%                   | 8,16%                  |
| 109 | <i>corallinus</i>    | 8,87%              | 9,35%               | 16,23%             | 6,22%                 | 10,28%           | 5,50%                 | 8,63%                    | 8,41%                  |
| 110 | <i>monachus</i>      | 7,75%              | 8,68%               | 15,21%             | 7,31%                 | 7,22%            | 8,48%                 | 10,67%                   | 5,78%                  |
| 111 | <i>californicus</i>  | 13,97%             | 15,64%              | 11,46%             | 15,13%                | 14,86%           | 16,40%                | 16,19%                   | 12,68%                 |
| 112 | <i>proximus</i>      | 10,35%             | 8,67%               | 17,85%             | 8,71%                 | 9,08%            | 8,17%                 | 11,79%                   | 8,86%                  |
| 113 | <i>parvulus</i>      | 9,88%              | 8,84%               | 17,77%             | 6,95%                 | 9,11%            | 7,20%                 | 11,31%                   | 8,40%                  |
| 114 | <i>musicus</i>       | 12,74%             | 10,25%              | 18,73%             | 11,98%                | 11,67%           | 11,04%                | 14,87%                   | 11,24%                 |
| 115 | <i>miliaris</i>      | 7,53%              | 10,12%              | 16,43%             | 10,89%                | 9,41%            | 12,37%                | 13,09%                   | 9,35%                  |
| 116 | <i>lividus</i>       | 11,54%             | 10,32%              | 17,35%             | 9,91%                 | 11,24%           | 11,32%                | 13,74%                   | 9,63%                  |
| 117 | <i>bullatus</i>      | 12,13%             | 10,77%              | 18,11%             | 11,09%                | 8,13%            | 11,33%                | 13,55%                   | 11,36%                 |
| 118 | <i>coronatus</i>     | 9,40%              | 10,63%              | 14,43%             | 12,34%                | 8,89%            | 11,82%                | 11,64%                   | 10,38%                 |
| 119 | <i>circumactus</i>   | 8,22%              | 8,93%               | 15,82%             | 8,23%                 | 7,46%            | 9,22%                 | 10,42%                   | 6,75%                  |
| 120 | <i>cinereus</i>      | 9,90%              | 8,17%               | 16,29%             | 8,69%                 | 8,42%            | 8,49%                 | 10,44%                   | 7,45%                  |
| 121 | <i>chaldeus</i>      | 8,74%              | 10,31%              | 16,51%             | 11,14%                | 8,67%            | 10,65%                | 11,36%                   | 9,59%                  |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                     | 105 <i>memiae</i> | 106 <i>tribblei</i> | 107 <i>coffae</i> | 108 <i>magus</i> | 109 <i>corallinus</i> | 110 <i>monachus</i> | 111 <i>californicus</i> | 112 <i>proximus</i> |
|-----|---------------------|-------------------|---------------------|-------------------|------------------|-----------------------|---------------------|-------------------------|---------------------|
| 105 | <i>memiae</i>       | -                 |                     |                   |                  |                       |                     |                         |                     |
| 106 | <i>tribblei</i>     | 15,30%            | -                   |                   |                  |                       |                     |                         |                     |
| 107 | <i>coffae</i>       | 14,32%            | 8,25%               | -                 |                  |                       |                     |                         |                     |
| 108 | <i>magus</i>        | 13,87%            | 10,68%              | 10,75%            | -                |                       |                     |                         |                     |
| 109 | <i>corallinus</i>   | 14,37%            | 5,85%               | 8,10%             | 8,87%            | -                     |                     |                         |                     |
| 110 | <i>monachus</i>     | 14,05%            | 8,61%               | 10,35%            | 6,98%            | 7,04%                 | -                   |                         |                     |
| 111 | <i>californicus</i> | 10,82%            | 15,86%              | 15,63%            | 12,93%           | 14,14%                | 12,46%              | -                       |                     |
| 112 | <i>proximus</i>     | 16,01%            | 10,02%              | 11,52%            | 8,15%            | 7,68%                 | 6,22%               | 15,85%                  | -                   |
| 113 | <i>parvulus</i>     | 16,40%            | 7,54%               | 10,97%            | 8,17%            | 5,96%                 | 7,98%               | 15,64%                  | 8,45%               |
| 114 | <i>musicus</i>      | 17,64%            | 14,36%              | 14,32%            | 9,78%            | 11,42%                | 10,13%              | 17,47%                  | 10,29%              |
| 115 | <i>miliaris</i>     | 15,50%            | 12,29%              | 12,27%            | 9,91%            | 10,87%                | 8,68%               | 16,19%                  | 9,17%               |
| 116 | <i>lividus</i>      | 16,47%            | 10,48%              | 12,71%            | 10,77%           | 11,06%                | 10,36%              | 18,48%                  | 10,78%              |
| 117 | <i>bullatus</i>     | 16,21%            | 11,24%              | 12,72%            | 7,92%            | 10,33%                | 9,19%               | 16,62%                  | 7,72%               |
| 118 | <i>coronatus</i>    | 13,79%            | 13,00%              | 11,58%            | 9,89%            | 11,06%                | 9,34%               | 15,23%                  | 8,87%               |
| 119 | <i>circumactus</i>  | 14,74%            | 10,04%              | 10,38%            | 6,51%            | 8,45%                 | 2,89%               | 12,94%                  | 6,95%               |
| 120 | <i>cinereus</i>     | 14,73%            | 9,56%               | 10,12%            | 8,21%            | 7,48%                 | 5,06%               | 15,40%                  | 5,04%               |
| 121 | <i>chaldeus</i>     | 15,13%            | 11,80%              | 10,82%            | 9,64%            | 10,32%                | 9,38%               | 16,64%                  | 8,41%               |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                    | 113 <i>parvulus</i> | 114 <i>musicus</i> | 115 <i>miliaris</i> | 116 <i>lividus</i> | 117 <i>bullatus</i> | 118 <i>coronatus</i> | 119 <i>circumactus</i> | 120 <i>cinereus</i> | 121 <i>chaldeus</i> |
|-----|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|----------------------|------------------------|---------------------|---------------------|
| 113 | <i>parvulus</i>    | -                   |                    |                     |                    |                     |                      |                        |                     |                     |
| 114 | <i>musicus</i>     | 11,47%              | -                  |                     |                    |                     |                      |                        |                     |                     |
| 115 | <i>miliaris</i>    | 11,82%              | 13,20%             | -                   |                    |                     |                      |                        |                     |                     |
| 116 | <i>lividus</i>     | 12,26%              | 13,84%             | 11,62%              | -                  |                     |                      |                        |                     |                     |
| 117 | <i>bullatus</i>    | 10,31%              | 12,66%             | 11,35%              | 11,77%             | -                   |                      |                        |                     |                     |
| 118 | <i>coronatus</i>   | 12,80%              | 13,22%             | 6,15%               | 12,81%             | 10,90%              | -                    |                        |                     |                     |
| 119 | <i>circumactus</i> | 8,91%               | 11,27%             | 9,44%               | 10,83%             | 9,44%               | 10,38%               | -                      |                     |                     |
| 120 | <i>cinereus</i>    | 9,39%               | 9,60%              | 8,21%               | 9,65%              | 9,40%               | 8,66%                | 6,74%                  | -                   |                     |
| 121 | <i>chaldeus</i>    | 12,26%              | 11,28%             | 5,76%               | 10,86%             | 10,11%              | 5,21%                | 9,63%                  | 7,92%               | -                   |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                     | 1 <i>marmoreus</i> | 2 <i>marmoreus1</i> | 3 <i>aureus</i> | 4 <i>araneosus</i> | 5 <i>texile</i> | 6 <i>nigrescens</i> | 7 <i>pennaceus</i> | 8 <i>canonicus</i> |
|-----|---------------------|--------------------|---------------------|-----------------|--------------------|-----------------|---------------------|--------------------|--------------------|
| 122 | <i>betulinus</i>    | 8,18%              | 8,18%               | 8,43%           | 9,90%              | 9,15%           | 8,66%               | 12,03%             | 9,87%              |
| 123 | <i>balteatus</i>    | 8,22%              | 8,22%               | 8,25%           | 8,97%              | 8,95%           | 8,46%               | 10,40%             | 8,95%              |
| 124 | <i>radiatus</i>     | 6,24%              | 6,24%               | 6,27%           | 6,04%              | 6,98%           | 6,48%               | 8,70%              | 7,70%              |
| 125 | <i>shikamai</i>     | 8,43%              | 8,43%               | 8,20%           | 7,96%              | 7,71%           | 8,42%               | 9,14%              | 8,19%              |
| 126 | <i>figulinus</i>    | 6,74%              | 6,74%               | 7,24%           | 7,99%              | 9,88%           | 7,21%               | 10,60%             | 10,13%             |
| 127 | <i>viola</i>        | 9,66%              | 9,66%               | 9,42%           | 8,70%              | 9,17%           | 9,65%               | 9,64%              | 9,17%              |
| 128 | <i>acutangulus</i>  | 9,42%              | 9,42%               | 9,16%           | 8,47%              | 9,41%           | 9,41%               | 10,11%             | 9,42%              |
| 129 | <i>musicus1</i>     | 9,13%              | 9,13%               | 8,43%           | 8,42%              | 8,17%           | 9,37%               | 9,38%              | 9,13%              |
| 130 | <i>loriosii</i>     | 6,96%              | 6,96%               | 7,93%           | 8,21%              | 10,09%          | 7,43%               | 11,28%             | 10,34%             |
| 131 | <i>emaciatius</i>   | 9,35%              | 9,35%               | 8,21%           | 8,92%              | 8,90%           | 9,59%               | 10,12%             | 9,15%              |
| 132 | <i>granum</i>       | 8,70%              | 8,70%               | 9,16%           | 9,19%              | 9,66%           | 8,70%               | 10,83%             | 8,94%              |
| 133 | <i>archon</i>       | 10,11%             | 10,11%              | 9,86%           | 11,35%             | 9,86%           | 9,87%               | 10,79%             | 9,86%              |
| 134 | <i>aristophanes</i> | 10,16%             | 10,16%              | 9,45%           | 10,66%             | 9,91%           | 11,37%              | 9,66%              | 9,91%              |
| 135 | <i>beddomei</i>     | 9,83%              | 9,83%               | 10,07%          | 9,14%              | 9,83%           | 10,06%              | 11,25%             | 10,08%             |
| 136 | <i>eburneus</i>     | 8,21%              | 8,21%               | 6,78%           | 8,26%              | 5,79%           | 8,92%               | 7,95%              | 7,73%              |
| 137 | <i>flavidus</i>     | 11,53%             | 11,53%              | 11,09%          | 11,11%             | 11,56%          | 12,00%              | 12,99%             | 12,05%             |
| 138 | <i>glans</i>        | 9,83%              | 9,83%               | 10,08%          | 8,41%              | 9,84%           | 10,07%              | 12,21%             | 10,08%             |
| 139 | <i>litteratus</i>   | 8,18%              | 8,18%               | 6,75%           | 8,22%              | 5,53%           | 8,90%               | 7,94%              | 7,94%              |
| 140 | <i>mitratus</i>     | 12,54%             | 12,54%              | 12,32%          | 11,83%             | 13,24%          | 12,78%              | 13,26%             | 13,25%             |
| 141 | <i>moluccensis</i>  | 8,49%              | 8,49%               | 8,51%           | 7,80%              | 9,48%           | 8,72%               | 11,19%             | 9,74%              |
| 142 | <i>mucronatus</i>   | 11,26%             | 11,26%              | 11,32%          | 10,36%             | 11,78%          | 11,02%              | 12,78%             | 11,77%             |
| 143 | <i>boeticus</i>     | 20,08%             | 20,08%              | 20,78%          | 18,87%             | 20,31%          | 20,08%              | 22,20%             | 19,60%             |
| 144 | <i>cf. boeticus</i> | 10,32%             | 10,32%              | 9,14%           | 10,34%             | 10,31%          | 10,32%              | 11,50%             | 9,58%              |
| 145 | <i>scopulorum</i>   | 9,17%              | 9,17%               | 9,89%           | 8,45%              | 7,95%           | 9,40%               | 11,30%             | 8,20%              |
| 146 | <i>spurius</i>      | 8,93%              | 8,93%               | 8,46%           | 8,97%              | 8,93%           | 9,64%               | 11,56%             | 8,48%              |
| 147 | <i>mindanus</i>     | 16,69%             | 16,69%              | 16,64%          | 16,23%             | 14,94%          | 16,67%              | 15,63%             | 15,18%             |
| 148 | <i>delessertii</i>  | 20,95%             | 20,95%              | 20,87%          | 20,94%             | 19,66%          | 20,68%              | 20,61%             | 20,17%             |
| 149 | <i>circumciscus</i> | 8,14%              | 8,14%               | 6,72%           | 8,66%              | 8,13%           | 8,37%               | 7,92%              | 7,90%              |
| 150 | <i>T. horasei</i>   | 17,56%             | 17,56%              | 18,61%          | 19,12%             | 17,62%          | 17,08%              | 19,09%             | 18,09%             |
| 151 | <i>T. subulata</i>  | 19,62%             | 19,62%              | 19,84%          | 20,47%             | 19,17%          | 19,87%              | 20,14%             | 20,14%             |
| 152 | <i>T. crenulata</i> | 19,43%             | 19,43%              | 19,97%          | 20,78%             | 20,21%          | 19,47%              | 21,95%             | 20,75%             |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                     | 9 <i>distans</i> | 10 <i>gloriamaris</i> | 11 <i>ammiralis</i> | 12 <i>aulicus</i> | 13 <i>magnificus</i> | 14 <i>bandanus</i> | 15 <i>dalli</i> | 16 <i>natalis</i> |
|-----|---------------------|------------------|-----------------------|---------------------|-------------------|----------------------|--------------------|-----------------|-------------------|
| 122 | <i>betulinus</i>    | 11,36%           | 9,38%                 | 8,42%               | 10,14%            | 8,66%                | 8,42%              | 9,40%           | 10,83%            |
| 123 | <i>balteatus</i>    | 12,37%           | 8,95%                 | 8,46%               | 8,03%             | 8,71%                | 8,70%              | 9,69%           | 9,18%             |
| 124 | <i>radiatus</i>     | 11,33%           | 6,49%                 | 7,23%               | 7,73%             | 6,99%                | 7,20%              | 7,72%           | 7,96%             |
| 125 | <i>shikamai</i>     | 11,59%           | 7,47%                 | 7,95%               | 7,75%             | 9,36%                | 9,40%              | 7,97%           | 9,62%             |
| 126 | <i>figulinus</i>    | 11,83%           | 8,67%                 | 8,43%               | 8,21%             | 7,48%                | 6,96%              | 9,91%           | 9,65%             |
| 127 | <i>viola</i>        | 12,85%           | 9,40%                 | 8,67%               | 7,99%             | 9,87%                | 10,15%             | 9,91%           | 10,61%            |
| 128 | <i>acutangulus</i>  | 10,67%           | 8,44%                 | 7,72%               | 9,67%             | 9,39%                | 9,90%              | 8,71%           | 9,89%             |
| 129 | <i>musicus1</i>     | 12,81%           | 8,42%                 | 8,40%               | 8,69%             | 9,12%                | 9,62%              | 8,43%           | 8,88%             |
| 130 | <i>loriosii</i>     | 12,05%           | 9,36%                 | 8,65%               | 8,43%             | 8,40%                | 7,19%              | 10,12%          | 10,07%            |
| 131 | <i>emaciatius</i>   | 12,27%           | 9,13%                 | 8,41%               | 8,71%             | 8,42%                | 9,34%              | 8,44%           | 10,35%            |
| 132 | <i>granum</i>       | 11,14%           | 9,40%                 | 8,93%               | 8,95%             | 9,15%                | 9,67%              | 8,97%           | 9,40%             |
| 133 | <i>archon</i>       | 12,77%           | 10,34%                | 10,09%              | 10,84%            | 10,33%               | 11,06%             | 9,90%           | 11,06%            |
| 134 | <i>aristophanes</i> | 14,48%           | 10,38%                | 9,42%               | 10,89%            | 9,41%                | 10,87%             | 9,20%           | 11,11%            |
| 135 | <i>beddomei</i>     | 13,01%           | 9,35%                 | 9,11%               | 10,11%            | 11,01%               | 10,79%             | 9,63%           | 10,78%            |
| 136 | <i>eburneus</i>     | 12,59%           | 7,97%                 | 7,70%               | 7,30%             | 9,18%                | 9,16%              | 7,49%           | 9,39%             |
| 137 | <i>flavidus</i>     | 14,43%           | 12,97%                | 11,31%              | 11,84%            | 12,01%               | 12,21%             | 12,31%          | 12,76%            |
| 138 | <i>glans</i>        | 13,20%           | 9,85%                 | 9,35%               | 9,88%             | 11,00%               | 10,29%             | 10,34%          | 10,54%            |
| 139 | <i>litteratus</i>   | 12,75%           | 7,94%                 | 7,69%               | 7,25%             | 8,89%                | 9,14%              | 7,71%           | 8,89%             |
| 140 | <i>mitratus</i>     | 15,86%           | 11,83%                | 12,52%              | 11,17%            | 12,51%               | 13,03%             | 13,28%          | 12,51%            |
| 141 | <i>moluccensis</i>  | 12,43%           | 8,01%                 | 9,47%               | 9,76%             | 9,49%                | 9,20%              | 10,24%          | 10,44%            |
| 142 | <i>mucronatus</i>   | 13,94%           | 10,83%                | 10,81%              | 10,88%            | 11,51%               | 11,02%             | 11,80%          | 11,27%            |
| 143 | <i>boeticus</i>     | 22,81%           | 21,04%                | 20,33%              | 19,69%            | 20,08%               | 20,09%             | 20,36%          | 22,45%            |
| 144 | <i>cf. boeticus</i> | 12,63%           | 10,35%                | 9,60%               | 9,40%             | 9,84%                | 10,81%             | 10,58%          | 11,50%            |
| 145 | <i>scopulorum</i>   | 12,29%           | 9,88%                 | 7,46%               | 8,71%             | 9,86%                | 9,65%              | 8,70%           | 10,11%            |
| 146 | <i>spurius</i>      | 12,54%           | 8,43%                 | 8,91%               | 8,98%             | 9,67%                | 9,88%              | 9,22%           | 10,60%            |
| 147 | <i>mindanus</i>     | 17,97%           | 16,37%                | 15,43%              | 15,16%            | 14,71%               | 16,92%             | 15,73%          | 15,67%            |
| 148 | <i>delessertii</i>  | 21,94%           | 21,08%                | 19,91%              | 20,17%            | 19,20%               | 21,42%             | 20,48%          | 19,42%            |
| 149 | <i>circumcisis</i>  | 12,28%           | 6,96%                 | 7,90%               | 8,42%             | 9,36%                | 9,08%              | 7,92%           | 9,09%             |
| 150 | <i>T. horasei</i>   | 16,62%           | 17,78%                | 17,39%              | 19,13%            | 19,96%               | 17,33%             | 18,87%          | 18,12%            |
| 151 | <i>T. subulata</i>  | 19,75%           | 20,12%                | 19,15%              | 21,36%            | 20,39%               | 20,58%             | 19,92%          | 20,61%            |
| 152 | <i>T. crenulata</i> | 18,84%           | 21,19%                | 19,21%              | 21,75%            | 20,19%               | 19,92%             | 20,75%          | 20,66%            |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                     | 17 <i>nocturnus2</i> | 18 <i>nocturnus1</i> | 19 <i>vidua</i> | 20 <i>legatus</i> | 21 <i>victoriae</i> | 22 <i>omaria</i> | 23 <i>anemone</i> | 24 <i>aurisiacus</i> |
|-----|---------------------|----------------------|----------------------|-----------------|-------------------|---------------------|------------------|-------------------|----------------------|
| 122 | <i>betulinus</i>    | 8,66%                | 8,66%                | 8,91%           | 8,40%             | 9,17%               | 11,07%           | 9,39%             | 11,29%               |
| 123 | <i>balteatus</i>    | 8,70%                | 8,94%                | 7,97%           | 8,21%             | 8,49%               | 9,68%            | 5,55%             | 9,46%                |
| 124 | <i>radiatus</i>     | 6,72%                | 6,96%                | 6,25%           | 6,50%             | 6,53%               | 7,48%            | 8,46%             | 7,49%                |
| 125 | <i>shikamai</i>     | 8,91%                | 9,15%                | 8,19%           | 6,98%             | 7,98%               | 8,18%            | 4,56%             | 9,17%                |
| 126 | <i>figulinus</i>    | 7,21%                | 7,21%                | 7,46%           | 8,20%             | 7,73%               | 9,40%            | 9,63%             | 9,16%                |
| 127 | <i>viola</i>        | 10,14%               | 10,38%               | 9,42%           | 7,96%             | 9,68%               | 9,39%            | 6,23%             | 9,66%                |
| 128 | <i>acutangulus</i>  | 9,65%                | 9,89%                | 9,41%           | 8,93%             | 9,18%               | 9,39%            | 9,89%             | 9,61%                |
| 129 | <i>musicus1</i>     | 9,13%                | 8,89%                | 9,86%           | 8,15%             | 8,69%               | 9,15%            | 8,41%             | 9,13%                |
| 130 | <i>loriosii</i>     | 7,43%                | 7,43%                | 7,68%           | 8,89%             | 8,43%               | 9,61%            | 9,83%             | 9,82%                |
| 131 | <i>emaciatius</i>   | 9,83%                | 9,59%                | 10,08%          | 8,41%             | 8,45%               | 9,16%            | 9,36%             | 10,37%               |
| 132 | <i>granum</i>       | 9,18%                | 9,42%                | 8,47%           | 9,18%             | 10,39%              | 9,15%            | 8,63%             | 10,13%               |
| 133 | <i>archon</i>       | 10,58%               | 10,82%               | 10,12%          | 9,85%             | 9,87%               | 9,85%            | 11,05%            | 9,60%                |
| 134 | <i>aristophanes</i> | 10,88%               | 11,12%               | 10,64%          | 9,66%             | 9,90%               | 10,63%           | 12,31%            | 8,92%                |
| 135 | <i>beddomei</i>     | 9,59%                | 9,83%                | 9,59%           | 10,05%            | 10,11%              | 10,54%           | 7,88%             | 9,12%                |
| 136 | <i>eburneus</i>     | 8,44%                | 8,68%                | 8,69%           | 6,76%             | 7,75%               | 7,04%            | 9,65%             | 9,43%                |
| 137 | <i>flavidus</i>     | 11,76%               | 12,00%               | 12,01%          | 11,27%            | 12,32%              | 11,33%           | 11,78%            | 11,30%               |
| 138 | <i>glans</i>        | 10,31%               | 10,55%               | 9,83%           | 9,58%             | 10,11%              | 9,82%            | 7,16%             | 9,82%                |
| 139 | <i>litteratus</i>   | 8,41%                | 8,65%                | 8,90%           | 6,72%             | 7,72%               | 6,74%            | 9,61%             | 9,39%                |
| 140 | <i>mitratus</i>     | 12,06%               | 12,06%               | 13,02%          | 12,29%            | 12,35%              | 11,82%           | 10,87%            | 12,08%               |
| 141 | <i>moluccensis</i>  | 8,49%                | 8,73%                | 8,73%           | 8,50%             | 8,54%               | 9,00%            | 11,41%            | 8,71%                |
| 142 | <i>mucronatus</i>   | 11,74%               | 11,50%               | 11,50%          | 11,30%            | 11,12%              | 10,60%           | 11,79%            | 11,07%               |
| 143 | <i>boeticus</i>     | 20,08%               | 19,84%               | 20,09%          | 20,27%            | 20,59%              | 20,25%           | 19,76%            | 20,29%               |
| 144 | <i>cf. boeticus</i> | 10,80%               | 11,04%               | 10,08%          | 9,60%             | 10,39%              | 9,12%            | 7,65%             | 9,62%                |
| 145 | <i>scopulorum</i>   | 9,41%                | 9,64%                | 8,93%           | 9,15%             | 10,15%              | 9,62%            | 7,67%             | 9,67%                |
| 146 | <i>spurius</i>      | 8,69%                | 8,93%                | 9,42%           | 8,23%             | 8,94%               | 8,45%            | 11,33%            | 10,17%               |
| 147 | <i>mindanus</i>     | 17,18%               | 17,17%               | 16,69%          | 15,68%            | 16,43%              | 15,87%           | 17,33%            | 15,08%               |
| 148 | <i>delessertii</i>  | 21,19%               | 21,18%               | 20,95%          | 20,41%            | 20,88%              | 19,85%           | 22,08%            | 19,84%               |
| 149 | <i>circumcisis</i>  | 8,62%                | 8,85%                | 8,38%           | 6,46%             | 6,75%               | 7,93%            | 9,13%             | 1,44%                |
| 150 | <i>T. horasei</i>   | 17,08%               | 17,33%               | 17,07%          | 18,08%            | 18,40%              | 18,84%           | 17,63%            | 18,34%               |
| 151 | <i>T. subulata</i>  | 19,62%               | 19,87%               | 19,39%          | 19,86%            | 19,92%              | 20,88%           | 19,88%            | 19,87%               |
| 152 | <i>T. crenulata</i> | 19,72%               | 19,71%               | 18,96%          | 20,44%            | 20,02%              | 21,25%           | 19,70%            | 21,19%               |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                     | 25 <i>brunneus</i> | 26 <i>burryae</i> | 27 <i>cargilei</i> | 28 <i>cedonuli</i> | 29 <i>cingulatus</i> | 30 <i>sanderi</i> | 31 <i>donnae</i> | 32 <i>daucus</i> |
|-----|---------------------|--------------------|-------------------|--------------------|--------------------|----------------------|-------------------|------------------|------------------|
| 122 | <i>betulinus</i>    | 11,34%             | 12,77%            | 13,25%             | 11,82%             | 10,40%               | 11,80%            | 12,54%           | 13,08%           |
| 123 | <i>balteatus</i>    | 9,90%              | 9,65%             | 7,95%              | 9,92%              | 9,22%                | 7,72%             | 7,68%            | 8,48%            |
| 124 | <i>radiatus</i>     | 8,68%              | 9,91%             | 10,12%             | 9,21%              | 7,96%                | 8,70%             | 9,88%            | 9,97%            |
| 125 | <i>shikamai</i>     | 9,87%              | 8,63%             | 9,11%              | 9,16%              | 8,95%                | 6,93%             | 8,87%            | 8,92%            |
| 126 | <i>figulinus</i>    | 10,13%             | 12,29%            | 12,04%             | 11,61%             | 8,96%                | 10,87%            | 11,33%           | 11,20%           |
| 127 | <i>viola</i>        | 10,33%             | 9,82%             | 8,86%              | 10,13%             | 10,38%               | 8,14%             | 8,37%            | 9,16%            |
| 128 | <i>acutangulus</i>  | 12,55%             | 10,61%            | 11,09%             | 11,11%             | 10,40%               | 10,60%            | 10,38%           | 11,17%           |
| 129 | <i>musicus1</i>     | 12,04%             | 11,54%            | 12,28%             | 12,05%             | 8,96%                | 11,55%            | 12,07%           | 11,38%           |
| 130 | <i>loriosii</i>     | 10,12%             | 12,03%            | 12,05%             | 11,56%             | 8,48%                | 10,64%            | 11,33%           | 10,95%           |
| 131 | <i>emaciatius</i>   | 10,08%             | 11,07%            | 11,54%             | 11,81%             | 8,46%                | 10,60%            | 11,31%           | 10,93%           |
| 132 | <i>granum</i>       | 9,17%              | 8,18%             | 8,42%              | 9,20%              | 9,48%                | 7,47%             | 8,19%            | 7,29%            |
| 133 | <i>archon</i>       | 9,42%              | 10,57%            | 10,60%             | 6,76%              | 8,99%                | 10,87%            | 10,38%           | 9,93%            |
| 134 | <i>aristophanes</i> | 10,42%             | 11,14%            | 10,43%             | 11,38%             | 8,78%                | 9,73%             | 9,96%            | 10,28%           |
| 135 | <i>beddomei</i>     | 9,86%              | 5,52%             | 6,71%              | 9,64%              | 8,72%                | 2,64%             | 6,23%            | 6,26%            |
| 136 | <i>eburneus</i>     | 8,47%              | 10,63%            | 10,88%             | 9,67%              | 7,99%                | 9,17%             | 10,65%           | 10,41%           |
| 137 | <i>flavidus</i>     | 14,20%             | 13,22%            | 13,26%             | 13,54%             | 10,16%               | 12,56%            | 12,55%           | 13,10%           |
| 138 | <i>glans</i>        | 11,51%             | 9,55%             | 9,36%              | 9,84%              | 10,39%               | 7,89%             | 9,12%            | 8,94%            |
| 139 | <i>litteratus</i>   | 8,66%              | 10,80%            | 11,09%             | 9,64%              | 7,96%                | 8,93%             | 10,86%           | 10,20%           |
| 140 | <i>mitratus</i>     | 14,43%             | 12,27%            | 12,72%             | 13,03%             | 11,61%               | 11,78%            | 12,51%           | 11,64%           |
| 141 | <i>moluccensis</i>  | 10,42%             | 11,92%            | 10,70%             | 10,25%             | 8,30%                | 10,45%            | 10,23%           | 10,04%           |
| 142 | <i>mucronatus</i>   | 11,77%             | 13,46%            | 12,26%             | 11,80%             | 11,39%               | 11,34%            | 11,55%           | 10,92%           |
| 143 | <i>boeticus</i>     | 21,58%             | 20,55%            | 20,50%             | 20,93%             | 19,97%               | 20,33%            | 19,57%           | 20,20%           |
| 144 | <i>cf. boeticus</i> | 10,83%             | 9,33%             | 9,83%              | 10,34%             | 9,45%                | 8,37%             | 8,84%            | 9,86%            |
| 145 | <i>scopulorum</i>   | 9,64%              | 5,28%             | 6,00%              | 9,66%              | 7,98%                | 3,37%             | 5,29%            | 6,73%            |
| 146 | <i>spurius</i>      | 11,34%             | 12,55%            | 10,39%             | 12,59%             | 10,01%               | 11,14%            | 10,17%           | 9,24%            |
| 147 | <i>mindanus</i>     | 16,85%             | 16,11%            | 15,90%             | 18,56%             | 15,17%               | 16,19%            | 15,19%           | 14,46%           |
| 148 | <i>delessertii</i>  | 20,88%             | 19,38%            | 20,43%             | 22,33%             | 19,43%               | 19,46%            | 20,22%           | 19,22%           |
| 149 | <i>circumciscus</i> | 9,64%              | 9,12%             | 8,17%              | 9,89%              | 7,50%                | 7,70%             | 7,94%            | 8,46%            |
| 150 | <i>T. horasei</i>   | 14,93%             | 20,56%            | 16,92%             | 16,67%             | 20,14%               | 19,35%            | 16,45%           | 18,23%           |
| 151 | <i>T. subulata</i>  | 18,94%             | 19,62%            | 18,25%             | 17,50%             | 20,03%               | 19,37%            | 18,75%           | 18,85%           |
| 152 | <i>T. crenulata</i> | 19,68%             | 21,17%            | 21,22%             | 18,12%             | 20,49%               | 20,94%            | 20,70%           | 20,92%           |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                     | 33 <i>flavescens</i> | 34 <i>fontonae</i> | 35 <i>caribbaeus</i> | 36 <i>frigidus</i> | 37 <i>ermineus</i> | 38 <i>generalis</i> | 39 <i>geographus</i> | 40 <i>gladiator</i> |
|-----|---------------------|----------------------|--------------------|----------------------|--------------------|--------------------|---------------------|----------------------|---------------------|
| 122 | <i>betulinus</i>    | 12,51%               | 8,93%              | 13,76%               | 10,60%             | 10,62%             | 13,29%              | 11,82%               | 9,66%               |
| 123 | <i>balteatus</i>    | 10,33%               | 9,40%              | 11,10%               | 9,67%              | 8,49%              | 9,71%               | 11,10%               | 7,01%               |
| 124 | <i>radiatus</i>     | 9,90%                | 7,71%              | 11,13%               | 9,87%              | 6,74%              | 10,13%              | 8,69%                | 9,67%               |
| 125 | <i>shikamai</i>     | 9,32%                | 8,87%              | 10,08%               | 10,13%             | 6,51%              | 7,69%               | 10,57%               | 6,25%               |
| 126 | <i>figulinus</i>    | 12,54%               | 7,50%              | 13,78%               | 8,89%              | 9,65%              | 11,61%              | 10,15%               | 9,68%               |
| 127 | <i>viola</i>        | 9,57%                | 9,59%              | 10,32%               | 11,31%             | 7,22%              | 9,39%               | 11,53%               | 6,47%               |
| 128 | <i>acutangulus</i>  | 11,79%               | 9,64%              | 13,27%               | 9,41%              | 9,42%              | 10,64%              | 11,82%               | 9,66%               |
| 129 | <i>musicus1</i>     | 11,53%               | 7,43%              | 12,54%               | 9,64%              | 8,67%              | 11,36%              | 10,59%               | 10,37%              |
| 130 | <i>loriosii</i>     | 12,55%               | 7,97%              | 13,31%               | 8,41%              | 9,66%              | 11,64%              | 10,16%               | 9,65%               |
| 131 | <i>emaciatius</i>   | 12,26%               | 8,19%              | 13,04%               | 3,60%              | 10,82%             | 11,56%              | 9,62%                | 8,45%               |
| 132 | <i>granum</i>       | 9,86%                | 10,15%             | 10,62%               | 10,89%             | 8,95%              | 7,74%               | 11,13%               | 6,99%               |
| 133 | <i>archon</i>       | 11,58%               | 10,83%             | 12,35%               | 11,86%             | 11,09%             | 12,35%              | 13,49%               | 12,30%              |
| 134 | <i>aristophanes</i> | 10,46%               | 8,52%              | 11,69%               | 11,19%             | 9,95%              | 12,19%              | 10,46%               | 11,66%              |
| 135 | <i>beddomei</i>     | 6,46%                | 8,64%              | 7,21%                | 11,60%             | 10,10%             | 8,93%               | 10,11%               | 6,72%               |
| 136 | <i>eburneus</i>     | 9,15%                | 7,97%              | 9,90%                | 10,62%             | 9,43%              | 10,88%              | 9,64%                | 8,68%               |
| 137 | <i>flavidus</i>     | 13,99%               | 10,12%             | 14,55%               | 8,93%              | 12,80%             | 13,33%              | 10,16%               | 11,59%              |
| 138 | <i>glans</i>        | 10,73%               | 9,38%              | 11,27%               | 11,06%             | 9,38%              | 8,91%               | 10,57%               | 6,48%               |
| 139 | <i>litteratus</i>   | 9,39%                | 7,23%              | 10,15%               | 10,59%             | 9,40%              | 10,61%              | 8,94%                | 8,45%               |
| 140 | <i>mitratus</i>     | 12,49%               | 9,86%              | 13,26%               | 12,55%             | 10,81%             | 13,00%              | 12,51%               | 11,30%              |
| 141 | <i>moluccensis</i>  | 12,34%               | 10,69%             | 13,38%               | 10,22%             | 9,26%              | 9,97%               | 11,65%               | 11,40%              |
| 142 | <i>mucronatus</i>   | 12,74%               | 10,85%             | 13,26%               | 12,02%             | 10,11%             | 11,82%              | 12,52%               | 10,85%              |
| 143 | <i>boeticus</i>     | 21,50%               | 20,86%             | 22,20%               | 22,53%             | 19,37%             | 20,19%              | 21,59%               | 19,61%              |
| 144 | <i>cf. boeticus</i> | 10,75%               | 8,43%              | 11,50%               | 11,34%             | 8,68%              | 8,24%               | 11,10%               | 7,64%               |
| 145 | <i>scopulorum</i>   | 5,03%                | 9,15%              | 5,77%                | 11,80%             | 9,15%              | 9,91%               | 11,59%               | 6,73%               |
| 146 | <i>spurius</i>      | 11,84%               | 9,92%              | 12,60%               | 11,12%             | 9,93%              | 11,41%              | 8,91%                | 10,64%              |
| 147 | <i>mindanus</i>     | 15,67%               | 15,92%             | 16,92%               | 15,20%             | 16,67%             | 14,88%              | 16,94%               | 16,15%              |
| 148 | <i>delessertii</i>  | 19,93%               | 21,16%             | 21,17%               | 20,18%             | 20,85%             | 19,66%              | 21,19%               | 20,66%              |
| 149 | <i>circumciscus</i> | 8,68%                | 7,92%              | 10,13%               | 10,35%             | 7,68%              | 9,66%               | 9,17%                | 9,37%               |
| 150 | <i>T. horasei</i>   | 19,54%               | 19,59%             | 21,02%               | 18,58%             | 18,39%             | 17,62%              | 18,57%               | 17,39%              |
| 151 | <i>T. subulata</i>  | 20,77%               | 21,12%             | 22,22%               | 19,61%             | 20,40%             | 18,25%              | 20,09%               | 17,96%              |
| 152 | <i>T. crenulata</i> | 21,62%               | 21,64%             | 23,10%               | 19,43%             | 20,42%             | 20,03%              | 20,47%               | 19,49%              |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                     | 41 <i>gradatulus</i> | 42 <i>jaspideus</i> | 43 <i>lindae</i> | 44 <i>litoglyphus</i> | 45 <i>mahogani</i> | 46 <i>mus</i> | 47 <i>nux</i> | 48 <i>obscurus</i> | 49 <i>patricius</i> |
|-----|---------------------|----------------------|---------------------|------------------|-----------------------|--------------------|---------------|---------------|--------------------|---------------------|
| 122 | <i>betulinus</i>    | 7,99%                | 16,12%              | 10,63%           | 12,99%                | 16,46%             | 10,41%        | 10,14%        | 9,63%              | 10,10%              |
| 123 | <i>balteatus</i>    | 8,74%                | 14,82%              | 9,46%            | 10,60%                | 15,47%             | 7,75%         | 10,59%        | 9,90%              | 7,21%               |
| 124 | <i>radiatus</i>     | 7,97%                | 16,40%              | 8,00%            | 10,35%                | 15,70%             | 10,18%        | 8,91%         | 8,70%              | 7,00%               |
| 125 | <i>shikamai</i>     | 8,21%                | 14,80%              | 8,71%            | 9,10%                 | 14,67%             | 6,25%         | 8,65%         | 9,87%              | 6,68%               |
| 126 | <i>figulinus</i>    | 7,52%                | 15,37%              | 8,74%            | 11,76%                | 15,19%             | 9,96%         | 9,17%         | 8,23%              | 8,93%               |
| 127 | <i>viola</i>        | 8,90%                | 14,74%              | 10,18%           | 9,61%                 | 15,16%             | 6,26%         | 10,08%        | 10,87%             | 8,15%               |
| 128 | <i>acutangulus</i>  | 9,44%                | 14,86%              | 10,42%           | 10,85%                | 14,96%             | 9,20%         | 9,63%         | 11,36%             | 9,15%               |
| 129 | <i>musicus1</i>     | 9,69%                | 15,13%              | 8,96%            | 10,37%                | 15,52%             | 10,41%        | 2,88%         | 10,59%             | 9,35%               |
| 130 | <i>loriosii</i>     | 7,76%                | 15,61%              | 8,48%            | 11,56%                | 15,45%             | 10,17%        | 9,41%         | 8,18%              | 9,36%               |
| 131 | <i>emaciatius</i>   | 10,12%               | 14,88%              | 8,25%            | 11,03%                | 15,68%             | 8,73%         | 8,21%         | 9,16%              | 8,66%               |
| 132 | <i>granum</i>       | 10,16%               | 14,06%              | 9,75%            | 9,35%                 | 14,41%             | 7,01%         | 10,89%        | 10,16%             | 7,46%               |
| 133 | <i>archon</i>       | 12,08%               | 15,86%              | 9,46%            | 13,03%                | 15,23%             | 12,34%        | 11,81%        | 11,56%             | 9,36%               |
| 134 | <i>aristophanes</i> | 11,97%               | 14,25%              | 9,26%            | 13,28%                | 15,59%             | 11,97%        | 10,70%        | 10,14%             | 11,83%              |
| 135 | <i>beddomei</i>     | 9,40%                | 15,81%              | 9,17%            | 9,15%                 | 16,42%             | 7,69%         | 11,05%        | 9,86%              | 7,39%               |
| 136 | <i>eburneus</i>     | 10,16%               | 15,81%              | 8,21%            | 9,90%                 | 16,71%             | 9,43%         | 10,13%        | 9,41%              | 8,18%               |
| 137 | <i>flavidus</i>     | 11,84%               | 15,96%              | 10,40%           | 11,82%                | 17,02%             | 12,37%        | 10,15%        | 11,85%             | 11,30%              |
| 138 | <i>glans</i>        | 9,17%                | 15,05%              | 10,41%           | 9,08%                 | 16,13%             | 6,97%         | 10,11%        | 10,29%             | 7,63%               |
| 139 | <i>litteratus</i>   | 9,92%                | 15,56%              | 7,74%            | 10,32%                | 16,39%             | 8,95%         | 9,65%         | 9,38%              | 7,46%               |
| 140 | <i>mitratus</i>     | 10,65%               | 18,10%              | 11,63%           | 12,24%                | 17,89%             | 11,81%        | 11,05%        | 13,00%             | 11,81%              |
| 141 | <i>moluccensis</i>  | 11,64%               | 15,87%              | 8,28%            | 10,70%                | 15,54%             | 11,20%        | 11,68%        | 10,93%             | 9,45%               |
| 142 | <i>mucronatus</i>   | 12,06%               | 18,30%              | 11,40%           | 12,48%                | 18,60%             | 11,60%        | 11,83%        | 11,04%             | 11,31%              |
| 143 | <i>boeticus</i>     | 19,95%               | 24,33%              | 19,54%           | 20,32%                | 24,58%             | 19,65%        | 21,07%        | 22,05%             | 18,85%              |
| 144 | <i>cf. boeticus</i> | 10,14%               | 14,64%              | 9,93%            | 10,12%                | 14,75%             | 6,69%         | 10,62%        | 11,78%             | 7,37%               |
| 145 | <i>scopulorum</i>   | 9,93%                | 14,87%              | 7,77%            | 9,59%                 | 15,68%             | 7,23%         | 12,23%        | 10,37%             | 6,97%               |
| 146 | <i>spurius</i>      | 11,37%               | 16,39%              | 10,22%           | 12,32%                | 16,23%             | 11,16%        | 11,82%        | 10,63%             | 9,16%               |
| 147 | <i>mindanus</i>     | 16,18%               | 4,04%               | 15,67%           | 16,10%                | 4,77%              | 15,68%        | 15,94%        | 17,41%             | 14,90%              |
| 148 | <i>delessertii</i>  | 21,17%               | 10,45%              | 19,69%           | 20,84%                | 9,39%              | 20,17%        | 20,67%        | 21,67%             | 19,17%              |
| 149 | <i>circumcisis</i>  | 9,18%                | 14,04%              | 7,26%            | 10,61%                | 13,90%             | 9,61%         | 9,36%         | 9,60%              | 7,91%               |
| 150 | <i>T. horasei</i>   | 17,61%               | 17,60%              | 20,33%           | 17,89%                | 17,97%             | 17,19%        | 19,68%        | 19,60%             | 18,72%              |
| 151 | <i>T. subulata</i>  | 20,60%               | 17,93%              | 20,47%           | 18,66%                | 19,21%             | 18,49%        | 20,70%        | 20,91%             | 18,94%              |
| 152 | <i>T. crenulata</i> | 20,47%               | 20,68%              | 20,72%           | 20,74%                | 19,79%             | 19,52%        | 21,11%        | 20,77%             | 20,25%              |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                     | 50 <i>planorbis</i> | 51 <i>princeps</i> | 52 <i>purpurascens</i> | 53 <i>quercinus</i> | 54 <i>richardbinghami</i> | 55 <i>stimpsoni</i> | 56 <i>tinianus</i> |
|-----|---------------------|---------------------|--------------------|------------------------|---------------------|---------------------------|---------------------|--------------------|
| 122 | <i>betulinus</i>    | 12,59%              | 10,14%             | 9,63%                  | 8,67%               | 13,02%                    | 11,51%              | 10,56%             |
| 123 | <i>balteatus</i>    | 11,33%              | 7,72%              | 8,93%                  | 8,92%               | 8,67%                     | 7,69%               | 6,48%              |
| 124 | <i>radiatus</i>     | 10,88%              | 9,14%              | 6,72%                  | 7,95%               | 10,13%                    | 8,88%               | 9,34%              |
| 125 | <i>shikamai</i>     | 10,35%              | 5,76%              | 6,49%                  | 8,17%               | 9,11%                     | 6,67%               | 5,02%              |
| 126 | <i>figulinus</i>    | 12,34%              | 9,15%              | 8,67%                  | 7,94%               | 11,35%                    | 10,55%              | 9,82%              |
| 127 | <i>viola</i>        | 11,57%              | 7,42%              | 8,43%                  | 9,39%               | 9,37%                     | 8,13%               | 6,70%              |
| 128 | <i>acutangulus</i>  | 12,34%              | 10,15%             | 8,68%                  | 7,73%               | 11,12%                    | 9,87%               | 10,36%             |
| 129 | <i>musicus1</i>     | 11,63%              | 10,40%             | 7,70%                  | 9,63%               | 10,63%                    | 10,33%              | 9,40%              |
| 130 | <i>loriosii</i>     | 12,15%              | 8,96%              | 8,47%                  | 8,46%               | 10,93%                    | 10,14%              | 9,85%              |
| 131 | <i>emaciatius</i>   | 14,26%              | 11,08%             | 9,13%                  | 7,92%               | 11,08%                    | 10,07%              | 9,82%              |
| 132 | <i>granum</i>       | 11,39%              | 9,17%              | 9,40%                  | 9,64%               | 7,95%                     | 7,42%               | 7,90%              |
| 133 | <i>archon</i>       | 11,96%              | 10,68%             | 11,36%                 | 10,90%              | 9,20%                     | 9,43%               | 11,54%             |
| 134 | <i>aristophanes</i> | 14,35%              | 12,39%             | 10,90%                 | 10,44%              | 11,16%                    | 10,15%              | 12,57%             |
| 135 | <i>beddomei</i>     | 12,14%              | 7,01%              | 9,63%                  | 8,92%               | 5,77%                     | 2,15%               | 6,93%              |
| 136 | <i>eburneus</i>     | 12,39%              | 10,69%             | 8,97%                  | 9,46%               | 10,21%                    | 8,47%               | 9,16%              |
| 137 | <i>flavidus</i>     | 14,08%              | 12,13%             | 12,33%                 | 9,46%               | 12,83%                    | 12,07%              | 12,28%             |
| 138 | <i>glans</i>        | 11,57%              | 7,93%              | 9,61%                  | 9,36%               | 9,35%                     | 7,63%               | 7,85%              |
| 139 | <i>litteratus</i>   | 12,09%              | 10,64%             | 8,93%                  | 9,17%               | 10,40%                    | 8,67%               | 9,12%              |
| 140 | <i>mitratus</i>     | 14,77%              | 12,54%             | 10,80%                 | 13,01%              | 12,01%                    | 11,75%              | 12,69%             |
| 141 | <i>moluccensis</i>  | 12,06%              | 10,27%             | 8,77%                  | 9,74%               | 9,53%                     | 9,96%               | 11,14%             |
| 142 | <i>mucronatus</i>   | 15,02%              | 12,33%             | 9,41%                  | 11,78%              | 11,07%                    | 10,79%              | 11,98%             |
| 143 | <i>boeticus</i>     | 19,77%              | 18,40%             | 19,15%                 | 19,92%              | 20,17%                    | 19,53%              | 18,77%             |
| 144 | <i>cf. boeticus</i> | 11,92%              | 7,95%              | 8,72%                  | 9,43%               | 9,14%                     | 7,66%               | 6,69%              |
| 145 | <i>scopulorum</i>   | 11,80%              | 7,21%              | 9,40%                  | 8,93%               | 6,50%                     | 2,16%               | 7,64%              |
| 146 | <i>spurius</i>      | 12,93%              | 10,97%             | 9,97%                  | 9,46%               | 8,99%                     | 10,17%              | 12,05%             |
| 147 | <i>mindanus</i>     | 17,25%              | 16,72%             | 17,47%                 | 15,96%              | 14,41%                    | 15,65%              | 17,41%             |
| 148 | <i>delessertii</i>  | 21,49%              | 20,97%             | 21,65%                 | 20,20%              | 19,17%                    | 19,42%              | 21,65%             |
| 149 | <i>circumcisis</i>  | 13,36%              | 8,23%              | 8,18%                  | 7,72%               | 8,21%                     | 7,21%               | 9,10%              |
| 150 | <i>T. horasei</i>   | 16,57%              | 18,22%             | 18,69%                 | 19,30%              | 18,24%                    | 18,87%              | 18,64%             |
| 151 | <i>T. subulata</i>  | 21,09%              | 19,95%             | 21,16%                 | 20,83%              | 19,03%                    | 19,62%              | 21,09%             |
| 152 | <i>T. crenulata</i> | 20,91%              | 20,04%             | 19,78%                 | 20,75%              | 20,62%                    | 20,24%              | 20,89%             |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                     | 57 <i>vanhyningi</i> | 58 <i>varius</i> | 59 <i>vexillum</i> | 60 <i>vilipinii</i> | 61 <i>virgo</i> | 62 <i>dorreensis</i> | 63 <i>infernatus</i> | 64 <i>pertusus</i> |
|-----|---------------------|----------------------|------------------|--------------------|---------------------|-----------------|----------------------|----------------------|--------------------|
| 122 | <i>betulinus</i>    | 16,47%               | 13,28%           | 14,86%             | 11,76%              | 11,30%          | 12,28%               | 11,12%               | 13,70%             |
| 123 | <i>balteatus</i>    | 14,74%               | 10,42%           | 11,78%             | 7,45%               | 9,87%           | 12,07%               | 10,91%               | 10,85%             |
| 124 | <i>radiatus</i>     | 16,77%               | 8,94%            | 10,84%             | 9,12%               | 10,32%          | 8,94%                | 10,13%               | 9,89%              |
| 125 | <i>shikamai</i>     | 15,18%               | 9,88%            | 11,48%             | 6,91%               | 10,33%          | 11,30%               | 9,88%                | 10,55%             |
| 126 | <i>figulinus</i>    | 15,73%               | 10,85%           | 12,93%             | 10,79%              | 8,64%           | 10,39%               | 8,95%                | 12,96%             |
| 127 | <i>viola</i>        | 15,38%               | 10,61%           | 12,24%             | 8,37%               | 11,33%          | 12,50%               | 10,08%               | 10,31%             |
| 128 | <i>acutangulus</i>  | 14,71%               | 10,66%           | 12,01%             | 10,11%              | 10,39%          | 11,53%               | 11,11%               | 11,50%             |
| 129 | <i>musicus1</i>     | 15,51%               | 9,45%            | 11,29%             | 10,57%              | 8,93%           | 10,35%               | 12,36%               | 11,49%             |
| 130 | <i>loriosii</i>     | 15,98%               | 11,11%           | 12,76%             | 10,38%              | 8,41%           | 11,30%               | 9,21%                | 12,91%             |
| 131 | <i>emacius</i>      | 15,75%               | 12,06%           | 12,22%             | 10,31%              | 0,24%           | 9,42%                | 11,80%               | 12,71%             |
| 132 | <i>granum</i>       | 14,70%               | 10,36%           | 12,97%             | 7,66%               | 10,62%          | 10,61%               | 11,11%               | 11,77%             |
| 133 | <i>archon</i>       | 16,49%               | 10,64%           | 11,80%             | 9,67%               | 12,32%          | 10,63%               | 13,06%               | 10,31%             |
| 134 | <i>aristophanes</i> | 15,42%               | 11,17%           | 11,85%             | 10,39%              | 11,15%          | 4,35%                | 12,93%               | 12,07%             |
| 135 | <i>beddomei</i>     | 16,18%               | 10,86%           | 12,01%             | 2,39%               | 10,60%          | 9,60%                | 10,09%               | 10,53%             |
| 136 | <i>eburneus</i>     | 16,17%               | 11,89%           | 10,38%             | 8,71%               | 9,42%           | 10,62%               | 12,06%               | 9,83%              |
| 137 | <i>flavidus</i>     | 16,33%               | 13,10%           | 13,75%             | 12,32%              | 7,70%           | 13,08%               | 13,30%               | 13,70%             |
| 138 | <i>glans</i>        | 16,19%               | 10,82%           | 11,50%             | 7,87%               | 11,03%          | 11,55%               | 10,12%               | 11,00%             |
| 139 | <i>litteratus</i>   | 15,93%               | 11,82%           | 10,33%             | 8,91%               | 9,38%           | 9,87%                | 11,83%               | 10,04%             |
| 140 | <i>mitratus</i>     | 17,94%               | 12,29%           | 13,42%             | 12,00%              | 12,97%          | 13,47%               | 12,56%               | 13,41%             |
| 141 | <i>moluccensis</i>  | 15,97%               | 9,99%            | 11,73%             | 10,21%              | 11,14%          | 10,70%               | 12,11%               | 12,39%             |
| 142 | <i>mucronatus</i>   | 19,16%               | 13,02%           | 13,03%             | 11,04%              | 10,79%          | 10,85%               | 13,42%               | 12,72%             |
| 143 | <i>boeticus</i>     | 24,62%               | 19,18%           | 22,02%             | 19,77%              | 21,77%          | 21,82%               | 20,65%               | 22,00%             |
| 144 | <i>cf. boeticus</i> | 14,77%               | 12,13%           | 12,08%             | 7,90%               | 11,11%          | 12,35%               | 11,12%               | 10,86%             |
| 145 | <i>scopulorum</i>   | 15,00%               | 11,32%           | 12,25%             | 2,40%               | 10,81%          | 10,09%               | 10,65%               | 11,28%             |
| 146 | <i>spurius</i>      | 16,51%               | 11,88%           | 14,24%             | 10,42%              | 9,89%           | 11,82%               | 11,58%               | 13,44%             |
| 147 | <i>mindanus</i>     | 2,51%                | 15,20%           | 16,45%             | 15,90%              | 16,45%          | 14,20%               | 15,19%               | 15,65%             |
| 148 | <i>delessertii</i>  | 9,15%                | 18,95%           | 21,94%             | 19,67%              | 21,19%          | 19,21%               | 20,69%               | 21,40%             |
| 149 | <i>circumcisis</i>  | 14,20%               | 8,22%            | 10,85%             | 7,45%               | 9,86%           | 9,16%                | 10,13%               | 9,60%              |
| 150 | <i>T. horasei</i>   | 17,95%               | 16,73%           | 21,09%             | 18,63%              | 18,83%          | 19,63%               | 18,97%               | 19,50%             |
| 151 | <i>T. subulata</i>  | 17,99%               | 20,17%           | 22,09%             | 19,87%              | 19,67%          | 20,14%               | 20,54%               | 20,77%             |
| 152 | <i>T. crenulata</i> | 20,74%               | 20,56%           | 21,56%             | 20,49%              | 20,21%          | 21,20%               | 21,18%               | 21,57%             |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                     | 65 <i>nanus</i> | 66 <i>sanguinolentus</i> | 67 <i>tessellatus</i> | 68 <i>arenatus</i> | 69 <i>anemone2</i> | 70 <i>mustelinus</i> | 71 <i>miles</i> | 72 <i>rattus</i> |
|-----|---------------------|-----------------|--------------------------|-----------------------|--------------------|--------------------|----------------------|-----------------|------------------|
| 122 | <i>betulinus</i>    | 11,05%          | 12,44%                   | 10,08%                | 9,11%              | 9,34%              | 14,68%               | 14,68%          | 13,89%           |
| 123 | <i>balteatus</i>    | 11,30%          | 9,61%                    | 9,15%                 | 7,46%              | 5,03%              | 12,28%               | 12,06%          | 12,20%           |
| 124 | <i>radiatus</i>     | 10,07%          | 11,00%                   | 7,92%                 | 6,74%              | 7,90%              | 10,16%               | 10,88%          | 11,29%           |
| 125 | <i>shikamai</i>     | 9,10%           | 11,96%                   | 8,63%                 | 6,46%              | 5,24%              | 11,50%               | 11,49%          | 10,72%           |
| 126 | <i>figulinus</i>    | 10,55%          | 11,71%                   | 8,88%                 | 7,18%              | 8,84%              | 12,74%               | 12,76%          | 12,21%           |
| 127 | <i>viola</i>        | 10,82%          | 12,20%                   | 10,33%                | 6,95%              | 6,67%              | 11,98%               | 12,45%          | 12,16%           |
| 128 | <i>acutangulus</i>  | 10,85%          | 12,91%                   | 10,10%                | 7,92%              | 10,34%             | 11,75%               | 11,29%          | 12,68%           |
| 129 | <i>musicus1</i>     | 5,52%           | 12,22%                   | 8,41%                 | 7,20%              | 8,65%              | 12,26%               | 11,99%          | 12,71%           |
| 130 | <i>loriosii</i>     | 10,36%          | 11,24%                   | 8,86%                 | 7,18%              | 8,65%              | 12,74%               | 12,99%          | 12,03%           |
| 131 | <i>emacius</i>      | 10,54%          | 11,44%                   | 8,88%                 | 8,62%              | 9,57%              | 12,75%               | 12,27%          | 14,14%           |
| 132 | <i>granum</i>       | 11,30%          | 12,23%                   | 10,11%                | 8,39%              | 7,63%              | 12,76%               | 11,81%          | 12,48%           |
| 133 | <i>archon</i>       | 11,13%          | 13,66%                   | 9,15%                 | 9,13%              | 10,85%             | 11,28%               | 11,29%          | 10,59%           |
| 134 | <i>aristophanes</i> | 12,33%          | 12,29%                   | 10,37%                | 10,39%             | 11,34%             | 12,58%               | 11,69%          | 12,82%           |
| 135 | <i>beddomei</i>     | 11,55%          | 10,50%                   | 10,07%                | 8,84%              | 7,18%              | 12,70%               | 11,50%          | 12,23%           |
| 136 | <i>eburneus</i>     | 9,90%           | 11,95%                   | 0,72%                 | 6,97%              | 8,19%              | 10,55%               | 11,04%          | 10,32%           |
| 137 | <i>flavidus</i>     | 10,39%          | 11,76%                   | 11,32%                | 10,35%             | 11,33%             | 13,81%               | 13,75%          | 14,50%           |
| 138 | <i>glans</i>        | 10,07%          | 11,95%                   | 10,74%                | 7,16%              | 7,37%              | 11,53%               | 11,05%          | 11,26%           |
| 139 | <i>litteratus</i>   | 9,86%           | 11,23%                   | 0,48%                 | 6,92%              | 8,16%              | 10,34%               | 10,81%          | 10,32%           |
| 140 | <i>mitratus</i>     | 13,67%          | 13,19%                   | 13,15%                | 10,74%             | 10,79%             | 13,93%               | 13,67%          | 15,35%           |
| 141 | <i>moluccensis</i>  | 11,42%          | 13,24%                   | 10,63%                | 7,77%              | 10,92%             | 13,88%               | 12,65%          | 12,65%           |
| 142 | <i>mucronatus</i>   | 13,19%          | 13,56%                   | 11,70%                | 9,83%              | 11,73%             | 13,02%               | 12,56%          | 13,47%           |
| 143 | <i>boeticus</i>     | 20,80%          | 20,74%                   | 21,20%                | 18,87%             | 19,26%             | 22,78%               | 23,07%          | 22,07%           |
| 144 | <i>cf. boeticus</i> | 11,16%          | 12,04%                   | 9,89%                 | 7,26%              | 6,98%              | 11,86%               | 11,13%          | 12,09%           |
| 145 | <i>scopulorum</i>   | 11,78%          | 11,03%                   | 9,83%                 | 9,10%              | 7,16%              | 12,76%               | 12,01%          | 12,69%           |
| 146 | <i>spurius</i>      | 13,05%          | 12,68%                   | 9,65%                 | 10,10%             | 10,86%             | 14,39%               | 13,95%          | 13,70%           |
| 147 | <i>mindanus</i>     | 17,21%          | 16,17%                   | 16,42%                | 15,15%             | 16,41%             | 16,76%               | 16,89%          | 16,14%           |
| 148 | <i>delessertii</i>  | 21,44%          | 20,92%                   | 21,16%                | 19,91%             | 21,40%             | 21,51%               | 21,89%          | 21,61%           |
| 149 | <i>circumcisis</i>  | 10,07%          | 11,67%                   | 9,31%                 | 7,19%              | 8,85%              | 9,87%                | 10,34%          | 10,38%           |
| 150 | <i>T. horasei</i>   | 18,89%          | 18,85%                   | 17,62%                | 17,85%             | 17,86%             | 21,19%               | 21,23%          | 19,77%           |
| 151 | <i>T. subulata</i>  | 20,86%          | 21,42%                   | 18,64%                | 19,80%             | 19,58%             | 21,76%               | 22,00%          | 21,24%           |
| 152 | <i>T. crenulata</i> | 21,19%          | 21,75%                   | 19,70%                | 20,88%             | 19,66%             | 22,32%               | 21,07%          | 20,36%           |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                     | 73 <i>ximenes</i> | 74 <i>verrucosus</i> | 75 <i>tabidus</i> | 76 <i>sponsalis</i> | 77 <i>lorenzianus</i> | 78 <i>recurvus</i> | 79 <i>orion</i> | 80 <i>granarius</i> |
|-----|---------------------|-------------------|----------------------|-------------------|---------------------|-----------------------|--------------------|-----------------|---------------------|
| 122 | <i>betulinus</i>    | 17,31%            | 18,10%               | 10,13%            | 10,54%              | 11,96%                | 11,69%             | 11,73%          | 11,06%              |
| 123 | <i>balteatus</i>    | 16,11%            | 16,87%               | 7,48%             | 10,32%              | 9,12%                 | 7,41%              | 7,66%           | 10,56%              |
| 124 | <i>radiatus</i>     | 16,56%            | 16,63%               | 9,64%             | 9,33%               | 9,55%                 | 7,64%              | 10,29%          | 9,37%               |
| 125 | <i>shikamai</i>     | 16,07%            | 15,83%               | 6,48%             | 8,37%               | 10,53%                | 7,36%              | 7,13%           | 9,58%               |
| 126 | <i>figulinus</i>    | 16,07%            | 16,89%               | 9,65%             | 9,80%               | 8,84%                 | 10,26%             | 11,72%          | 11,52%              |
| 127 | <i>viola</i>        | 16,54%            | 17,31%               | 6,70%             | 9,84%               | 11,50%                | 8,08%              | 8,33%           | 11,01%              |
| 128 | <i>acutangulus</i>  | 15,58%            | 15,35%               | 10,12%            | 9,86%               | 11,29%                | 9,58%              | 10,80%          | 10,32%              |
| 129 | <i>musicus1</i>     | 16,40%            | 16,67%               | 10,59%            | 2,88%               | 10,56%                | 10,05%             | 11,99%          | 11,05%              |
| 130 | <i>loriosii</i>     | 16,16%            | 17,24%               | 9,62%             | 9,61%               | 8,65%                 | 10,08%             | 11,54%          | 11,29%              |
| 131 | <i>emaciatius</i>   | 16,58%            | 17,16%               | 8,68%             | 8,38%               | 10,29%                | 9,80%              | 11,24%          | 11,27%              |
| 132 | <i>granum</i>       | 15,05%            | 15,09%               | 6,98%             | 11,28%              | 8,63%                 | 7,87%              | 7,17%           | 9,86%               |
| 133 | <i>archon</i>       | 16,46%            | 16,21%               | 12,07%            | 11,81%              | 11,56%                | 9,12%              | 8,88%           | 5,81%               |
| 134 | <i>aristophanes</i> | 15,73%            | 16,78%               | 11,43%            | 11,59%              | 12,03%                | 9,62%              | 11,12%          | 10,41%              |
| 135 | <i>beddomei</i>     | 16,65%            | 16,42%               | 6,94%             | 11,28%              | 10,07%                | 4,04%              | 5,74%           | 9,15%               |
| 136 | <i>eburneus</i>     | 17,46%            | 16,70%               | 8,90%             | 9,40%               | 9,17%                 | 8,89%              | 9,84%           | 8,67%               |
| 137 | <i>flavidus</i>     | 16,76%            | 16,83%               | 12,06%            | 10,12%              | 11,31%                | 10,78%             | 13,25%          | 12,84%              |
| 138 | <i>glans</i>        | 16,56%            | 16,87%               | 6,47%             | 10,53%              | 10,76%                | 8,31%              | 8,33%           | 10,05%              |
| 139 | <i>litteratus</i>   | 17,36%            | 16,41%               | 8,66%             | 9,35%               | 9,13%                 | 8,88%              | 9,83%           | 8,63%               |
| 140 | <i>mitratus</i>     | 18,01%            | 18,60%               | 12,00%            | 11,97%              | 13,41%                | 10,57%             | 13,18%          | 12,71%              |
| 141 | <i>moluccensis</i>  | 15,97%            | 15,97%               | 10,89%            | 11,41%              | 10,44%                | 9,71%              | 11,11%          | 9,74%               |
| 142 | <i>mucronatus</i>   | 18,54%            | 18,59%               | 11,54%            | 12,21%              | 11,49%                | 9,10%              | 12,20%          | 11,31%              |
| 143 | <i>boeticus</i>     | 25,42%            | 26,25%               | 19,85%            | 21,02%              | 21,25%                | 19,77%             | 18,54%          | 21,15%              |
| 144 | <i>cf. boeticus</i> | 15,48%            | 16,48%               | 7,68%             | 11,12%              | 10,17%                | 8,15%              | 7,68%           | 10,65%              |
| 145 | <i>scopulorum</i>   | 16,57%            | 16,88%               | 6,95%             | 12,23%              | 10,08%                | 4,29%              | 6,21%           | 9,83%               |
| 146 | <i>spurius</i>      | 16,98%            | 17,00%               | 10,37%            | 11,56%              | 3,37%                 | 9,61%              | 11,05%          | 12,55%              |
| 147 | <i>mindanus</i>     | 4,28%             | 2,75%                | 15,91%            | 15,94%              | 15,67%                | 14,15%             | 15,91%          | 17,59%              |
| 148 | <i>delessertii</i>  | 9,69%             | 9,44%                | 20,42%            | 20,67%              | 19,17%                | 18,13%             | 20,17%          | 22,13%              |
| 149 | <i>circumcisis</i>  | 14,39%            | 15,21%               | 9,34%             | 9,57%               | 9,79%                 | 6,93%              | 9,09%           | 10,10%              |
| 150 | <i>T. horasei</i>   | 18,18%            | 18,49%               | 17,35%            | 19,38%              | 17,85%                | 18,25%             | 17,34%          | 16,93%              |
| 151 | <i>T. subulata</i>  | 18,69%            | 18,25%               | 18,63%            | 21,09%              | 19,83%                | 19,53%             | 20,29%          | 18,42%              |
| 152 | <i>T. crenulata</i> | 19,45%            | 20,48%               | 19,44%            | 21,12%              | 20,46%                | 21,40%             | 20,91%          | 18,52%              |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                     | 81 <i>fergusoni</i> | 82 <i>diadema</i> | 83 <i>centurio</i> | 84 <i>violaceus</i> | 85 <i>punctulatus</i> | 86 <i>poormani</i> | 87 <i>perplexus</i> | 88 <i>nussatella</i> |
|-----|---------------------|---------------------|-------------------|--------------------|---------------------|-----------------------|--------------------|---------------------|----------------------|
| 122 | <i>betulinus</i>    | 10,55%              | 11,57%            | 12,48%             | 11,51%              | 19,27%                | 11,73%             | 17,30%              | 9,65%                |
| 123 | <i>balteatus</i>    | 6,96%               | 12,07%            | 9,13%              | 10,11%              | 17,83%                | 7,92%              | 16,07%              | 9,61%                |
| 124 | <i>radiatus</i>     | 8,18%               | 12,29%            | 9,39%              | 10,79%              | 18,25%                | 9,59%              | 17,25%              | 7,94%                |
| 125 | <i>shikamai</i>     | 4,76%               | 11,79%            | 7,38%              | 10,55%              | 17,53%                | 7,14%              | 16,53%              | 7,47%                |
| 126 | <i>figulinus</i>    | 10,28%              | 9,65%             | 11,28%             | 10,08%              | 18,30%                | 10,55%             | 16,31%              | 8,66%                |
| 127 | <i>viola</i>        | 5,95%               | 12,50%            | 8,35%              | 11,79%              | 16,78%                | 8,35%              | 16,25%              | 9,13%                |
| 128 | <i>acutangulus</i>  | 8,89%               | 11,31%            | 8,89%              | 9,39%               | 17,80%                | 10,08%             | 15,55%              | 9,39%                |
| 129 | <i>musicus1</i>     | 9,34%               | 12,80%            | 9,61%              | 9,61%               | 17,35%                | 10,78%             | 16,86%              | 9,17%                |
| 130 | <i>loriosii</i>     | 10,72%              | 10,38%            | 11,49%             | 9,59%               | 17,64%                | 10,76%             | 16,39%              | 8,91%                |
| 131 | <i>emaciatius</i>   | 10,05%              | 11,30%            | 9,60%              | 4,09%               | 17,53%                | 10,08%             | 16,29%              | 8,67%                |
| 132 | <i>granum</i>       | 8,35%               | 11,07%            | 6,46%              | 10,35%              | 16,27%                | 7,41%              | 15,26%              | 9,42%                |
| 133 | <i>archon</i>       | 11,23%              | 13,52%            | 10,09%             | 12,75%              | 15,17%                | 9,13%              | 16,16%              | 11,36%               |
| 134 | <i>aristophanes</i> | 12,28%              | 12,18%            | 8,95%              | 10,87%              | 16,93%                | 10,61%             | 15,71%              | 10,17%               |
| 135 | <i>beddomei</i>     | 7,11%               | 10,58%            | 4,04%              | 11,04%              | 17,61%                | 3,08%              | 16,61%              | 9,87%                |
| 136 | <i>eburneus</i>     | 10,06%              | 13,25%            | 9,88%              | 9,36%               | 17,66%                | 9,60%              | 17,90%              | 7,70%                |
| 137 | <i>flavidus</i>     | 12,23%              | 13,04%            | 12,26%             | 8,17%               | 18,20%                | 12,95%             | 17,94%              | 9,18%                |
| 138 | <i>glans</i>        | 6,87%               | 11,57%            | 8,09%              | 11,50%              | 18,02%                | 8,32%              | 16,76%              | 9,86%                |
| 139 | <i>litteratus</i>   | 10,02%              | 12,77%            | 9,80%              | 9,35%               | 17,82%                | 9,34%              | 17,80%              | 7,46%                |
| 140 | <i>mitratus</i>     | 11,46%              | 12,07%            | 11,72%             | 13,44%              | 19,01%                | 11,75%             | 18,49%              | 11,32%               |
| 141 | <i>moluccensis</i>  | 10,38%              | 13,56%            | 10,70%             | 12,10%              | 16,99%                | 10,88%             | 16,40%              | 9,24%                |
| 142 | <i>mucronatus</i>   | 10,75%              | 13,01%            | 10,79%             | 11,97%              | 20,48%                | 10,30%             | 18,98%              | 11,07%               |
| 143 | <i>boeticus</i>     | 18,45%              | 21,85%            | 19,06%             | 22,06%              | 26,95%                | 19,24%             | 26,19%              | 22,47%               |
| 144 | <i>cf. boeticus</i> | 6,68%               | 11,17%            | 8,62%              | 11,36%              | 17,42%                | 7,63%              | 15,46%              | 10,42%               |
| 145 | <i>scopulorum</i>   | 6,90%               | 12,27%            | 5,96%              | 10,07%              | 18,52%                | 2,86%              | 16,53%              | 10,08%               |
| 146 | <i>spurius</i>      | 10,99%              | 13,26%            | 11,10%             | 11,06%              | 17,68%                | 10,55%             | 16,69%              | 10,85%               |
| 147 | <i>mindanus</i>     | 15,90%              | 16,33%            | 15,12%             | 16,40%              | 6,75%                 | 15,40%             | 5,49%               | 14,70%               |
| 148 | <i>delessertii</i>  | 20,55%              | 20,59%            | 19,40%             | 21,16%              | 9,87%                 | 19,16%             | 9,40%               | 19,68%               |
| 149 | <i>circumcisis</i>  | 9,52%               | 11,10%            | 7,66%              | 10,78%              | 16,35%                | 7,86%              | 14,63%              | 9,12%                |
| 150 | <i>T. horasei</i>   | 17,28%              | 19,26%            | 20,05%             | 19,28%              | 17,41%                | 19,00%             | 17,92%              | 19,10%               |
| 151 | <i>T. subulata</i>  | 20,96%              | 21,11%            | 19,57%             | 19,67%              | 18,38%                | 20,24%             | 19,35%              | 20,40%               |
| 152 | <i>T. crenulata</i> | 20,31%              | 22,82%            | 21,93%             | 19,22%              | 20,00%                | 20,62%             | 19,56%              | 21,20%               |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                     | 89 <i>capitaneus</i> | 90 <i>carinatus</i> | 91 <i>muriculatus</i> | 92 <i>imperialis</i> | 93 <i>striatellus</i> | 94 <i>striatus</i> | 95 <i>vulpinus</i> | 96 <i>cuneolus</i> |
|-----|---------------------|----------------------|---------------------|-----------------------|----------------------|-----------------------|--------------------|--------------------|--------------------|
| 122 | <i>betulinus</i>    | 12,53%               | 9,84%               | 12,74%                | 13,92%               | 12,79%                | 8,92%              | 11,82%             | 8,88%              |
| 123 | <i>balteatus</i>    | 12,04%               | 9,62%               | 12,50%                | 13,23%               | 11,12%                | 8,69%              | 10,88%             | 9,12%              |
| 124 | <i>radiatus</i>     | 9,92%                | 7,20%               | 11,70%                | 12,30%               | 10,40%                | 7,68%              | 9,95%              | 7,67%              |
| 125 | <i>shikamai</i>     | 10,55%               | 9,09%               | 10,29%                | 13,90%               | 9,35%                 | 8,88%              | 9,63%              | 8,38%              |
| 126 | <i>figulinus</i>    | 11,31%               | 7,69%               | 11,78%                | 11,78%               | 12,32%                | 7,70%              | 11,13%             | 7,69%              |
| 127 | <i>viola</i>        | 11,51%               | 10,51%              | 11,23%                | 13,67%               | 10,79%                | 9,81%              | 10,35%             | 9,30%              |
| 128 | <i>acutangulus</i>  | 12,00%               | 10,80%              | 10,55%                | 13,20%               | 11,35%                | 10,35%             | 10,85%             | 10,07%             |
| 129 | <i>musicus1</i>     | 12,26%               | 9,58%               | 11,77%                | 15,07%               | 12,27%                | 9,37%              | 11,53%             | 8,14%              |
| 130 | <i>loriosii</i>     | 11,31%               | 7,69%               | 12,29%                | 11,76%               | 12,51%                | 7,97%              | 11,11%             | 7,69%              |
| 131 | <i>emacius</i>      | 11,81%               | 8,88%               | 11,52%                | 13,89%               | 13,52%                | 9,37%              | 12,09%             | 8,17%              |
| 132 | <i>granum</i>       | 11,57%               | 8,90%               | 10,56%                | 13,01%               | 9,88%                 | 10,35%             | 9,94%              | 10,10%             |
| 133 | <i>archon</i>       | 11,29%               | 9,40%               | 13,51%                | 12,46%               | 11,09%                | 10,86%             | 11,58%             | 10,80%             |
| 134 | <i>aristophanes</i> | 12,10%               | 9,43%               | 11,85%                | 13,06%               | 14,49%                | 8,49%              | 13,29%             | 8,92%              |
| 135 | <i>beddomei</i>     | 12,24%               | 9,10%               | 11,30%                | 12,43%               | 10,55%                | 7,95%              | 12,03%             | 8,87%              |
| 136 | <i>eburneus</i>     | 10,56%               | 8,42%               | 12,30%                | 11,54%               | 12,52%                | 7,98%              | 12,07%             | 6,75%              |
| 137 | <i>flavidus</i>     | 13,81%               | 12,05%              | 12,74%                | 15,12%               | 15,92%                | 11,12%             | 14,02%             | 9,86%              |
| 138 | <i>glans</i>        | 11,05%               | 8,60%               | 10,29%                | 13,45%               | 11,76%                | 9,35%              | 10,37%             | 9,56%              |
| 139 | <i>litteratus</i>   | 10,34%               | 8,17%               | 12,03%                | 11,54%               | 12,29%                | 7,71%              | 12,08%             | 6,73%              |
| 140 | <i>mitratus</i>     | 13,22%               | 12,22%              | 12,69%                | 15,20%               | 13,00%                | 10,56%             | 14,01%             | 10,31%             |
| 141 | <i>moluccensis</i>  | 13,16%               | 8,45%               | 11,85%                | 13,34%               | 12,45%                | 8,97%              | 11,00%             | 10,64%             |
| 142 | <i>mucronatus</i>   | 12,30%               | 9,82%               | 13,85%                | 12,96%               | 14,46%                | 9,63%              | 13,77%             | 10,79%             |
| 143 | <i>boeticus</i>     | 22,33%               | 20,26%              | 21,46%                | 23,79%               | 18,44%                | 20,99%             | 18,55%             | 20,07%             |
| 144 | <i>cf. boeticus</i> | 11,38%               | 9,64%               | 10,88%                | 13,44%               | 10,15%                | 8,49%              | 11,15%             | 8,67%              |
| 145 | <i>scopulorum</i>   | 12,76%               | 9,13%               | 11,54%                | 11,81%               | 10,32%                | 8,65%              | 10,90%             | 8,89%              |
| 146 | <i>spurius</i>      | 14,16%               | 10,36%              | 12,77%                | 13,48%               | 13,70%                | 10,15%             | 12,54%             | 9,64%              |
| 147 | <i>mindanus</i>     | 16,77%               | 14,71%              | 15,46%                | 15,61%               | 16,52%                | 15,73%             | 15,99%             | 15,92%             |
| 148 | <i>delessertii</i>  | 22,27%               | 19,15%              | 19,62%                | 20,39%               | 21,27%                | 20,72%             | 20,76%             | 21,16%             |
| 149 | <i>circumciscus</i> | 10,84%               | 4,78%               | 9,82%                 | 12,54%               | 11,30%                | 5,28%              | 12,06%             | 7,66%              |
| 150 | <i>T. horaei</i>    | 20,48%               | 18,31%              | 19,69%                | 19,21%               | 18,13%                | 17,70%             | 16,17%             | 18,83%             |
| 151 | <i>T. subulata</i>  | 21,29%               | 18,63%              | 21,06%                | 20,28%               | 18,71%                | 19,94%             | 19,73%             | 21,26%             |
| 152 | <i>T. crenulata</i> | 21,85%               | 19,03%              | 21,08%                | 21,14%               | 20,32%                | 20,43%             | 20,11%             | 21,55%             |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                     | 97 <i>bartschi</i> | 98 <i>ateralbus</i> | 99 <i>arcuatus</i> | 100 <i>lineolatus</i> | 101 <i>catus</i> | 102 <i>compressus</i> | 103 <i>tenuistriatus</i> | 104 <i>episcopatus</i> |
|-----|---------------------|--------------------|---------------------|--------------------|-----------------------|------------------|-----------------------|--------------------------|------------------------|
| 122 | <i>betulinus</i>    | 11,07%             | 10,54%              | 18,09%             | 9,90%                 | 9,36%            | 9,66%                 | 12,56%                   | 9,34%                  |
| 123 | <i>balteatus</i>    | 10,36%             | 10,09%              | 17,02%             | 7,72%                 | 9,63%            | 5,56%                 | 9,46%                    | 8,94%                  |
| 124 | <i>radiatus</i>     | 8,21%              | 9,33%               | 17,24%             | 9,16%                 | 7,44%            | 8,69%                 | 11,10%                   | 7,20%                  |
| 125 | <i>shikamai</i>     | 9,14%              | 9,56%               | 17,20%             | 5,75%                 | 9,58%            | 4,57%                 | 8,43%                    | 9,37%                  |
| 126 | <i>figulinus</i>    | 9,89%              | 8,61%               | 17,02%             | 8,95%                 | 7,69%            | 9,90%                 | 10,38%                   | 7,45%                  |
| 127 | <i>viola</i>        | 10,33%             | 10,05%              | 17,44%             | 7,89%                 | 10,32%           | 6,24%                 | 9,40%                    | 9,88%                  |
| 128 | <i>acutangulus</i>  | 11,80%             | 11,06%              | 16,33%             | 9,88%                 | 10,57%           | 9,92%                 | 11,62%                   | 9,61%                  |
| 129 | <i>musicus1</i>     | 11,80%             | 7,91%               | 16,60%             | 10,62%                | 9,32%            | 8,42%                 | 13,01%                   | 9,85%                  |
| 130 | <i>loriosii</i>     | 10,57%             | 8,42%               | 17,14%             | 8,97%                 | 8,36%            | 10,09%                | 10,57%                   | 8,38%                  |
| 131 | <i>emacius</i>      | 10,15%             | 8,85%               | 17,51%             | 10,64%                | 9,12%            | 9,63%                 | 11,11%                   | 8,91%                  |
| 132 | <i>granum</i>       | 8,48%              | 10,07%              | 16,27%             | 8,92%                 | 9,62%            | 8,67%                 | 4,81%                    | 9,13%                  |
| 133 | <i>archon</i>       | 8,43%              | 9,16%               | 16,68%             | 10,90%                | 10,55%           | 11,08%                | 12,32%                   | 11,03%                 |
| 134 | <i>aristophanes</i> | 8,52%              | 10,86%              | 15,71%             | 11,46%                | 9,89%            | 12,36%                | 13,34%                   | 9,87%                  |
| 135 | <i>beddomei</i>     | 9,12%              | 8,88%               | 17,81%             | 6,97%                 | 10,51%           | 8,14%                 | 10,06%                   | 11,23%                 |
| 136 | <i>eburneus</i>     | 8,20%              | 7,72%               | 18,38%             | 10,64%                | 8,63%            | 9,66%                 | 13,04%                   | 9,59%                  |
| 137 | <i>flavidus</i>     | 14,17%             | 11,58%              | 17,67%             | 12,14%                | 11,52%           | 11,58%                | 14,49%                   | 12,28%                 |
| 138 | <i>glans</i>        | 10,61%             | 9,80%               | 17,46%             | 7,69%                 | 9,06%            | 7,16%                 | 7,93%                    | 11,01%                 |
| 139 | <i>litteratus</i>   | 8,20%              | 7,68%               | 18,29%             | 10,17%                | 8,61%            | 9,62%                 | 13,23%                   | 8,89%                  |
| 140 | <i>mitratus</i>     | 14,49%             | 12,45%              | 18,40%             | 12,77%                | 13,44%           | 10,86%                | 14,00%                   | 12,54%                 |
| 141 | <i>moluccensis</i>  | 9,93%              | 10,92%              | 15,94%             | 10,20%                | 9,67%            | 11,66%                | 12,90%                   | 9,91%                  |
| 142 | <i>mucronatus</i>   | 11,13%             | 12,21%              | 19,02%             | 12,09%                | 10,51%           | 12,00%                | 12,99%                   | 11,25%                 |
| 143 | <i>boeticus</i>     | 20,98%             | 22,22%              | 24,52%             | 18,65%                | 20,71%           | 19,76%                | 19,65%                   | 19,80%                 |
| 144 | <i>cf. boeticus</i> | 10,58%             | 10,15%              | 16,71%             | 8,43%                 | 9,60%            | 8,16%                 | 8,66%                    | 9,87%                  |
| 145 | <i>scopulorum</i>   | 8,68%              | 10,08%              | 17,02%             | 6,95%                 | 10,10%           | 7,92%                 | 10,34%                   | 9,87%                  |
| 146 | <i>spurius</i>      | 11,08%             | 8,94%               | 17,43%             | 10,88%                | 9,82%            | 11,57%                | 11,59%                   | 10,56%                 |
| 147 | <i>mindanus</i>     | 15,66%             | 15,67%              | 5,85%              | 17,17%                | 16,18%           | 17,21%                | 15,73%                   | 14,65%                 |
| 148 | <i>delessertii</i>  | 20,45%             | 20,16%              | 9,91%              | 21,15%                | 19,64%           | 21,96%                | 19,77%                   | 19,39%                 |
| 149 | <i>circumciscus</i> | 8,67%              | 8,62%               | 16,09%             | 8,69%                 | 5,95%            | 9,80%                 | 11,95%                   | 9,33%                  |
| 150 | <i>T. horaei</i>    | 15,69%             | 18,82%              | 18,43%             | 18,43%                | 18,27%           | 17,90%                | 18,65%                   | 20,14%                 |
| 151 | <i>T. subulata</i>  | 19,15%             | 19,33%              | 20,48%             | 19,71%                | 18,34%           | 20,17%                | 20,61%                   | 20,53%                 |
| 152 | <i>T. crenulata</i> | 19,01%             | 19,44%              | 20,43%             | 19,92%                | 18,75%           | 20,01%                | 18,51%                   | 20,16%                 |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                     | 105 memiae | 106 tribblei | 107 coffeae | 108 magus | 109 corallinus | 110 monachus | 111 californicus | 112 proximus |
|-----|---------------------|------------|--------------|-------------|-----------|----------------|--------------|------------------|--------------|
| 122 | <i>betulinus</i>    | 16,95%     | 11,30%       | 12,73%      | 9,87%     | 9,81%          | 10,36%       | 17,37%           | 10,55%       |
| 123 | <i>balteatus</i>    | 15,42%     | 6,83%        | 8,40%       | 9,17%     | 6,46%          | 8,95%        | 15,17%           | 8,90%        |
| 124 | <i>radiatus</i>     | 15,91%     | 9,78%        | 11,03%      | 6,73%     | 8,37%          | 2,18%        | 13,68%           | 6,02%        |
| 125 | <i>shikamai</i>     | 15,14%     | 5,10%        | 7,40%       | 9,13%     | 2,38%          | 7,47%        | 15,85%           | 8,16%        |
| 126 | <i>figulinus</i>    | 15,42%     | 11,46%       | 10,54%      | 7,70%     | 9,36%          | 8,42%        | 14,44%           | 8,38%        |
| 127 | <i>viola</i>        | 15,12%     | 5,36%        | 8,36%       | 10,55%    | 4,05%          | 8,45%        | 16,08%           | 8,88%        |
| 128 | <i>acutangulus</i>  | 13,92%     | 9,57%        | 10,34%      | 10,84%    | 8,63%          | 9,19%        | 16,39%           | 10,32%       |
| 129 | <i>musicus1</i>     | 15,23%     | 11,28%       | 12,49%      | 9,13%     | 9,59%          | 8,47%        | 15,66%           | 9,33%        |
| 130 | <i>loriosii</i>     | 15,22%     | 11,45%       | 10,79%      | 8,14%     | 9,60%          | 8,86%        | 14,66%           | 8,35%        |
| 131 | <i>emacius</i>      | 14,22%     | 11,50%       | 11,26%      | 9,13%     | 9,61%          | 9,65%        | 15,38%           | 8,60%        |
| 132 | <i>granum</i>       | 13,87%     | 6,83%        | 3,82%       | 9,40%     | 6,23%          | 8,92%        | 14,97%           | 9,86%        |
| 133 | <i>archon</i>       | 15,00%     | 10,76%       | 11,56%      | 9,42%     | 10,09%         | 9,63%        | 15,63%           | 11,02%       |
| 134 | <i>aristophanes</i> | 15,01%     | 13,30%       | 12,55%      | 9,92%     | 11,59%         | 9,70%        | 16,78%           | 9,42%        |
| 135 | <i>beddomei</i>     | 15,16%     | 8,01%        | 9,06%       | 8,63%     | 8,08%          | 9,38%        | 17,82%           | 10,03%       |
| 136 | <i>eburneus</i>     | 16,05%     | 10,54%       | 12,28%      | 8,67%     | 10,06%         | 8,71%        | 17,13%           | 8,64%        |
| 137 | <i>flavidus</i>     | 14,79%     | 12,26%       | 13,48%      | 12,52%    | 11,53%         | 10,87%       | 16,67%           | 10,29%       |
| 138 | <i>glans</i>        | 15,08%     | 6,79%        | 6,89%       | 9,31%     | 6,43%          | 9,16%        | 15,60%           | 9,56%        |
| 139 | <i>litteratus</i>   | 15,92%     | 10,49%       | 12,43%      | 8,38%     | 9,60%          | 8,64%        | 16,39%           | 8,61%        |
| 140 | <i>mitratus</i>     | 17,10%     | 11,71%       | 13,62%      | 12,44%    | 10,34%         | 11,80%       | 17,33%           | 12,01%       |
| 141 | <i>moluccensis</i>  | 15,70%     | 11,09%       | 12,59%      | 8,22%     | 9,69%          | 5,87%        | 13,95%           | 7,50%        |
| 142 | <i>mucronatus</i>   | 17,63%     | 12,94%       | 11,71%      | 10,05%    | 10,80%         | 7,97%        | 16,99%           | 7,91%        |
| 143 | <i>boeticus</i>     | 24,61%     | 19,66%       | 19,50%      | 20,75%    | 18,78%         | 19,29%       | 23,74%           | 20,83%       |
| 144 | <i>cf. boeticus</i> | 14,22%     | 6,31%        | 7,43%       | 9,64%     | 6,20%          | 8,73%        | 14,41%           | 8,90%        |
| 145 | <i>scopulorum</i>   | 15,14%     | 8,77%        | 9,30%       | 8,64%     | 7,14%          | 9,41%        | 16,66%           | 10,08%       |
| 146 | <i>spurius</i>      | 15,58%     | 12,46%       | 10,84%      | 10,14%    | 10,80%         | 9,39%        | 15,14%           | 11,05%       |
| 147 | <i>mindanus</i>     | 3,80%      | 15,88%       | 15,40%      | 14,98%    | 15,42%         | 14,96%       | 12,73%           | 16,89%       |
| 148 | <i>delessertii</i>  | 7,62%      | 20,02%       | 19,90%      | 19,48%    | 19,93%         | 19,98%       | 18,28%           | 22,16%       |
| 149 | <i>circumcisis</i>  | 14,40%     | 10,19%       | 11,20%      | 5,74%     | 9,08%          | 6,73%        | 14,38%           | 7,42%        |
| 150 | <i>T. horasei</i>   | 17,85%     | 17,20%       | 17,88%      | 18,57%    | 16,82%         | 17,86%       | 19,25%           | 19,92%       |
| 151 | <i>T. subulata</i>  | 18,15%     | 20,39%       | 20,08%      | 18,88%    | 20,75%         | 19,80%       | 19,02%           | 21,98%       |
| 152 | <i>T. crenulata</i> | 19,91%     | 20,24%       | 19,92%      | 19,28%    | 20,78%         | 19,95%       | 20,81%           | 21,79%       |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                     | 113 parvulus | 114 musicus | 115 miltaris | 116 lividus | 117 bullatus | 118 coronatus | 119 circumactus | 120 cinereus |
|-----|---------------------|--------------|-------------|--------------|-------------|--------------|---------------|-----------------|--------------|
| 122 | <i>betulinus</i>    | 9,60%        | 11,23%      | 12,30%       | 12,52%      | 12,49%       | 13,57%        | 10,36%          | 10,58%       |
| 123 | <i>balteatus</i>    | 9,33%        | 12,45%      | 12,11%       | 9,41%       | 11,80%       | 12,81%        | 9,92%           | 9,14%        |
| 124 | <i>radiatus</i>     | 9,36%        | 10,28%      | 9,64%        | 11,06%      | 9,36%        | 9,89%         | 3,87%           | 6,48%        |
| 125 | <i>shikamai</i>     | 5,00%        | 10,98%      | 12,06%       | 12,01%      | 11,02%       | 11,80%        | 8,89%           | 8,16%        |
| 126 | <i>figulinus</i>    | 10,07%       | 11,47%      | 11,30%       | 11,06%      | 11,50%       | 12,09%        | 7,70%           | 7,67%        |
| 127 | <i>viola</i>        | 7,39%        | 13,14%      | 12,32%       | 12,26%      | 12,01%       | 12,26%        | 9,86%           | 9,11%        |
| 128 | <i>acutangulus</i>  | 10,10%       | 11,97%      | 11,12%       | 12,97%      | 12,50%       | 11,59%        | 9,39%           | 9,14%        |
| 129 | <i>musicus1</i>     | 9,13%        | 4,80%       | 11,88%       | 12,73%      | 10,60%       | 11,05%        | 9,42%           | 9,16%        |
| 130 | <i>loriosii</i>     | 9,89%        | 11,71%      | 11,81%       | 11,04%      | 11,33%       | 12,33%        | 8,41%           | 7,71%        |
| 131 | <i>emacius</i>      | 10,32%       | 11,00%      | 11,33%       | 10,55%      | 11,25%       | 10,89%        | 10,08%          | 7,89%        |
| 132 | <i>granum</i>       | 9,09%        | 12,96%      | 11,82%       | 12,04%      | 12,03%       | 11,16%        | 9,63%           | 8,88%        |
| 133 | <i>archon</i>       | 10,11%       | 13,91%      | 9,91%        | 13,46%      | 11,80%       | 9,87%         | 9,88%           | 8,69%        |
| 134 | <i>aristophanes</i> | 13,06%       | 12,55%      | 5,33%        | 12,31%      | 11,34%       | 4,71%         | 10,01%          | 8,00%        |
| 135 | <i>beddomei</i>     | 9,06%        | 12,67%      | 11,11%       | 10,53%      | 10,58%       | 10,84%        | 10,08%          | 8,43%        |
| 136 | <i>eburneus</i>     | 7,94%        | 11,95%      | 9,90%        | 12,00%      | 10,85%       | 10,56%        | 9,86%           | 9,19%        |
| 137 | <i>flavidus</i>     | 12,09%       | 13,46%      | 13,06%       | 11,56%      | 11,61%       | 12,36%        | 11,81%          | 10,34%       |
| 138 | <i>glans</i>        | 8,83%        | 13,60%      | 11,53%       | 12,23%      | 11,02%       | 11,57%        | 10,14%          | 8,66%        |
| 139 | <i>litteratus</i>   | 7,69%        | 10,99%      | 9,40%        | 11,50%      | 10,33%       | 10,29%        | 9,38%           | 8,90%        |
| 140 | <i>mitratus</i>     | 12,46%       | 13,63%      | 14,23%       | 13,93%      | 12,99%       | 13,48%        | 11,82%          | 10,12%       |
| 141 | <i>moluccensis</i>  | 10,43%       | 12,52%      | 10,69%       | 13,02%      | 9,99%        | 10,07%        | 7,53%           | 6,82%        |
| 142 | <i>mucronatus</i>   | 11,52%       | 13,85%      | 11,55%       | 13,35%      | 11,98%       | 12,05%        | 9,22%           | 7,24%        |
| 143 | <i>boeticus</i>     | 19,55%       | 24,32%      | 22,32%       | 20,32%      | 22,43%       | 21,77%        | 20,16%          | 19,50%       |
| 144 | <i>cf. boeticus</i> | 7,70%        | 14,89%      | 11,46%       | 12,32%      | 10,65%       | 11,44%        | 9,69%           | 8,75%        |
| 145 | <i>scopulorum</i>   | 8,84%        | 13,83%      | 10,60%       | 10,85%      | 11,79%       | 10,83%        | 9,89%           | 9,37%        |
| 146 | <i>spurius</i>      | 10,37%       | 13,16%      | 12,29%       | 12,51%      | 11,78%       | 11,57%        | 11,09%          | 9,16%        |
| 147 | <i>mindanus</i>     | 17,19%       | 17,44%      | 16,70%       | 16,71%      | 17,44%       | 14,02%        | 15,68%          | 15,67%       |
| 148 | <i>delessertii</i>  | 20,19%       | 21,92%      | 21,00%       | 21,48%      | 21,36%       | 19,18%        | 20,17%          | 20,93%       |
| 149 | <i>circumcisis</i>  | 8,86%        | 11,43%      | 8,45%        | 11,72%      | 9,09%        | 8,65%         | 7,48%           | 7,00%        |
| 150 | <i>T. horasei</i>   | 18,12%       | 21,39%      | 18,89%       | 19,12%      | 18,56%       | 19,05%        | 19,26%          | 18,84%       |
| 151 | <i>T. subulata</i>  | 20,81%       | 23,59%      | 20,40%       | 21,25%      | 21,52%       | 19,15%        | 20,52%          | 20,37%       |
| 152 | <i>T. crenulata</i> | 20,21%       | 22,71%      | 21,19%       | 21,86%      | 21,74%       | 21,41%        | 19,15%          | 20,65%       |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                     | 121 chaldeus | 122 betulinus | 123 balteatus | 124 radiatus | 125 shikamai | 126 figulinus | 127 viola | 128 acutangulus |
|-----|---------------------|--------------|---------------|---------------|--------------|--------------|---------------|-----------|-----------------|
| 122 | <i>betulinus</i>    | 11,51%       | -             |               |              |              |               |           |                 |
| 123 | <i>balteatus</i>    | 11,55%       | 9,84%         | -             |              |              |               |           |                 |
| 124 | <i>radiatus</i>     | 9,12%        | 9,36%         | 9,13%         | -            |              |               |           |                 |
| 125 | <i>shikamai</i>     | 11,73%       | 10,49%        | 6,91%         | 8,39%        | -            |               |           |                 |
| 126 | <i>figulinus</i>    | 11,02%       | 4,77%         | 8,62%         | 7,90%        | 10,49%       | -             |           |                 |
| 127 | <i>viola</i>        | 11,98%       | 12,23%        | 7,39%         | 9,82%        | 3,32%        | 11,46%        | -         |                 |
| 128 | <i>acutangulus</i>  | 10,34%       | 10,56%        | 11,26%        | 9,61%        | 8,12%        | 9,83%         | 10,26%    | -               |
| 129 | <i>musicus1</i>     | 9,87%        | 11,25%        | 11,29%        | 8,43%        | 8,61%        | 10,55%        | 10,05%    | 9,59%           |
| 130 | <i>loriosii</i>     | 11,06%       | 5,02%         | 7,94%         | 7,94%        | 10,32%       | 0,48%         | 11,06%    | 10,32%          |
| 131 | <i>emaciatius</i>   | 9,59%        | 10,99%        | 9,83%         | 10,04%       | 10,27%       | 8,35%         | 11,26%    | 10,08%          |
| 132 | <i>granum</i>       | 11,02%       | 11,98%        | 7,43%         | 10,09%       | 6,20%        | 10,05%        | 7,16%     | 9,60%           |
| 133 | <i>archon</i>       | 9,22%        | 12,72%        | 12,30%        | 9,91%        | 9,59%        | 12,06%        | 11,30%    | 10,56%          |
| 134 | <i>aristophanes</i> | 4,82%        | 12,07%        | 12,37%        | 9,18%        | 12,32%       | 11,36%        | 12,84%    | 11,37%          |
| 135 | <i>beddomei</i>     | 10,35%       | 12,44%        | 8,15%         | 9,16%        | 7,13%        | 11,53%        | 8,33%     | 10,06%          |
| 136 | <i>eburneus</i>     | 10,39%       | 10,54%        | 9,63%         | 7,74%        | 8,64%        | 9,36%         | 10,08%    | 11,03%          |
| 137 | <i>flavidus</i>     | 11,14%       | 13,01%        | 10,63%        | 10,62%       | 12,03%       | 11,57%        | 13,00%    | 12,08%          |
| 138 | <i>glans</i>        | 11,51%       | 12,23%        | 7,18%         | 9,59%        | 6,19%        | 10,75%        | 6,67%     | 10,56%          |
| 139 | <i>litteratus</i>   | 10,33%       | 10,07%        | 9,13%         | 7,94%        | 8,38%        | 9,10%         | 10,07%    | 10,33%          |
| 140 | <i>mitratus</i>     | 13,46%       | 12,98%        | 10,82%        | 11,79%       | 10,77%       | 11,73%        | 10,79%    | 12,48%          |
| 141 | <i>moluccensis</i>  | 9,74%        | 11,68%        | 11,18%        | 5,56%        | 9,71%        | 9,23%         | 10,94%    | 10,47%          |
| 142 | <i>mucronatus</i>   | 11,30%       | 13,45%        | 10,61%        | 8,63%        | 11,54%       | 10,80%        | 12,03%    | 12,78%          |
| 143 | <i>boeticus</i>     | 22,79%       | 22,11%        | 18,48%        | 20,80%       | 18,60%       | 21,05%        | 19,07%    | 21,60%          |
| 144 | <i>cf. boeticus</i> | 11,17%       | 11,11%        | 7,02%         | 9,69%        | 5,26%        | 10,17%        | 5,27%     | 10,64%          |
| 145 | <i>scopulorum</i>   | 10,52%       | 11,52%        | 7,18%         | 9,60%        | 7,63%        | 11,48%        | 8,10%     | 10,79%          |
| 146 | <i>spurius</i>      | 10,89%       | 12,46%        | 9,88%         | 9,67%        | 11,03%       | 8,65%         | 12,01%    | 12,23%          |
| 147 | <i>mindanus</i>     | 15,43%       | 16,89%        | 15,88%        | 15,46%       | 15,66%       | 15,94%        | 15,90%    | 14,14%          |
| 148 | <i>delessertii</i>  | 20,20%       | 22,15%        | 21,18%        | 20,68%       | 20,42%       | 21,19%        | 19,92%    | 18,64%          |
| 149 | <i>circumcisis</i>  | 8,67%        | 10,56%        | 9,40%         | 6,71%        | 8,63%        | 7,93%         | 9,12%     | 9,36%           |
| 150 | <i>T. horasei</i>   | 19,58%       | 18,50%        | 16,95%        | 17,86%       | 17,05%       | 19,02%        | 16,61%    | 18,75%          |
| 151 | <i>T. subulata</i>  | 20,60%       | 22,01%        | 20,64%        | 19,82%       | 20,03%       | 21,26%        | 20,06%    | 21,03%          |
| 152 | <i>T. crenulata</i> | 21,04%       | 20,09%        | 21,58%        | 18,92%       | 19,85%       | 20,12%        | 21,74%    | 21,09%          |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                     | 129 musicus1 | 130 loriosii | 131 emaciatius | 132 granum | 133 archon | 134 aristophanes | 135 beddomei | 136 eburneus |
|-----|---------------------|--------------|--------------|----------------|------------|------------|------------------|--------------|--------------|
| 129 | <i>musicus1</i>     | -            |              |                |            |            |                  |              |              |
| 130 | <i>loriosii</i>     | 10,77%       | -            |                |            |            |                  |              |              |
| 131 | <i>emaciatius</i>   | 9,11%        | 7,90%        | -              |            |            |                  |              |              |
| 132 | <i>granum</i>       | 11,07%       | 9,87%        | 10,31%         | -          |            |                  |              |              |
| 133 | <i>archon</i>       | 11,51%       | 12,47%       | 11,81%         | 9,91%      | -          |                  |              |              |
| 134 | <i>aristophanes</i> | 11,34%       | 11,84%       | 10,63%         | 11,16%     | 9,87%      | -                |              |              |
| 135 | <i>beddomei</i>     | 10,74%       | 11,94%       | 10,32%         | 7,18%      | 10,29%     | 10,63%           | -            |              |
| 136 | <i>eburneus</i>     | 9,35%        | 9,11%        | 9,14%          | 10,14%     | 9,80%      | 10,63%           | 10,52%       | -            |
| 137 | <i>flavidus</i>     | 11,28%       | 11,76%       | 7,43%          | 12,55%     | 14,87%     | 12,83%           | 12,93%       | 11,79%       |
| 138 | <i>glans</i>        | 11,04%       | 11,00%       | 10,51%         | 5,49%      | 11,05%     | 11,81%           | 8,09%        | 10,57%       |
| 139 | <i>litteratus</i>   | 8,64%        | 9,08%        | 9,11%          | 10,08%     | 9,14%      | 10,39%           | 10,05%       | 0,24%        |
| 140 | <i>mitratus</i>     | 11,04%       | 11,29%       | 12,45%         | 11,76%     | 13,96%     | 13,30%           | 10,78%       | 13,25%       |
| 141 | <i>moluccensis</i>  | 10,21%       | 9,94%        | 10,89%         | 10,97%     | 10,72%     | 10,30%           | 10,90%       | 10,90%       |
| 142 | <i>mucronatus</i>   | 12,28%       | 11,02%       | 10,54%         | 11,08%     | 13,26%     | 11,83%           | 11,30%       | 11,58%       |
| 143 | <i>boeticus</i>     | 21,61%       | 21,08%       | 21,09%         | 19,09%     | 23,46%     | 22,20%           | 20,06%       | 21,09%       |
| 144 | <i>cf. boeticus</i> | 11,55%       | 10,58%       | 10,64%         | 6,03%      | 11,28%     | 12,17%           | 8,82%        | 10,13%       |
| 145 | <i>scopulorum</i>   | 11,78%       | 11,28%       | 10,78%         | 8,11%      | 10,36%     | 9,93%            | 3,82%        | 9,62%        |
| 146 | <i>spurius</i>      | 11,76%       | 8,88%        | 9,37%          | 8,68%      | 11,43%     | 12,07%           | 10,53%       | 10,51%       |
| 147 | <i>mindanus</i>     | 15,69%       | 16,18%       | 15,94%         | 14,63%     | 15,12%     | 14,93%           | 16,14%       | 16,16%       |
| 148 | <i>delessertii</i>  | 19,69%       | 21,43%       | 20,94%         | 18,40%     | 20,79%     | 20,64%           | 19,67%       | 21,66%       |
| 149 | <i>circumcisis</i>  | 9,09%        | 8,60%        | 9,37%          | 9,39%      | 9,11%      | 7,96%            | 8,61%        | 8,89%        |
| 150 | <i>T. horasei</i>   | 19,76%       | 19,23%       | 18,50%         | 17,16%     | 17,01%     | 20,09%           | 19,44%       | 17,96%       |
| 151 | <i>T. subulata</i>  | 21,32%       | 21,25%       | 19,34%         | 18,63%     | 19,39%     | 20,50%           | 19,07%       | 18,39%       |
| 152 | <i>T. crenulata</i> | 21,32%       | 20,09%       | 19,82%         | 19,49%     | 18,51%     | 21,08%           | 20,64%       | 19,66%       |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                     | 137 <i>flavidus</i> | 138 <i>glans</i> | 139 <i>litteratus</i> | 140 <i>mitratus</i> | 141 <i>moluccensis</i> | 142 <i>mucronatus</i> | 143 <i>boeticus</i> |
|-----|---------------------|---------------------|------------------|-----------------------|---------------------|------------------------|-----------------------|---------------------|
| 137 | <i>flavidus</i>     | -                   |                  |                       |                     |                        |                       |                     |
| 138 | <i>glans</i>        | 12,47%              | -                |                       |                     |                        |                       |                     |
| 139 | <i>litteratus</i>   | 11,54%              | 10,49%           | -                     |                     |                        |                       |                     |
| 140 | <i>mitratus</i>     | 14,24%              | 11,49%           | 13,37%                | -                   |                        |                       |                     |
| 141 | <i>moluccensis</i>  | 11,63%              | 10,38%           | 10,64%                | 13,84%              | -                      |                       |                     |
| 142 | <i>mucronatus</i>   | 13,01%              | 10,98%           | 11,50%                | 13,91%              | 9,67%                  | -                     |                     |
| 143 | <i>boeticus</i>     | 21,29%              | 19,26%           | 21,05%                | 22,28%              | 20,91%                 | 22,70%                | -                   |
| 144 | <i>cf. boeticus</i> | 12,80%              | 7,43%            | 9,65%                 | 12,10%              | 10,96%                 | 11,37%                | 18,12%              |
| 145 | <i>scopulorum</i>   | 12,52%              | 8,33%            | 9,81%                 | 12,67%              | 10,94%                 | 11,54%                | 18,62%              |
| 146 | <i>spurius</i>      | 12,72%              | 11,05%           | 9,87%                 | 12,78%              | 10,46%                 | 11,58%                | 22,04%              |
| 147 | <i>mindanus</i>     | 16,46%              | 15,87%           | 15,91%                | 17,96%              | 15,49%                 | 18,14%                | 25,73%              |
| 148 | <i>delessertii</i>  | 21,22%              | 20,86%           | 21,41%                | 21,67%              | 21,11%                 | 23,40%                | 29,48%              |
| 149 | <i>circumciscus</i> | 11,28%              | 8,82%            | 8,86%                 | 11,55%              | 7,97%                  | 10,74%                | 20,23%              |
| 150 | <i>T. horasei</i>   | 19,51%              | 17,82%           | 17,59%                | 21,10%              | 17,00%                 | 20,70%                | 25,63%              |
| 151 | <i>T. subulata</i>  | 20,20%              | 19,34%           | 18,39%                | 22,80%              | 19,97%                 | 22,48%                | 28,50%              |
| 152 | <i>T. crenulata</i> | 21,43%              | 20,09%           | 19,90%                | 22,99%              | 19,25%                 | 22,57%                | 27,18%              |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                     | 144 <i>cf. boeticus</i> | 145 <i>scopulorum</i> | 146 <i>spurius</i> | 147 <i>mindanus</i> |
|-----|---------------------|-------------------------|-----------------------|--------------------|---------------------|
| 144 | <i>cf. boeticus</i> | -                       |                       |                    |                     |
| 145 | <i>scopulorum</i>   | 7,68%                   | -                     |                    |                     |
| 146 | <i>spurius</i>      | 11,06%                  | 10,82%                | -                  |                     |
| 147 | <i>mindanus</i>     | 15,00%                  | 15,90%                | 16,43%             | -                   |
| 148 | <i>delessertii</i>  | 19,95%                  | 20,16%                | 20,59%             | 9,01%               |
| 149 | <i>circumciscus</i> | 8,65%                   | 9,15%                 | 9,38%              | 14,67%              |
| 150 | <i>T. horasei</i>   | 17,41%                  | 19,11%                | 17,46%             | 18,40%              |
| 151 | <i>T. subulata</i>  | 19,68%                  | 20,55%                | 18,86%             | 19,07%              |
| 152 | <i>T. crenulata</i> | 20,49%                  | 21,30%                | 19,23%             | 20,02%              |

**Tabelle 6.8 (Fortsetzung)** Distanzwerte der Nukleotid-Sequenzen des 16S rRNA-Genabschnittes (in %)

|     |                     | 148 <i>delessertii</i> | 149 <i>circumciscus</i> | 150 <i>T. horasei</i> | 151 <i>T. subulata</i> | 152 <i>T. crenulata</i> |
|-----|---------------------|------------------------|-------------------------|-----------------------|------------------------|-------------------------|
| 148 | <i>delessertii</i>  | -                      |                         |                       |                        |                         |
| 149 | <i>circumciscus</i> | 19,37%                 | -                       |                       |                        |                         |
| 150 | <i>T. horasei</i>   | 23,82%                 | 17,78%                  | -                     |                        |                         |
| 151 | <i>T. subulata</i>  | 23,67%                 | 19,30%                  | 14,39%                | -                      |                         |
| 152 | <i>T. crenulata</i> | 24,77%                 | 20,38%                  | 13,89%                | 11,59%                 | -                       |

## 6.2.2 Erstellte 16S rRNA Sequenzen

### *C. ammiralis*

TTTTAAACGGCCGCGGTACTCTGACCGTGCAAAGGTAGCATAATCATTTGCCTTA  
TAATTGAAGGCTGGAATGAATGGTTTGACAAGAATACAGCTGTCTCTTTTAGATT  
ACTTAGAACTTTATCTTTGGATGAAAAAGTCCAGATATAAATTTAAAGACAAGAAG  
ACCCTATCGAGCTTTAGAGAAAGTTAATAGATTTAATTCGAACCAATATAGATAAA  
AGGAAAGCTATTAAATACTTTGGTTGGGGCAACCGAGGAGTAAGTAAAGCCTCCT  
TTAAATAATAAATCTTACCTGTGTTGATCCAAAATTTTTGATCAAAGGAATTAGTT  
ACCGTAGGGATAACAGCATTATCTTTTTTAAAGAGCCCATATCGAAAAAAAGGTTT  
GTGACCTCGATGTTGGACCAGAATGTCCTAAAG

### *C. anemone*

TTTTAAACGGCCGCGGTACTCTGACCGTGCAAAGGTAGCATAATAATTTGCCTTA  
TAATTGAAGGCTGGAATGAACGGTTTGACAAGAATACATCTGTCTCTTATTGATT  
ACCTAGAATTTTATTTTTGGATGAAAAAGTCCAGATATTATTAAAAGACAAGAAG  
ACCCTATCGAGCTTTAGAGAAATTAGTGGACTTAATAAAAATCAATATAAGTAAA  
AGAAAAGCCGCTAAGTGTACTTTGGTTGGGGCAACCGAGGAGCAGACAAAGCCT  
CCTTTAACTTTTAAATCATACTTGTGTTGATCCAAAGATTTTGATCAAAGGAATTA  
GTTACCGTAGGGATAACAGCATTATCTTTTTTCAAGAGCCCATATCGAAAAAAAGG  
TTTGTGACCTCGATGTTGGACCAGAATATCCTAAAG

### *C. anemone 2*

ttTTaAACGGCCGCGGTACTCTGACCGTGCAAAGGTAGCATAATAaTTTGCCTTATA  
ATTGAAGGCTGgAATGAATGGTTTGACAAGAATACATCTGTCTCTTATTGATTATC  
CAGAATTTTATTTTTGGATGAAAAAGTCCAGATATAAATTTAAAGACAAGAAGACC  
CTATCGAGCTTTAGAGAAATTAGTGGACTTAATAAAAGTCAATATAGGTAAAAGA  
AAAGCCATTAAGTGTACTTTGGTTGGGGCAACCGAGGAGCAAACAAAGCCTCCTT  
TAACTTTTAAATCATACTTGTGTTGATCCAAAGATTTTGATCAAAGGAATTAGTTA  
CCGTAGGGATAACAGCATTATCTTTTTTCAAGAGCCCATATCGAAAAAAAGGTTTG  
TGACCTCGATGTTGGACCAGAATGTCCTAAAG

### *C. archon*

TTTTAaACGGCCGCGGTACTCTGACCGTGCAAAGGTAGCATAATCATTTGCCTTAT  
AATTGAAGGCTGGAATGAATGGTTTGACAAGAATACAGCTGTCTCTTTCTGATTA  
GTTAGAATTTTATTTTTAGGTGAAAAAGCCTAGATGTTATTAAAAGACAAGAAGA  
CCCTATCGAGCTTTAGAGAAAGTTAGTAGAATTTTAATAAATCAATATTATAGTAA  
AAGAAAACTATTAAATACTTTGGTTGGGGCAACCAAGGAGTAAGCAAAGCCTC  
CTTTAAACTATAAGTCATACTTGTACTGATCCAAGTATATTGATCAAAGAAATTA  
GTTACCGTAGGGATAACAGCATTATCTTTTTTGAAGAGCTCATATCGAAAAAAAGG  
TTTGTGACCTCGATGTTGGACCAGAATATCCTAAAG

### *C. arenatus*

TTTTAAACGGCCGCGGTACTCTGACCGTGCAAAGGTAGCATAATCATTTGCCTTA  
TAATTGAAGGCTGGAATGAATGGTTTGACAAGAATACAGCTGTCTCTTTTAGATT  
GTTTAGAATTTTATTTTTGGATGAAAAAGTCCAGTTACTATTAAAAGACAAGAAG  
ACCCTATCGAGCTTTAGAGAAATTAGTAGGCTTAATGGAAATCAATATAAATAAA  
AGAAAAGCTATTAAATACTTTGGTTGGGGCAACCGAGGAGCAAATAAAGCCTCC  
TTTAAGCTATAAGTCAAACCTTGTGTTGATCCAAAGATTTTGATCAAAGGAATTAG  
TTACCGTAGGGATAACAGCATTATCTTTTTTCAAGAGCCCATATCGAAAAAAAGGT  
TTGTGACCTCGATGTTGGACCAGAATATCCTAAAG

*C. aristophanes*

CTTGATTTCGGCCGCGGTACTCTGACCGTGCAAAGGTAGCATAATCATTTCGCTTAT  
 AATTGAAGGCTGGAATGAATGGTTTGACAAGAATACACCTGTCTCTTTTAGATTA  
 TTTAGAATTTTATCTTTGGGTGAAAAAGCCCAGATCGTATTAAAAGACAAGAAGA  
 CCCTATCGAGCTTCAGAAAAATTAATAGAGATTATGCTTAATATTGGTTAAAAAG  
 AAAGCTATTAAATACTTTGGTTGGGGCAACCGAGGAGTAAACAAAGCCTCCTTTG  
 AATAAGAAGTCTTACTTGTGAGGATCCAAGAATTTTGATCAAAGAAATTAGTTAC  
 CGTAGGGATAACAGCATTATCTTTTTTTGAGAGCCCATATCGAAAAAAAGGTTTGT  
 GACCTCGATGTTGGACCAGAATATCCTAAAG

*C. aurisiacus*

TTTTAAACGGCCGCGGTACTCTGACCGTGCAAAGGTAGCATAATCATTTCGCTT  
 ATAATTGAAGGCTGGAATGAATGGTTTGACAAGAATACAGCTGTCTCTTTTGTAT  
 TGTTTAGAATTTTATTTTTGGATGAAAAAGTCCAGATATTATTAAGACAAGAA  
 GACCCTATCGAGCTTTAGAAAAATTAATAGGCTTAATATAAACTAATATGAGTAA  
 AAAGCATAACTATTAAATACTTTGGTTGGGGCAACCGAGGAGTAAATAAAGCCTC  
 CTTTGTTTTGTAAAGTCTTACTTGC GTTGATCCAAGAATTTTGATCAAAGAAATTAG  
 TTACCGAGGGATAACACATTATCTTTTTTAAGAGCCCGTATCGAAAAAAAGGTTT  
 GTGACCTCGATGTTGGACCACAATATCCTAAAG

*C. bandanus*

GTTTGAACGGCCGCGGTACTCTGACCGTGCAAAGGTAGCATAATCATTTCGCTT  
 ATAATTGAAGGCTGGAATGAATGGTTTGACAAGAATACACCTGTCTCTTTTAGAT  
 TGCTTAGAATTTTATCTCTGGATGAAAAAGTCTAGATATAATTAAGACAAGAA  
 GACCCTATCGAGCTTTAGAGAATTAGTAGATTTAATTTAAATCTATATAAGTAA  
 AAGAAAAGCTATTAAACACTTTGGTTGGGGCAACCGAGGAGTAAATAAAGCCTC  
 CTTTAGAATAATAAATCTTGCTTGTGTTGATCCAAAATTTTGTATCAAAGGAATTA  
 GTTACCGTAGGGATAACAGCATTATCTTTTTTTGAGAGCTCATATCGAAAAAAAGG  
 TTTGTGACCTCGATGTTGGACCAGAATGTCCTAAAG

*C. beddomei*

TTTTAAACGGCCGCGGTACTCTGACCGTGCAAAGGTAGCATAATCATTTCGCTTA  
 TAATTGAAGGCTGGAATGAATGGTTTGACAAGAATACATCTGTCTCTTATTGATTT  
 TCTAGAATTTTATTTTTGGATGAAAAAGTCCAGATTATACTAAAAGACAAGAAGA  
 CCCTATCGAGCTTTAGGAAAATTAATGGATTTAAAAACGAATCAATATTAATAAA  
 AGAAAAACCATTAAGTATACTTTGGTTGGGGCAACCGAGGAGTAAACAAAACCT  
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*C. boeticus*

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*C. brunneus*

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*C. burryae*

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*C. cargilei*

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*C. capitaneus*

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*C. caribbaeus*

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*C. carinatus*

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*C. cedonuli I*

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*C. cedonuli II*

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*C. chaldeus*

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*C. cingulatus*

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*C. circumcisis*

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*C. coffeae*

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*C. dalli*

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*C. daucus*

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*C. delessertii*

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*C. distans*

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*C. donnae*

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*C. dorensis*

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*C. eburneus*

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*C. ermineus*

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*C. flavescens*

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*C. flavidus*

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*C. fontonae*

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*C. frigidus*

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*C. imperialis*

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*C. generalis*

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*C. geographus*

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*C. gladiator*

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*C. glans*

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*C. gradatulus*

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*C. infrenatus*

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*C. jaspideus*

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*C. jaspideus 2*

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*C. legatus*

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*C. lindae*

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*C. litoglyphus*

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*C. litteratus*

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*C. magus*

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*C. marmoreus*

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*C. mahogani*

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*C. marmoreus1*

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*C. miles*

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*C. mindanus*

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*C. mitratus*

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*C. moluccensis*

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*C. mucronatus*

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*C. muriculatus*

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*C. mus*

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*C. musicus*

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*C. mustelinus*

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*C. nanus*

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*C. nocturnus1*

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*C. nocturnus2*

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*C. nux*

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*C. obscurus*

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*C. omaria*

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*C. patricius*

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*C. pennaceus*

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*C. pertusus*

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*C. planorbis*

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*C. princeps*

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*C. purpurascens*

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*C. quercinus*

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*C. rattus*

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*C. richardbinghami*

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*C. sanderi*

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*C. sanguinolentus*

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*C. scopulorum*

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*C. spurius*

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*C. stimpsoni*

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*C. striatellus*

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*C. striatus*

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*C. tessulatus*

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*C. textile*

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*C. tinianus*

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*C. vanhyningi*

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*C. varius*

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*C. vexillum*

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*C. victoriae*

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*C. vidua*

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*C. villepini*

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*C. virgo*

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*C. vulpinus*

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*T. horasei*

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### 6.1.3. 16S rRNA Sequenzen aus der Datenbank

*C. acutangulus* AF160718

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*C. araneosus* AF174142

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*C. arcuatus* AY381996

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*C. ateralbus* AY381998

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*C. aulicus* AF174144

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*C. aureus* AF108824

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*C. balteatus* AF174146

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*C. bartschi* AY382001

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*C. betulinus* AF174147

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*C. cf. boeticus* AF174148

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*C. bullatus* AF126016

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*C. californicus* AF036534

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*C. canonicus* AF174152

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*C. catus* AF174154

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*C. centurio* AY382002

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*C. cinereus* AF174156

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*C. circumactus* AF144001

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*C. compressus* AF480306

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*C. corallinus* AF143995

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*C. coronatus* AF126019

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*C. cuneolus* AY382003

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*C. cylindraceus* AF174161

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*C. diadema* AY382006

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*C. emaciatu*s AF126018

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*C. episcopatus* EU078937

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*C. fergusonii* AY382007

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*C. figulinus* AF160702

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*C. gloriamaris* AF126168

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*C. granarius* AY382009

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*C. granum* AF126169

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*C. leopardus* AF174175

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*C. lineolatus* AF480307

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*C. lividus* AF174178

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*C. lorenzianus* AY382012

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*C. lorisii* AF126171

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*C. magnificus* AY382013

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*C. memiae* AF160723

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*C. miliaris* AF174181

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*C. monachus* EU078938

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*C. musicus1* AF144004

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*C. natalis* AY382017

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*C. nigrescens* AY382018

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*C. nigropunctatus* AF086614

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*C. nussatella* AF160710

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*C. ochroleucus* AF036528

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*C. orion* AY382020

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*C. parvulus* AF174189

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*C. perplexus* AY382022

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*C. poormani* AY382023

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*C. PROXIMUS* AF174193

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*C. puncticulatus* AY382024

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*C. radiatus* AF160724

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*C. recurvus* AY382025

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*C. sponsalis* AY382026

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*C. shikamai* AF160720

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*C. striolatus* AF174201

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*C. sugillatus* AF143990

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TAATTGAAGGCTGGAATGAATGGTTTGACAAGAATATATCTGTCTCTTTTAGACT  
ACTTAGAACTTTATTTTTGGATGAAAAAGTCCAGATATGATTAAAAGACAAGAAG  
ACCCTATCGAGCTTTAGAAAAATTAATAGACCTAATACGTTCTAATATTGATAAA  
AGAAGAGCTATTAAATACTTTGATTGGGGCAATCAAGGAGCAACTAAAGCCTCCT  
TTAATAGTGCCTAATACTTACCTGCATTTGATCCAAAAATTTTGATTAAAGAAATT  
AGTTACCGTAGGGATAACAGCATTATCTTTTTTAAGAGCCCATATCGAAAAAAAG  
GTTTGTGACCTCGATGTTGGACCAGAATATCCTGAAG

*C. tabidus* AY382028

TTTTAAACGGCCGCGGTACTCTGACCGTGCAAAGGTAGCATAATCATTTGCCTTA  
TAATTGAAGGCTGGAATGAATGGTTTGACAAGAATACATCTGTCTCTTTTGGATT  
CCTAGAATTTTATTTTTGGATGAAAAAGTCCAGATTTAATTAAGACAAGAAGA  
CCCTATCGAGCTTTAGAGAAATTGACGGATTTATTAATCCTCTATAGTAATAAAA  
GAAGAGCCGTTAAGTATACTTTGGTTGGGGCAACCGAGGAGCAGATAAAGCCTC  
CTCTAAATTTTAAGTCTTACTTGTGTTGATCCAAAAATTTTGATCAAAGGAATTAG  
TTACCGTAGGGATAACAGCATTATCTTTTTTCAAGAGCCCATATCGAAAAAAAGGT  
TTGTGACCTCGATGTTGGACCAGAATATCCTAAAG

*C. tenuistriatus* AF174203

TTTTAAACGGCACGGTACTCTGACCGTGCAAAGGTAGCATAATCACTTGCCTTAT  
AATTGAAGGCTGGAATGAATGGTTTGACAAGAATACACCTGTCTCTTTATACTT  
TCTAGAATTTTATCTTTGGATGAAAAAGTCCAAATATAATTAAGACAAGAAGA  
CCCTATCGAGCTTTAGAAGAATTAGTGGATTTGATAACAATCAATAGAAATAAAA  
GAAGAGCATTAAGTATCTTTGGTTGGGGCAACTAAGGAGTAGACAAAGCCTCCTT  
TAACTTTAAGTCGTACCTGTGTTGATCCAAAAATTATTGATCAAAGGAATTAGTT  
ACCGTAGGGATAACAGCAAGATCTTTTTTTGAGAGCCCATATCGAAAAAAAGGTTT  
GTGACCTCGATGTTGGACCAGAATATCCTAAAG

*C. tribblei* AF160716

TTTTAAACGGCCGCGGTACTCTGACCGTGCAAAGGTAGCATAATTTATAATTGAA  
GGCTGGAATGAATGGTTTGACAAGAATATATCTGTCTCTTTGTGACTTCCTAGAAT  
TTTATTTTTGGATGAAAAAGTCCAGATATCATTAAGACAAGAAGACCCTATCG  
AGCTTTAGAGAAATTAGTGGACTTGATAATAAGCAATAGTAATAAAAGAAAAAG  
CCATTAAGTATACTTTGGTTGGGGCAACCGAGGAGCAAATAAAGCCTCCTTTAAA  
TTTTAAGTCACACCCGTGTTGATCCAAACATTTTGATTAAAGGAATTAGTTACCGT  
AGGGATAACAGCATTATCTTTTTTAAGAGCCCATATCGAAAAAAAGGTTTGTGAC  
CTCGATGTTGGACCAGAATATCCTAAAG

*C. verrucosus* AY382030

TATTTAACGGCCGCGGTACCCTGACCGTGCAAAGGTAGCACAATACTTGCCTTAT  
AATTGAAGGCTGGAATGAATGGTTTGACAAGAATGTAGCTGTCTCATTATAATTT  
AATAGAATTTTATTTTAGGATGAAAAAGTCCTAATTAAATTAAGACAAGAAGA  
CCCTATCGAGCTTGAAATTAATTAATAAAAGATTAATAATTTAAAGTTGATTATT  
AAAGATTTTGGTTGGGGCAACTAAGGAGCAAGAAAAGCCTCTTTTAAAGGCTAT  
ACAAACTTGTAAGGATCCAATAATTTTGATCGAAGAAAATAGTTACCGTAGGGAT  
AACAGCATTATCTTTTTTGAGAGTCCCTATCGAAAAAAAGGTTTGTGACCTCGAT  
GTTGGACCAGAATATCCTAAAG

*C. viola* AF160719

TTTTAAACGGCCGCGGTACTCTGACCGTGCAAAGGTAGCATAATCATTTGCCTTA  
TAATTGAAGGCTGGAATGAATGGTTTGACAAGAATACAACCTGTCTCTTTATGACT  
TCCTAGAACTTTATTTTGGATGAAAAAGTCCAGATATTATTAAGACAAGAAG  
ACCCTATCGAGCTTTAGGAAAATTGGTGGACTTAACATTAAAACAATAGAAATAA  
AAGAAAAGCCATCAAGTATACTTTGGTTGGGGCAACCGAGGAGCAAATAAAGCC  
TCCTTTGAATTTTAAATCACACTTGTATTGATCCAAATATTTTGATCAAAGGAATT  
AGTTACCGTAGGGATAACAGCATTATCTTTTTCAAGAGCCCATATCGAAAAAAAG  
GTTTGTGACCTCGATGTTGGACCAGAATATCCTAAAG

*C. violaceus* AY382032

TTTTAAACGGCCGCGGTACTCTGACCGTGCAAAGGTAGCATAATCATTTGCCTTA  
TAATTGAAGGCTGGAATGAATGGTTTGACAAGAATATACCTGTCTCCTTTAGATT  
ATTTAGAACTTTATCTTTGGATGAAAAAGTCCGGATTTAATTAATAGACAAGAAG  
ACCCTATCGAGCTTCAGAAAAGTTAATAGATTTAAAGGGATCAATATGACTAAAA  
GAAGGGCTATTAAATACTTTGGTTGGGGCAACTGAGGAGTAGTCAAAGCTTCCTC  
TAATTTATAAATTCTTACAAGTGTTGATCCAAAATTTTTGATCAAAGGAATTAGTT  
ACCGTAGGGATAACAGCATTATCTTTTTCAAGAGCCCATATCGAAAAAAAGGTTT  
GTGACCTCGATGTTGGACCAGAATATCCTAAAG

*C. vitulinus* AF160713

TTTTAAACGGCCGCGGTACTCTGACCGTGCAAAGGTAGCATAATCATTTGCCTTA  
TAATTGAAGGCTGGAATGAATGGTTTGACGAGAATACACCTGTCTCTTTCTGATTT  
CCTAGAATTTTATTTCTGGATGAAAAAGTCCAGATAGAATTAAAAGACAAGAAG  
ACCCTATCGAGCTTTAGATAAATTAGTGGAGTTAAGGTAAATCAATTCTAGAAAA  
AGAAAAGCTGCTAAACACTTTGGTTGGGGCAACCGAGGAGTAAATGAAGCCTCC  
TTTAAAATAAGTAACAGACTTGTGCTGATCCAAATTTTTTTGATCAAAGGAATTAG  
TTACCGTAGGGATAACAGCATAATCTTTTTTTGAGAGCTCATATCGAAAAAAAGGT  
TTGTGACCTCGATGTTGGACCAGAATATCCTAAAG

*C. ximenes* AY382033

TATTTAACGGCCGCGGTACCCTGACCGTGCAAAGGTAGCATAATACTTGCCTTAT  
AATTGAAGGCTGGAATGAATGGTTTGACAAGAATGTAGCTGTCTCATTATAATTT  
AATAGAATTTTATTTTAGGATGAAAAAGTCCTAGTTTAATTAAGACAAGAAGA  
CCCTATCGAGCTTGAAATCAATTAATAAAAGATTAATACTTAGAAAATTGGTTAT  
TAAAAATTTTGGTTGGGGCAACTAAGGAGCAAAAAAAGCCTCTTTTTTAAAGCTA  
AACATACTAGTAAGGATCCAATAATTTTGATCAAAGAAAATAGTTACCGTAGGGA  
TAACAGCATTATCTTTTTTTGAGAGCCCTTATCGAAAAAAAGGTTTGTGACCTCGAT  
GTTGGACCAGAATATCCTAAAG

*T. subulata* AF174213

TTTTTAACGGCCGCGGTACTCTGAGTGCAAAGGTAGCATAATCATTTGCCTTATA  
ATTGAAGGCTAGTATGAATGGTTTGACAAGAATATGGCTGTCTCTTTATAATTTG  
ATAGAATTTTATTTTCAGGTGAAAAAGCCTTGATTAAATTAATAGACAAGAAGAC  
CCTATCGAGCTTGAAAGGAATTTGATGGGTAAAAAATAAGCCTTATTGGTGGAGAA  
AAGGGGTAAACTGTTGAATATTTTGGTTGGGGCGACTGAGGAACAGAAAAGCCT  
TCCTTTGTGGTGTGATACATACAGGTGTTGATCCAAAAGTGTTGATTAAAGGAAT  
TAGTTACCGTAGGGATAACAGCATTATCCTTTTTTGAGAGTTCATATCGAAAAAGG  
GGTTTGTGACCTCGATGTTGGACCAGAATGTCCTGAAG

*T. crenulata* AF108825

TTTTTAACGGCCGCGGTACTCTGACCGTGCAAAGGTAGACTAATCATTTGCCTTAT  
AATTGAAGGCTAGTATGAATGGTTTGACAAGAATGTAGCTGTCTCTTCATAATTT  
GGTAGAATTTTATTTTLAGGTGAAAAAGCCTTAATGTAATTAATAGACAAGAAGA  
CCCTATCGAGCTTAAAAGAATTTAGTGGATTTTTAAATAGTTTATTGGTTAAGAG  
GTATAACTGCTGAGATTTTTGGTTGGGGCGACTGAGGAACATTTAAAGCTTCCTTT  
AATGTAGATATACGTACAAGTGTTGATCCAAAATTAATGATTAAAGGAATTAGTT  
ACCGTAGGGATAACAGCATTATCTCCTTTGAGAGTTCTTATCGAAAAGGGGGTTT  
GTGACCTCGATGTTGGACCAGAATGTCCTGAAG

## 6.3 Toxinologie

### 6.3.1 Selbst erstellte Sequenzen diverser Conotoxin-Precursor

#### I-Superfamilie

##### *Conus regius*:

###### regius1

ATGATGTTTCGATTGACGTCAGTCAGCTGTATCCTGCTGGTCATCGTTCTTCTGAA  
CTTGGTTGTGCTTGCCGATGCCTGTCACCATCATGAAGGATGGCCATGCAATGAT  
CCCTGGGGTTGCTGTGGCTTGGGATGCTGCGACAAGAAATGCTCAAGAACTGTC  
CCAGAACGGAGAGGCGACGCTCAGTTTCATTCAGAGTATTTGGCCAACGTTGA

###### regius2a

ATGATGTTTCGATTGACGTCAGTCAGCTGTATCCTGCTGGTCATCGTTCTTCTGAA  
CTTGGTTGTGCTTACCGATGCCTGTCACCATCATGAAGGATGGCCATGCAATGAT  
CCCTGGGGTTGCTGTGGCTTGGGATGCTGCGACAAGAAATGCTCAAGAACTGTC  
CCAGAACGGAGAGGCGACGCTCAGTTTCATTCAGAGTATTTGGCCAACGTTGA

###### regius2b

ATGATGTTTCGATTGACGTCAGTCAGCTGTATCCTGCTGGTCATCGTTCTTCTGAA  
CTTGGTCGTGCTTACCGATGCCTGTCACCATCATGAAGGATGGCCATGCAATGAT  
CCCTGGGGTTGCTGTGGCTTGGGATGCTGCGACAAGAAATGCTCAAGAACTGTC  
CCAGAACGGAGAGGCGACGCTCAGTTTCATTCAGAGTATTTGGCCAACGTTGA

#### A-Superfamilie

##### *Conus regius*:

###### regius3

ATGGGCATGCGGATGATGTTCACTGTGTTTCTGTTGGTTGTCTTGACAACCACTGT  
CGTTTCCTCCACTTCAGTTCGTGCATCTGATGGCAGGAATGCCGCAGCCGACAAC  
AGAGCGTCTGACCTAATCGCTCAAATCGTCAGGAGAGGATGCTGTTCCCATCCTG  
CCTGTAATGTGAATAATCCACACATTTGTGGTTGA

###### regius 16

ATGGGCATGCGGATGATGTTCACTGTGTTTCTGTTGGTTGTCTTGACAACCACTGT  
CGTTTCCTCCACTTCAGTTCGTGCATCTGATGGCAGGAATGCCGCAGCCGACAAC  
AGAGCGTCTGACCTAATTGCTCAAATCGTCAGGAGAGGATGCTGTTCCCATCCTG  
CCTGTAATGTGAATAATCCACACATTTGTGGTTGA

###### regius 13

ATGGGCATGCGGATGATGTTCAACGTGTTTCTGTTGGTTGTCTTGGCAAGCGCTTT  
GGTTTCCTTCGCTTCAAATCGTGCATCCAATGACGATTATCGCAGAGCATCTGAA  
CGGATTACTCCGCGGACGTGGGAAGAATGCTGTAAGAATCCTGGTTGTGGAACA  
ATCATGTGGACCGTTGTGCGGACAAGTTTGA

## regius 8

ATGGGCATGCGGATGATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAAGCGCTTT  
GGTTTCCTTCGCTTCAAATCGTGCATCCAATGACGAGTATCGCAGAGCATCTGAA  
CGGATTACTCCGCGGACGTGGGAAGAATGCTGTAAGAATCCTGGTTGTCTGGAACA  
ATCATGTGGACCGTTGTCTGCGGACAAGTTTGA

*Conus ermineus*:

## ermineus 1

ATGGGCATGCGGATGATGTTACATCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGGTTTCCTTCACCTTAGATCGTGTTCTGGGTCTAGCATCTGAAGGCAGGAATGCTG  
CAGCCATCGACAACGCCTTAGACCAGAGGGATCCAAAGCGACAGACCCCGGGGT  
GCTGTTGGAATCCTGCCTGTGTGAAGAACAGATGTGGAAGACGCTGA

## ermineus 2

ATGGGCATGCGGATGATGTTACATCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGGTTTCCTTCACCTTAGATCGTGTTCTGGGTCTAGCATCTGAAGGCAGGAATGCTG  
CAGCCATCGACAACGCCTTAGACCAGAGGGATCCAAAGCGACAGACCCCGGGGT  
GCTGTTGGAATCCTGCCTGTGTGAAGAACAGATGTGGAAGACGCTGA

## ermineus 3

ATGGGCATGCGGATGATGTTACATCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCCTTCACCTTAGATCATGTTCTGGGTCTAGCATCTGAAGGCAGGAATGCTA  
AAGCCATCGACAACGCCTTAGACCAGAGGGATCCAAAGCGACAGACCCCGGGGT  
GCTGTTGGCATCCTGCCTGTGGGAAGAACAGATGTGGAAGACGCTGA

## ermineus 4

ATGGGCATGCGGATGATGTTACATCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGGTTTCCTTCACCTTAGATCGTGTTCTGGGTCTAGCATCTGAAGGCAGGAATGCTA  
AAGCCATCGACAACGCCTTAGACCAGAGGGATCCAAAGCGACAGACCCCGGGGT  
GCTGTTGGAATCCTGCCTGTGTGAAGAACAGATGTGGAAGACGCTGA

## ermineus 5

ATGGGCATGCGGATGATGTTACATCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGGTTTCCTTCACCTCAGATCGTGTTCTGGGTCTAGCATCTGAAGGCAGGAATGCT  
AAAGCCATCGACAACGCCTTAGACCAGAGGGATCCAAAGCGACAGACCCCGGGG  
TGCTGTTGGAATCCTGCCTGTGTGAAGAACAGATGTGGAAGACGCTGA

## ermineus 6

ATGGGCATGCGGATGATGTTACATCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGGTTTCCTTCACCTTAGATCGTGTTCTGGGTCTAGCATCTGAAGGCAGGAATGCTA  
AAGCCATCGACAACGCCTTAGACCAGAGGGATCCAAAGCGACAGACCCCGGGGT  
GCTGTTGGAATCTTGCCTGTGTGAAGAACAGATGTGGAAGACGCTGA

## ermineus 7

ATGGGCATGCGGATGATGTTACATCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCCTTCACCTTAGATCGTGTTCTGGGTCTAGCATCTGAAGGCAGGAATGCTA  
AAGCCATCGACAACGCCTTAGACCAGAGGGATCCAAAGCGACAGACCCCGGGGT  
GCTGTTGGCATCCTGCCTGTGGGAAGAACAGATGTGGAAGACGCTGA

*Conus nux:*

## nux 2

ATGGGCATGCGGATGATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCAGATCGTGCATCCGATCGCAAGAATCGCAGAGCATCTAACTGGAATACT  
TGGATGATTTCGGACGATAGCTTGCTGTGAAAATCCTCAATGTTATCAGACCAATA  
GGGATGAATGTATTTCGGGAAGCCTCTGAATGA

## nux 2b

ATGGGCATGCGGATGATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCAGATCGTGCATCCGATCGCAAGAATCGCAGAGCATCTAACTGGAATACT  
TGGATGATTTCGGACGATAGCTTGCTGTGAAAATCCTCAATGTTATCAGACCAATA  
GGGATGAATGTATTTCGGGAAGCCTCTGAATGA

*Conus jaspideus:*

## jaspideus1

ATGGGCATGCGGATGATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCAGATCGTGCATCCGATCGCAAGAATCGCAGAGCATCTAACTGGAATACT  
TGGATGATTTCGGACGATAGCTTGCTGTGAAAATCCTCAATGTTATCAGACCAATA  
GGGATGAATGTATTTCGGGAAGCCTCTGAATGA

## jaspideus2

ATGGGCATGCGGATGATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCAGATCGTGCATCCAATCGCAAGAATCGCAGAGCATCTAACTGGAATACT  
TGGATGATTTCGGACGATAGCTTGCTGTGAAAATCCTCAATGTTATCAGACCAATA  
GGGATGAATGTATTTCGGGAAGCCTCTGAATGA

## jaspideus3

ATGGGCATGCGGATGATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCAGATCGTGCATCCGATCGCAAGAATCGCAGAGCATCTAACTGGAATACT  
TGGATGATTTCGGACGATAGCTTGCTGTGAAAATCCTCAATGTTATCAGACCAATA  
GGGATGAATGTATTTCGGGAAGCCTCTGAATGA

## jaspideus4

ATGGGCATGCGGATGATGTTACATCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGGTTCCCTTCACTTTAGATCGTGTTCTGGGTCTAGCATCTGAAGGCAGGAATGCTA  
AAGCCATCGACAACGCCTTAGACCAGAGGGATCCAAAGCGACAGACCCCGGGGT  
GCTGTTGGAATCTTGCTGTGTGAAGAACAGATGTGGAAGACGCTGA

## jaspideus5

ATGGGCATGCGGATGATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCAGATCGTGCATCCGATCGCAAGAATCGCAGAGCATCTAACTGGAATACT  
TGGATGATTTCGGACGATAGCTTGCTGTGAAAATCCTCAATGTTATCAGACCAATA  
GGGATGAATGTATTTCGGGAAGCCTCTGAATGA

## jaspideus6

ATGGGCATGCGGATGATGTTNCNCCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCAGATCGTGCATCCGATCGCAAGAATCGCAGAGCATCTAACTGGAATACT  
TGGATGATTTCGGACGATAGCTTGCTGTGAAAATCCTCAATGTTATCAGACCAATA  
GGGATGAATGTATTTCGGGAAGCCTCTGAATGA

## jaspideus7

ATGGGCATGCGGATGATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCAGATCGTGCATCCGATCGCAAGAATCGCAGAGCATCTAACTGGAATACT  
TGGATGATTTCGGACGATAGCTTGCTGTGAAAATCCTCAATGTTATCAGACCAATA  
GGGATGAATGTATTTCGGGAAGCCTCTGAATGA

## jaspideus8

ATGGGCATGCGGATGATGTTTCATCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCAGATCGTGCATCCGATCGCAAGAATCGCAGAGCATCTAACTGGAATACT  
TGGATGATTTCGGACGATAGCTTGCTGTGAAAATCCTCAATGTTATCAGACCAATA  
GGGATGAATGTATTTCGGGAAGCCTCTGAATGA

## jaspideus9

ATGGGCATGCGGATGATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCAGATCGTGCATCCGATCGCAAGAATCGCAGAGCATCTAACTGGAATACT  
TGGATGATTTCGGACGATAGCTTGCTGTGAAAATCCTCAATGTTATCAGACCAATA  
GGGATGAATGTATTTCGGGAAGCCTCTGAATGA

## jaspideus14

ATGGGCATGCGGATGATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCAGATCGTGCATCCGATCGCAAGAATCGCAGAGCATCTAACTGGAATACT  
TGGATGATTTCGGACGATAGCTTGCTGTGAAAATCCTCAATGCTATCAGACCAATA  
GGGATGAATGTATTTCGGGAAGCCTCTGAATGA

## jaspideus16

ATGGGCATGCGGATGATGTTCTTGACCGCCTGGACATTCGTCACGGCTGATGACT  
CCAGAAATGGATTGGGGAACCTTTTTCTGAAGGCAAGTCACGAAATGAAGGACT  
CTGAATTGAACAAGAGAAATGATGACTGCATTGCTGGTGGTGTATTCTGTGGCTT  
GCCGAAAATTGGATACTGCTGCAGTGGCATTTCCTATTTCGTCTGCACTTAA

## jaspideus17

ATGGGCATGCGGATGATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCAGATCGTGCATCCGATCGCAAGAATCGCAGAGCATCTAACTGGAATACT  
TGGATGATTTCGGACGATAGCTTGCTGTGAAAATCCTCAATGTTATCAGACCAATA  
GGGATGAATGTATTTCGGGAAGCCTCTGAATGA

## jaspideus18

ATGGGCATGCGGATGATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCAGATCGTGCATCCGATCGCAAGAATCGCAGAGCATCTAACTGGAATACT  
TGGATGATTTCGGACGATAGCTTGCTGTGAAAATCCTCAATGTTATCAGACCAATA  
GGGATGAATGTATTTCGGGAAGCCTCTGAATGA

## jaspideus24

ATGGGCATGCGGATGATGTTCTTGACCGCCTGGACATTCGTCACGGCTGATGACT  
CCAGAAATGGATTGGGGAACCTTTTTCTGAAGGCAAGTCACGAAATGAAGGACT  
CTGAATTGAACAAGAGAAATGATGACTGCATTGCTGGTGGTGTATTCTGTGGCTT  
GCCGAAAATTGGATACTGCTGCAGTGGCATTTCCTATTTCGTCTGCACTTAA

jaspideus25

ATGGGCATGCGGATGATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCAGATCGTGCATCCGATCGCAAGAATCGCAGAGCATCTAACTGGAATACT  
TGGATGATTTCGGACGATAGCTTGCTGTGAAAATCCTCAATGTTATCAGACCAATA  
GGGATGAATGTATTTCGGGAAGCCTCTGAATGA

jaspideus26

ATGGGCATGCGGATGATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCAGATCGTGCATCCGATCGCAAGAATCGCAGAGCATCTAACTGGAATACT  
TGGATGATTTCGGACGATAGCTTGCTGTGAAAATCCTCAATGTTATCAGACCAATA  
GGGATGAATGTATTTCGGGAAGCCTCTGAATGA

jaspideus27

ATGGGCATGCGGATGATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCAGATCGTGCATCCGATCGCAAGAATCGCAGAGCATCTAACTGGAATACT  
TGGATGATTTCGGACGATAGCTTGCTGTGAAAATCCTCAATGTTATCAGACCAATA  
GGGATGAATGTATTTCGGGAAGCCTCTGAATGA

jaspideus29

ATGGGCATGCGGATGATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCAGATCGTGCATCCGATCGCAAGAATCGCAGAGCATCTAACTGGAATACT  
TGGATGATTTCGGACGATAGCTTGCTGTGAAAATCCTCAATGTTATCAGACCAATA  
GGGATGAATGTATTTCGGGAAGCCTCTGAATGA

jaspideus32

ATGGGCATGCGGATGATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCAGATCGTGCATCCGATCGCAAGAATCGCAGAGCATCTAACTGGAATACT  
TGGATGATTTCGGACGATAGCTTGCTGTGAAAATCCTCAATGTTATCAGACCAATA  
GGGATGAATGTATTTCGGGAAGCCTCTGAATGA

jaspideus33

ATGGGCATGCGGATGATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCAGATCGTGCATCCGATCGCAAGAATCGCAGAGCATCTAACTGGAATACT  
TGGATGATTTCGGACGATAGCTTGCTGTGAAAATCCTCAATGTTATCAGACCAATA  
GGGATGAATGTATTTCGGGAAGCCTCTGAATGA

*Conus purpurascens* ( $\alpha$ A-Conotoxin):

Pur1A

ATGGGCATGCGGATGATGTTATCGTGTTTCTGTTGGTTGCCTTGGCAACCACTGT  
CGGTTCTTCACTCCAGATCATGCATCTGATGGCAGGAATGCTGCAGTCAACGAC  
AAAGCGTCTCCCCTGATCGCCAAGGTCATCAGGGATTGCTGTGGTGTTCATGG  
AAGAGTGTCAATGCCTTTGTACTCAAACGTGTAAAAATAAAGGGAAAAAAG  
AGCTATGGGAAATGATGACAGCAACAGATAAAAGAAATTGA

## O-Superfamilie

*Conus nux:*

## nux1

ATGGGCATGCGGATGATGTTCTTGACCGCCTGGACATTCGTCACGGCTGATGACT  
CCAGAAATGGATTGGGGAACCTTTTTCTGAAGGCAAGTCACGAAATGAAGGACT  
CTGAATTGAACAAGAGAAATGATGACTGCATTGCTGGTGGTGTATTCTGTGGCTT  
GCCGAAAATTGGATACTGCTGCAGTGGCATTTCCTATTTCGTCTGCACTTAA

*Conus jaspideus:*

## jaspideus5

ATGGGCATGCGGATGATGTTCTTGACCGCCTGGACATTCGTCACGGCTGATGACT  
CCAGAAATGGATTGGGGAACCTTTTTCTGAAGGCAAGTCACGAAATGAAGGACT  
CTGAATTGAACAAGAGAAATGATGACTGCATTGCTGGTGGTGTATTCTGTGGCTT  
GCCGAAAATTGGATACTGCTGCAGTGGCATTTCCTATTTCGTCTGCACTTAA

## vil1293

*Conus villipinii:*

## vil1293a

ATGTTGTCCCAGATCTCCCTGCCCTCCTCCTCCCGCTNTGAATACGACGACAACGA  
TGTCAGCAAACGCGTNTTNTGCAACGGTTTCACAGGCTGCGGTGGACGACACCGG  
GACCGCAGCCGACGTCAAGAACGCTACGGGAAGAGGCTGATCCCCGTTCTAGCG  
AAGCGACCCTTNTGCAACAGTTTCGGCTGCTACAACGGCAAGAGGAGTCTTTCCG  
GAGCTGGCCCTGCCCTGTCCACGCCTGTAGATCCCTCGCGAAACAACAAGGCCCA  
ATGCAACAAAACTTTCAGAAATAA

## vil1293b

ATGTTGTCCCAGATcTCCCTGCCCTCCTCCTCCCGCTTTGAATACGACGACAACGA  
TGTCAGCAAACGCGTTTTTTGCAACGGTTTCACAGGCTGCGGTGGACGACACCGG  
GACCGCAGCCGACGTCAAGAACGCTaCGGGAAGAGGCTGATCCCCGTTcTAGcGA  
AGCGACCCTTTTGCAACAGTTTcGGCTGCTACAACGGCAAGAGGAGTcTTTCCGGA  
GCTGGCCCCGCCCTGTCCACGCCTGTAGATCCCTCGCGAAACAACAAGGCCCGAA  
CCATGGCTcGCATGCTAGACGCAGCCGCCTTcTGCCCGGCATGA

purpurX

*Conus purpurascens:*

purpur X

ATGGGCATGCGGATGATGTTTCGACGGCATGGTGCTCGTCCCGTGGTTCCCCAAGC  
GGCGACAGCGCCGGGCCTCCAGCCTCAAAAAGGCCCTACCACAGCCACTGGAGA  
AGCGCTACCGGAAGAGAACAGGAGGTGGACACACTGCCTGCTCCTCTCCCCATCT  
CTCACATCTCAAACCTCTCTCAGACTGACCAGTGTCTTGTGGCACTGACTCCCAAA  
CTCCCACCCACATCTTACAGTCCTGCCCCTCCTTTGAAGCCTGGAGTTGCCAGACG  
TGGCCCAGTCCGGTGGAGGTCCAGGAGAAGCTGTGGGGACCGGCGGGAGGTCGC  
TGTGGCGGACTGCTGACTTCGCCTCACCTTACTCACCGGACGGAGGATCTAGCAT  
GGCTAAGAGACGCGAAAGAAAGAAAGAATACAGCCACCTGGGAACATCATCCGC  
ATGCCATAATCACTAG

F-Superfamilie

*Conus villipinii:*

Klon1

GAAATGCGTCGACCGGAAGTGCGTCGACCGGAAGTGCGTCAACCAGAGTTCGCT  
GAGACGCCGGTGGGCCAGAAGCGAGGGGGCTTGGGGCGGTGCATCTACAACCTGC  
ATGAACAGCGGAGGGGGGCTCAGCTTCATCCAGTGCAAGACGATGTGCTAA

Klon2

ATGGGATTCAGAGTGTTGGTCTTGGTCGTCATGGCAACCACTTCTGCTCTCCCCTT  
TACATTTTCTGAGGAGCCAGGCAGGAGTCCCTTCAGGCCAGCTTTGAGGTCAGAG  
GAAGCGCAGGCCTTGAGGCACGGTCTGACGCTGCTCTTGGCGCGACGGGCGGAT  
GGGCAGCCACCAGATATGCGTCAACCGGAAATGCGTCGACCGGAAGTGCGTCGA  
CCGGAAGTGCGTCAACCAGAGTTCGCTGAGACGCCGGTGGGCCAGAAGCGAGGG  
GGCTTGGGGCGGTGCATCTACAACCTGCATGAACAGCGGAGGGGGGGCTCAGCTTC  
ATCCAGTGCAAGACCATGTGC

Klon3

ATGGGATTCAGAGTGTTGGTCTTGGTCGTCATGGCAACCACTTCTGCTCTCCCCTT  
TACATTTTCTGAGGAGCCAGGCAGAAAGTCCCTTCAGGCCAGCTTTGAGGTCAGAG  
GAAGCTCAGGCCTTGAGGCACGGTCTGACGCTGCTCTTGGCGCGACGGGCGGATG  
GGCAGCCACCGGATATGCGTCAACCGGAAATGCGTCGACCGGAAGTGCGTCAAC  
CAGAGTTCGCTGAGTTGTCGGTGGGCCAGAGGCGATGGGACGTGGATCAGTGCA  
TGTACTACCGCTTGACTGGCGTAGTGGGGTACAGCTACACCGAGTGTCAAACCAT  
GTGCACCTGA

Klon4

ATGGGATTCAGAGTGTTGGTCTTGGTCGTCATGGCAACCACTTCTGCTcTCCCCTT  
TACATTTTTTGGAGGAGCCAGGCAGAAAGTCCCTTCAGGCCAGCTTTGAGGTCAGAG  
GAAGCTCAGGCCTTGAGGCACGGTCTGACGCTGCTCTTGGCGCGACGGGCGGATG  
GGCAGCCaCCGGATATGCGTCAACCGGAAATGCGTCGACCGGAAGTGcGTCAACT  
AGAGTTCGCTGAGTTGTCGGTGGGCCAGAGGCGATGGGACGTGGATCAGTGCA  
GTACTACTGCTTGACTGGCGTAGTGGGGTACAGCTACACCGAGTGTCAAACCATG  
TGCACCTGA

## Klon5

ATGGGATTCAGAGTGTTGGTCTTGGTCGTCATGGCAACCACTTCTGCTcTCCCCTT  
 TACATTTTTTGAGGAGCCAGGCAGAAAGTCCCTTCAGGCCAGCTTTGAGGTCAGAG  
 GAAGCTCAGGCCTTGAGGCACGGTCTGACGCTGCTCTTGGCGCGACGGGCGGATG  
 GGCAGCCaCCGGATATGCGTCAACCGGAAATGCGTCGACCGGAAGTGcGTCAACT  
 AGAGTTCGCTGAGTTGTTCGGTGGGCCAGAGGCGATGGGACGTGGATCAGTGCAT  
 GTACTACTGCTTGACTGGCGTAGTGGGGTACAGCTACACCGAGTGTCAAACCATG  
 TGCACCTGA

## Klon6

ATGGGATTCAGAGTGTTGGTCTTGGTCGTCATGGCAACCACTTCTGCCCTCCCCTT  
 TACATTTTCTGAGGAGCCAGGCAGAAAGTCCCTTCAGGCCAGCTTTGAGGTCAGAG  
 GAAGCTCAGGCCTTGAGGCACGGTCTGACGCTGCTCTTGGCGCGACGGGCGGATG  
 GGCAGCCACCGGATATGCGTCAACCGGAAATGCGTCGACCGGAAATGCGTCGAC  
 CGGAAGTGCGTCAACCAGAGTTCGCTGAGTTGTTCGGTGGGCCAGAGGCGATGGG  
 ACGTGGATCAGTGCATGTACTACTGCTTGACCGGCGTAGTGGGGTACAGCTACAC  
 CGAGTGTGAAACCATGTGCACCTGA

## Klon7

ATGGGATTCAGAGTGTTGGTCTTGGTCGTCATGGCAACCACTTcTGCTcTCCCCTTT  
 ACATTTTcTGAGGAGCCAGGCAGAAAGTCCCTTCAGGCCAGCTTTGAGGTCAGAGG  
 AAGCTCAGGCCTTGAGGCACGGTCTGACGCTGCTCTTGGCGCGACGGGCGGATGG  
 GCAGCCaCCGGATATGCGTCAACCGGAAATGCGTCGACCGGAAATGCGTCGACCG  
 GAAGTGCGTCAACCAGAGTTCGCTGAGTTGTTCGGTGGGCCAGAGGCGATGGGAC  
 GTGGATCAGTGCATGTACTACTGCTTGACTGGCGTAGTGGGGTACAGCTACACCG  
 AGTGTCAAACCATGTGCACCTGA

## Klon8

ATGGGATTCAGAGTGTTGGTcTTGGTCGTCATGGCAACCACTTtTGCTCTCCCCTTT  
 ACATTTTtTGAGGAGCCAGGCAGAAAGTCCCTTCAGGCCAGCTTTGAGGTCAGAGG  
 AAGCTCAGGCCTTGAGGCACGGTCTGACGCTGCTCTTGGCGCGACGGGCGGATGG  
 GCAGCCaCCGGATATGCGTCAACCGGAAATGCGTCGACCGGAAATGCGTCGACCG  
 GAAGTGCGTCAACCAGAGTTCGCTGAGTTGTTCGGTGGGCCAGAGGCGATGGGAC  
 GTGGATCAGTGCATGTACTACTGCTTGACCGGCGTAGTGGGGTACAGCTACACCG  
 AGTGTGAAACCATGTGCACCTGA

### 6.3.2 Toxin-Precursor-Sequenzen aus der Datenbank

#### A-Superfamilie

##### *Conus ammiralis* BD261472

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGTCTGTTTCTTCCACTTCA  
 GGTCGTCGTCGATTTCTGTTGGCAGGAATGCCGCAGCCAAAGCGTCTGGACTGGTCG  
 GTCTGACTGACAGGAGACCAGAATGCTGTAGTGATCCTCGCTGTAACCTGACTCA  
 TCCAGAACTTTGTGGTGGAAGACGCTGATGCTCCAGGACCCTCTGAACCACGACG  
 T

*Conus ammiralis* 2 BD261471

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACCGTCGTTTCCTTCACTTCA  
GATCGTGCATTTCTGTGGCAGGAATGCCGCAGCCAAAGCGTCTGGCCTGGTCGGTC  
TGACCGACAAGAGGCAAGAATGCTGTTCTTATCCTGCCTGTAACTAGATCATCC  
AGAACTTTGTGGTTGAAGACGCTGATGCTCCAGGACCCTCTGAACCACGACGT

*Conus aulicus* BD261397

ATGTTACCGTGTTTCTGTTGGTCGTCTTGGCAACCACCGTCGTTTCCTTCACTTCA  
GATCGTGCATCTGATGGCAGGAAGGACGCAGCGTCTGGCCTGATTGCTCTGACCA  
TGAAGGGATGCTGTTCTTATCCTCCCTGTTTCGCGACTAATCCAGACTGTGGTCGA  
CGACGCTGATGCTCCAGGACCCTCTGAACCACGACGT

*Conus aulicus* 2 BD261396

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACCGTCGTTTCCTTCACTTCA  
GATCGTGCATCTGATGGCAGGAAGGACGCAGCGTCTGGCCTGATCGCTCTGACCA  
TCAAGGGATGCTGTTCTTATCCTCCCTGTTTCGCGACTAATTCAGACTATTGTGGT  
TGACGACGCTGATGCTCCAGGACCCTCTGAACCACGACGT

*Conus bandanus* BD261406

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACTGCTGTTCTTCCAGTCACTTTA  
GATCGTGCATCTGATGGAAGGAATGCAGCAGCCAACGCCAAAACGCCTCGCCTG  
ATCGCGCCATTCATCAGGGATTATTGCTGTCATAGAGGTCCCTGTATGGTATGGT  
GTGGTTGAAGCCGCTGCTGCTCCAGGACCCTCTGAACCAC

*Conus bandanus* 2 BD261404

ATGTTACCATGTTTCTGTTGGTTGTCTTGGCAACCACTGTCGTTTCCTTCGCTTCA  
GATCGTGCATCTGATGGCAGGAATGCCGCAGCCAAGGACAAAGCGTCTGACCTG  
GTCGCTCTGACCGTCAAGGGATGCTGTTCTCATCCTGCCTGTAGCGTGAATAATCC  
AGACATTTGTGGTTGAAGACGCTGATGCTCCAGGACCCTCTGAACCACGACGTTT  
GAGCA

*Conus betulinus* BD261422

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGTCGTTTCCTTCACTTCA  
GGTCGTGCATCTGGTGGCAGGAATGCTGCAGCCAAAGCGTCTAACCGGATCGCTC  
TGATCGTCAGGAATGCAGAATGCTGTTATTATCCTCCCTGTTACGAGGCTTATCCA  
GAAATTTGTCTGTAACTGAATCATCCAGACCTTTGTGGCTGAAGACCCTGATGC  
TCCAGGACCCTCTGAACCACGACGT

*Conus bullatus* BD261439

ATGTTACCGTGTTTCTGTTGGTTGTCTTGACAACCACTGTCGTTTCCTTCCCTTCA  
GATCGTGCATCTGATGGCAGGAATGCCGCAGCCAACGACAAAGCGTCTGACGTG  
GTCACGCTGGTCCTCAAGGGATGCTGTTCCACCCCTCCCTGTGCTGTGCTGTATTG  
TGGTAGAAGACGCTGATGCTCCAGGACCCTCTGAACCACGACGT

*Conus bullatus* 2 BD261438

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGTCGTTTCCTTCCCTTCA  
GATCGTGAATCTGATGGCGCGGATGCCGAAGCCAGTGACGAGCCTGTTGAGTTTCG  
AAAGGGACGAGAATGGATGCTGTTGGAATCCTTCTGTCCGAGGCCAGATGTAC  
AGGACGACGCTAATGCTCCAGGACCCTCTGAACCACGACGT

*Conus bullatus* 3 BD261437

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGTCGTTTCCTTCTCTACA  
GATGATGAATCTGATGGCTCGAATGAAGAACCCAGCGCCGACCAGGCTGCCAGG  
TCCGCAATGAACAGGCCGCCTGGATGCTGTAACAATCCTGCCTGTGTGAAGCACA  
GATGTGGTGGATGACGCTGATGCTCCAGGACCCTCTGAACCACGACGT

*Conus characteristicus* BD261408

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGTGGTTTCCTTCACTTCA  
GATCGTGCGTCTGAAGGCAGGAATGCTGCAGCCAAGGACAAAGCGTCTGACCTG  
GTGGCTCTGACAGTCAGGGGATGCTGTGCCATTTCGTGAATGTCGCTTGCAGAATG  
CAGCGTATTGTGGTGGAATATACTGATGCTCCAGGACCCTCTGAACCACGACG

*Conus characteristicus* 2 BD261407

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGTGGTTTCCTTCACTTCA  
GATCGTGCTTCTGATGGCAGGAATGCCGCAGCCAACGCGTTTGACCTGATCGCTC  
TGATCGCCAGGCAAAATTGCTGTAGCATTCCCAGCTGTTGGGAGAAATATAAATG  
TAGTTAA

*Conus circumcisis* BD261426

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGTCGTTTCCTTCCCTTCA  
GATCGTGCACTCTGATGGCAGGAATGCCGCAGCCAGCGACAGAGCGTCTGACGCG  
GCCCACCAGGGATGCTGTTCCAACCCTGTCTGTACGTTGGAACATCCAGAACTTT  
GTCGTAGAAGACGCTGATGCTCCAGGACCCTCTGAACCACGACG

*Conus circumcisis* 2 BD261427

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGTCGTTTCCTTCCCTTCA  
AATCGTGAATCTGATGGCGCGAATGCCGAAGTCCGCACCGACGAGCCTGAGGAG  
CACGACGAACTGGGCGGGAATGGATGCTGTGGGAATCCTGACTGTACGAGCCAC  
AGTTGTGATTGACGACGCTGATGCTCCAGGACCCTCTGAACCACGACG

*Conus consors* BD261416

ATGTTACCGTGTTTCTGTTGGTTGTCTTGACAACCACTGTCGTTTCCTTCCCTTCA  
GATAGTGCATCTGATGTCAGGGATGACGAAGCCAAAGACGAAAGGTCTGACATG  
TACAAATCGAAACGGAATGGACGCTGTTGCCATCCTGCCTGTGGCAAACACTTTA  
GTTGTGGACGCTGATGCTCCAGGACCCTCTGAACCACGACGT

*Conus distans* BD261440

ATGTTACCGTGTTTCTGTTGGTTGTCTTCGCATCCTCTGTCACCTTAGATCGTGCA  
TCTTATGGCAGGTATGCCTCACCCGTCGACAGAGCGTCTGCCCTGATCGCTCAGG  
CCATCCTTCGAGATTGCTGCTCCAATCCTCCTTGTGCCATAATAATCCAGACTGT  
CGTTAAAGACGCTGCTTGCTCCAGGACCCTCTGAACCACGACGT

*Conus episcopatus* BD261428

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACCGTCGTTTCCTTCACTTCA  
GATCGTGCACTCTGATAGCAGGAAGGACGCAGCGTCTGGCCTGATCGCTCTGACCA  
TCAAGGGATGCTGTTCTGATCCTCGCTGTAACATGAATAATCCAGACTATTGTGG  
TTGACGACGCTGATGCTCCAGGACCCTCTGAACCACGACG

*Conus ermineus* BD394991

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGTCGGTTCCTTCACTTTA  
GATCGTGCATCTGATGGTAGGGATGCCGCAGCCAACGACAAAGCGTCTGACCTG  
ATCGCTCTGACCGCCAGGAGAGATCCATGCTGTTCCAATCCTGCCTGTAACGTGA  
ATAATCCACAGATTTGTGGTTGAAGACGCTGATGCTCCAGGACCCTCTGAACCAC  
GACGT

*Conus leopardus* Lp1.4 AY580324

ATGGGCATGCGGATGATGTTTCATCATGTTTATGTTGGTTGTCTTGGCAACGACTGT  
CGTTTCCTTCACTTCAGATCGTGCATTTGATGCCATGAATGCTGCAGCCAGCAAG  
AAAGCGTCTCGCCTGATCGCTCTGGCCGTCAGGGGATGCTGTTCCCATCCTGCCT  
GTAGTGGAATCATCAAGAACTTTGTGATGGAAGACGCTGATGATCCAGGACCCT  
CTGAACCACGAC

*Conus leopardus* 1.3 AY58032323

ATGGGCATGCGGATGATGTTTCATCATGTTTATGCTGGTTGTCTTGGCAACCACTGT  
CGTTTCCTTCACTTCAGATCGTGCATCTGATGGCAGGAATGCCGAAGCCAAAGCG  
CTTGACTTGATCGCTGCGACCGCCAGGCCAAGATGCTGTTCCAATCCTGCCTGTG  
GGGCAGGACATCCGGAATTTGTGCTGGAAGACGCTGATGATCCAGGACCCTCTG  
AACCACGAC

*Conus leopardus* 1.2 AY580322

ATGGGCATGCGGATGATGTTTCACCGTGTTTCTATTGGTTGTCTTGGCAACCACTGT  
CGTTTCCTTCACTTCAGATCGTGCATTTGATGGCAGGAATGCTGCAGCCAGCGAC  
AAAGCGTCTGACCTGATCTCTCTGGCCGTCAGGGGATGCTGTTCCCATCCTGCCTG  
TAGTGTGAATAATCCATACTTTTGTGGTGGAACGCTGATACTCCATGACCCTCT  
GAACCACGAC

*Conus magus* BD394987

1TCTGATGGCAGGGATGACGAAGCCAAAGACGAAAGGTCTGACATGTACGAATC  
GGACCGG61AATGGACGCTGTTGCCATCCTGCCTGTGCGAGAAAGTATAATTGTG  
GACGCTGATGCTCC121AGGACCCTCTGAACCACGACGT

*Conus magus* 2 BD394986

TCTGATGGCAGGGATGACGAAGCCAAAGACGAAAGGTCTGACATGTACGAATCG  
AAACGGAATGGACGCTGTTGCCATCCTGCCTGTGCGAAAACTATAGTTGTGGAC  
GCTGATGCTCCAGGACCCTCTGAACCACGACGT

*Conus marmoreus* Mr 1.1 AY580325

ATGGGCATGCGGATGATGTTTCACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCCTTCACTTCAGATCGTGCATCTGATGGCAGGAAAGCCGCAGCCAAGGAC  
AAAGCGTCTGACCTGGTCGCTCTGACCGTCAAGGGATGCTGTTCTCATCCTGCCT  
GTAGCGTGAATAATCCAGACATTTGTGGTTGAAGACGCTGATGCTCCAGGACCCT  
CTGAACCACGAC

*Conus marmoreus* Mr1.2 DQ359140

ATGGGCATGCGGATGATGTTTCACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCCTTCACTTCAGATCGTGGATCTGATGGCAGGAATGCCGCAGCCAAGGAC  
AAAGCGTCTGACCTGGTCGCTCTGACCGTCAAGGGATGCTGTTCTAATCCTCCCT  
GTTACGCGAATAATCAAGCCTATTGTAATGGAAGACGCTGATGCTCCAGGACCCT  
CTGA

*Conus monachus* BD394976

ATGTTACCGTGTTTCTGTTGGTTGTCTTGACAACAACTGTCGTTTCCTACCCTTCA  
GATAGTGCATCTGATGGCAGGGATGACGAAGCCAAAGACGAAAGGTCTGACATG  
TACAAATCGAAACGGAATGGACGCTGTTGCCATCCTGCCTGTGGCAAACACTTTA  
GTTGTGGACGCTGATGCTCCAGGACCCTCTGAACCACGACGT

*Conus monachus* 2 BD394971

ATGTTACCGTGTTTCTGTTGGTTGTCTTGACAACCACTGTCGTTTCCTTCCCTTCA  
GATAGTGCATCTGGTGGCAGGGATGACGAGGCCAAAGACGAAAGGTCTGACATG  
TACGAATTGAAACGGAATGGACACTGTTGCCATCCTGCCTGTGGTGGCAAATACG  
TTAAATGTGGACGCTGATGCTCCAGGACCCTCTCGAACCACG

*Conus obscurus* BD261506

ATGTTACCGTGTTTCTGTTGGTTGTCTTATCAACCACCGTCGTTTCCTCCACTTCA  
GATCGTGCATCTGATAGGAGGAATGCCGCAGCCAAAGCGTCTGACCTGATGTATT  
CGACCGTCAAGAAAGGATGTTGTTCCCATCCTGCCTGTTTCGGGGAATAATCGAGA  
ATATTGTCGTGAAAGTGGCTAATGCTCCAGGACCCTCTGAACCACGACGT

*Conus obscurus* 2 BD261505

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGAACCACCGTCGTTTCCTTCACTTCA  
GATCGTGCATCTGATGGCGGGAATGTCGCAGCGTCTCACCTGATCGCTCTGACCA  
TCAAGGGATGCTGTTCTCACCTCCCTGTGCCCAGAATAATCAAGACTATTGTGG  
TTGACGACGCTGATGCTCCAGGACCCTCTGAACCACGACGT

*Conus pennaceus* BD261424

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGAACCACCGTCGTTTCCTTCACTTCA  
GATCGTGCATCTGATGGCGGGAATGCCGCAATGTCTGACCTGATCGCTCTGACCA  
TCAAGGGATGCTGTTCTCATCCTCCCTGTTTCCTGAATAATCCAGACTATTGTGGT  
TGACGACGCTGATGCTCCAGGACCCTCTGAACCACGACG

*Conus pennaceus* 2 BD261423

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGAACCACCGTCATTTCTTCACTTCA  
GATCGTGCATCTGATGGCGGGAATGCCGCAGCGTCTGACCTGATCGCTCTGACCA  
TCAAGGGATGCTGTTCTCATCCTCCCTGTGCCATGAATAATCCAGACTATTGTGGT  
TGACGACGCTGATGCTCCAGGACCCTCTGAACCACGACG

*Conus purpurascens* BD261513

ATGTCTGATGGCAGGGATGCCGCAGCCAACGACAAAGCGTCTGACCTGATCGCTC  
TGACCGCCAGGAGAGATCCATGCTGTTTCAATCCTGCCTGTAACGTGAATAATCC  
ACAGATTTGTGGTTGAAGACGCTGATGCTCCAGGACCCTCTGAACCACGACGT

*Conus purpurascens* 2 BD394997

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGAACCACTGTCGGTTTCCTTCACTTTA  
GATCGTGCATCTGATGGTAGGGATGCCGCAGCCAACGACAAAGCGACTGACCTG  
ATCGCTCTGACCGCCAGGAGAGATCCATGCTGTTCCAATCCTGTCTGTACCGTGC  
ATAATCCACAGATTTGTGGTTGAAGACGCTGATGCTTCAGGACCCTCTGAACCAC  
GACGT

*Conus quercinus* Qc1.4 AY588973

ATGGGCATGCGGATGATGTTTCACAGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CACTTCAGATCGTGTATCTAATGGCAGGAAAGCTGCAGCCAAACTCAAAGCGCCT  
GCCCTGATGGAGCTGTCCGTCAGGCAAGGATGCTGTTTCAGATCCTGCCTGTGCCG  
TGAGCAATCCAGACATCTGTGGCGGAGGACGCTGATGCTCCAGGACCCTCTGAAC  
CACGAC

*Conus quercinus* Qc1.3 AY58897223

ATGGGCATGCGGATGATGTTTCACCATGTTTCTGTTGGTTGTCTTGGCAATCACGGT  
GGTTTCCTTCACCTCAGATCATGCATCTGATGGCAGGAATACCGCAGCCAACGAC  
AAAGCGTCTAAACTGATGGCTCTTAGGAACGAATGCTGTGACAATCCTCCGTGCA  
AGTCGAGTAATCCAGATTTGTGTGACTGGAGAAGCTGATGCTCCAGGACCCTCTG  
AACCACGAC

*Conus radiatus* BD261402

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACCGTCGTTTCCTTCACTTCA  
GGTCGTAGTACATTTCTGTTGGCAGGAATGCCGCAGCCAAAGCGTCTGGCCTGGTCA  
GTCTGACTGACAGGAGACCACAATGCTGTTCTCATCCTGCCTGTAACGTAGATCA  
TCCAGAAATTTGCGATTGAAGACGCTGATGCTCCAGGACCCTCTGAACCACGACG  
T

*Conus radiatus* 2 BD261401

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACCGTCGTTTCCTTCACTTCA  
GGTCGTCTGACATTTTCATGGCAGGAATGCCGCAGCCAAAGCGTCTGGCCTGGTCA  
GTCTGACTGACAGGAGACCAGAATGCTGTTCTCATCCTGCCTGTAACGTAGATCA  
TCCAGAAATTTGTCGTTGAAGACGCTGATGCTCCAGGACCCTCTGAACCACGACG  
T

*Conus sponsalis* BD261430

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACCGTCGTTTCCTTCATTATC  
GATGATCCATCTGATGGCAGGAATATTGCAGTCGACGACAGAGGGCTTTTCTCTA  
CGCTCTTCCATGCTGATTGCTGTGAAAATCCTGCCTGTAGACACACGCAGGGTTG  
TTGATCTTTGTTCTTCAAAGACACTGCTGGCCCAGGACCCTCTGAACCACGACG

*Conus sulcatus* BD261415

ATGTTACCGTGTTTCTGTTGGTTCTCTTGGCAACCACCGTCGTTTCCTTCAATTCA  
GATCGTGCAATTAGGTGGCAGGAATGCTGCAGCCAAAGCGTCTGACAAGATCCTTT  
CGAACCTCAGGAGAGGAGGATGCTGTTTTTCATCCTGTCTGTTACATCAATCTTCTA  
GAAATGTGTCGTCAACGAGGCTGATCGTCCAGGACCCTCTGAACCACGACGT

*Conus sulcatus* 2 BD261414

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACCGTCGTTTCCTTCAATTCA  
GATCGTGATCCAGCATTAGGTGGCAGGAATGCTGCAGCCATAGCGTCTGACAAG  
ATCGCTTCGACCCTCAGGAGAGGAGGATGCTGTTCTTTTGCTGCCTGTAGAAAGT  
ATCGTCCAGAAATGTGTGGTGGACGACGCTGATGCT

*Conus sulcatus* 3 BD261411

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCAACCGTCGTTTCCTTCAATTCA  
GATCGTGATCCAGCATTAGGTGGCAGGAATGCTGCAGCCAAAGCGTCTGACAAG  
ATCGCTTCGACCCTCAAGAGAAGAGGATGCTGTTTCGTATTTTGAAGTGTAGAATGA  
TGTTTCCAGAAATGTGTGGTTGGCGAGGCTGATGCTCCAGGACCCTCTGAACCAC  
GACGT

*Conus striatus* BD261403

ATGTTCACTGTGTTTCTGTTGGTTGTCTTGGCAATCACTGTCGTTTCCTTCCCTTTA  
GATCGTGAATCTGATGGCGCGAATGCCGAAGCCCGCACCCACGATCATGAGAAG  
CACGCACTGGACCGGAATGGATGCTGTAGGAATCCTGCCTGTGAGAGCCACAGA  
TGTGGTTGACGACGCTGATGCTCCAGGACCCTCTGAACCACGACGTTTCGAGCA

*Conus striatus* 2 BD394989

TCTGATGGCAGGGATGACGAAGCCAAAGACGAAAGGTCTGACATGCACGAATCG  
GACCGGAAAGGACGCGCATACTGTTGCCATCCTGCCTGTGGCAAAAAGTATAATT  
GTGGACGCTGATGCTCCAGGACCCTCTGAACCACGACGT

*Conus striatus* kappaA AY166873

ATGGGCATGCGGATGATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGT  
CGTTTCCACCCCTTCAGATCGTGCATCTGATGGCAGGAATGCCGCAGTCCACGAG  
AGACAGAAGAGTCTGGTCCCTTCGGTCATCACGACTTGCTGTGGATATGATCCGG  
GGACAATGTGCCCTCCTTGCAGGTGCACTAATAGCTGTGGTTAA

*Conus stercusmuscarum* BD261425

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGTCGTTTCCTTCCCTTCA  
GATCGTGAATCTGATGGCGCGAATGACGAAGCCCGCACCGACGAGCCTGAGGAG  
CACGGACCGGACAGGAATGGATGCTGTAGGAATCCTGCCTGTGAGAGCCACAGA  
TGTGGTTGACGACGCTGATGCTCCAGGACCCTCTGAACCACGACG

*Conus stercusmuscarum* 2 BD261417

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGTCGTTTCCTCCCCTTCA  
GATCGTGCATCTGATGGCAGGAATGCCGCAGCCAACGAGAAAGCGTCTGACGTG  
ATCGCGCTGGCCCTCAAGGGATGCTGTTCCAACCCTGTCTGTACCTGGAGCATT  
CAAACATGTGTGGTAGAAGACGCTGATGCTCCAGGACCCTCTGAACCACGACG

*Conus textile* TX2 AF146353

ATGGGCATGCGGATGATGTTACCGTGTTTCTCTTGGTTGTCTTGGCAACCACCGT  
CGTTTCCTTCACTTCAGGTCGTCTGACATTTTCATGGCAGGAATGCCGCAGCCAAA  
GCGTCTGGCCTGGTCAGTCTGACTGACAGGAGACCAGAATGCTGTTCTCATCCTG  
CCTGTAACGTAGATCATCCAGAAATTTGTCGTTGAAGACGCTGATGCTCCAGGAC  
C

*Conus textile* Tx1 AF146352

ATGGGCATGCGGATGATGTTTCGTCGTGTTTCCTGTTGGTTGTCTTGGCAAGCACTGT  
CGTTTCCTTCACTTCAGGTCGTCTGACATTTTCATGGCAGGAATGCCGCAGCCAAA  
GCGTCTGGCCTGGTCAGTCTGACTGACAGGAGACCAGAATGCTGTAGTGATCCTC  
GCTGTAACCTCGAGTCATCCAGAACTTTGTGGTGGAAGACGCTGA

*Conus textile* 2 BD261400

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCAACCGTCGTTTCCTTCACTTCA  
 GGTCGTAGTACATTTCTGTTGGCAGGAATGCCGCAGCCAAAGCGTCTGGCCTGGTCA  
 GTCTGACTGACAGGAGACCACAATGCTGTTCTCATCCTGCCTGTAACGTAGATCA  
 TCCAGAAATTTGTCGTTGAAGACGCTGATGCTCCAGGACCCTCTGAACCACGACG  
 T

*Conus tulipa* BD261525

ACTGATGGCAGGAGTGCTGCAGCCATAGCGTTTGCCCTGATCGCTCCGACCGTCT  
 GGAAGGATGCTGTTCTAATCCTGCCTGTCTCGTGAATCATATACGCTTTTGTGGT  
 GGAAGACGCTGATGCCCCAGGACCCTCTGAACCACGACGT

*Conus tulipa* 2 BD261410

ATGTTACCGTGTTTCTGTTGGTTGTCTTGGCAACCACTGTCGTTTCCTTCCCTTCA  
 GATATAGCAACTGAGGGCAGGAATGCCGCAGCCAAAGCGTTTGACCTGATATCTT  
 CGATCGTCAGGAAAGGATGCTGTTCCAATCCCGCCTGTGCGGGGAATAATCCACA  
 TGTTTGTCTGCAAGGTCGCTGATGCTCCAGGACCCTCTGAACCACGACGT

## Andere Conotoxin-Superfamilien

*C. arenatus* M-Superfamilie AF214925

GGGATCTATAGCAGTTCATGATGTCTAAACTGGGAGTCTTGTTGACCATCTGTAT  
 GCTTCTGTTTCCCCTTACTGCTCTTCCGCTGGATGGTGATCAACCTGCAGACCGAC  
 CTGCAGAGCGTATGCAGGACGACTTTATATCTGAGCAGCATCCCTTGTTTAATCC  
 CATCAAACGGTGTTGCGACTGGCCATGCACCATAGGATGCGTACCTTGTTGTAAA  
 TGACCA

*C. arenatus* T-Superfamilie AF215104

CGGATCTTCAGTGTTACCAACAGCTACACCTGCCAACCGATCCTTTCTCTGCACT  
 ACGTGGCACTTTGCAGTGTGAGRACAAGAATCTGACTACACGCAAAATGCTGTGT  
 CTTCAGTCTTCATCATCCTTCTTCTGTTGGCTTCTCCTGCAGCTTCAAACCCTCTG  
 GAAAAGAGAATCCAAAACGATTTGATTTCGTGCAGCCCTTGAAGACGCCGATATG  
 GAAAACGACCCACGGTCAATAATCGACTCCGTTAAACGTTTTGCTGCTCAACTT  
 TTAATCTTGGTATTTGCTGTAGTAAGAAATAACCAAGAGGCTTTAAAGTGTGGCT  
 GACTTTGGAAACGACACCTCCAAACTGTACCCGGATATGAGATGAAAAAACAG  
 GCTGTTTCTTCTGCACATACTCGTGTGGGTTGAAACAGTCGTCAAATATACGTGAC  
 CATTGCGATTGTGATGTTCTCCGTTTTATTTACAGAACTGCATACCAAATTAGACA  
 AATGTCTTTGAAATTGAACTCATTTTCTACAGAGTATAGGCAGTGACCAATTGAT  
 GATAGTTCAATTAATTCTGATTATCTAAACTGCTTCGACATCTTTTTTGTGTGCTT  
 TTTGTGACAGTTTCCGTATCGCTAGGTCGTCTGCAAGTACAACAATATTGTCCTCT  
 TTTTCTTCAGTCATGGCCGAGAAAACATCATGTCAATGTAATCATTATAATTAC  
 CTAGCTTTAGAGTGACTTTTCTTCCGTGTTGAATGTTTATCCTGTATACAAAGAGT  
 GGTCAGATCGACTAATAAACGCTTGCATGGCAATGTCAAAAAAAAAAAAAAAAAA  
 A

*C. arenatus* O-Superfamilie AF215068

ATCCATCTGAGCTGACGCAGTCTACATACCTTGCTGTATCTGGTGAAGTGAGAGT  
 CCAACAGCTGTGACACCAGCCCAAACCTTTCAACTCACTACGTGGCAGTTGCAGT  
 TTTCAACGTGTGGACAGGATTGAACAAAATTCAGGATGTCAAGATTGGGAATCAT  
 GGTGCTAACTCTTCTACTTCTTGTGTTTCATAGTAACCAGTCATCAGGATGCAGGAG  
 AGAAGCAGGCGACGAAAAGGGCCGCAGTCAACTTCAGATGGAGAAGATCATTCA  
 CTCGGAGAGCAGCAGCTGAGGAGTGCGAAGAGTACTGTGAGGAGGAGGAAAAAG  
 ACCTGCTGCGGCGAAGAAGATGGAGAACCCGTATGTGCCGAATTTTGCTTAGGAT  
 AGTTTCTGTACACTGTCTCATTATTATTTTATCAGTACAAGTGTAACGAGACCT  
 ATCAGAAAGTCGAAGGTTGTGCGTAATTTGATAAGCACTGTTTATTGGGACGAAC  
 GGATTTGAGATGCAAAGAGAATAAAAACAGCAACAAGAGGAAAAAAAAAAAAA

*C. californicus* CalTx O-Superfamilie EU022528

ATGAAACTGACGTGCGTGCTGGTCGTTCTTCTTCTGGTTCTGCCCTTTGGTGACCT  
 CATCACCCTAGTAACACCGAAGATAATAAGAGAGGTGCTACTCCATGGCAGAA  
 CAGCTTGAAAGCTCGTGCGGTGTGCAGCACGCCCGAAGGATCATGTGTCCACAAC  
 GGATGCATATGTCAGAACGCACCTTGCTGTACCCCGTCCGGTTGTAAGTGGGTCA  
 ATGTTTGCCCAGGTTTCTTATGGGACAAAAACTGA

*C. capitaneus* O-Superfamilie (aus MELAUN 2003)

ATGAAACTGACGTGCGTGCTGATCGTCGTCGTAAGTCTGTTCTGACGGCCTGTCAAC  
 TCATTACAAGTATGACTCCACTGGTAAGCAGAGATATCAGGCTTGGAAGTTGAG  
 AAGCAAGATGCAGAATTCGCTGCTCTCCAGGTTGTCCAAGCGATGCGATGAGGA  
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*C. capitaneus* I-Superfamilie (aus MELAUN 2003)

ATGATGTTTCGATTGACGTCAGTCAGCTGTTTCCTGCTGGTCATCGCTTGTCTGAA  
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 TTTCCAAGGTATGGAAAGAGG

*C. catus* O-Superfamilie BD241823

ATCATCAAAATGAAACTGACGTGTGTGGTGATCGTCGCCGTGCTGCTCCTGACGG  
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 GAGTCCTCCTTACCTGAGAGTGGTCATGAACCACTCATCACCTACCCCTGGAGG  
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*C. characteristicus* T-Superfamilie BD270192

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*C. ferrugineus* J-Superfamilie fe14.1 DQ447644

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*C. ferrugineus* J-Superfamilie fe14.2 DQ447645

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 TGGCGGTGTGA

*C. geographus* T-Superfamilie BD270185

ATGTGCTGTCTCCAGTCTTCGTCATTCTTCTGTTGCTGATTACATCTGCACCTAGC  
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*C. gloriamaris* T-Superfamilie BD270194

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 GNACGGTTAAACTT

*C. gloriamaris* spasmodic peptide P-Superfamilie AF193511

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 CTTTATGTCACGACGGTCTTGTAACAATTCTTGCCAGAGCCATTCCGATTGCGCAT  
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*C. imperialis* T-Superfamilie BD270184

AATTCGGAAGCTGACTACAAGCAGAATGTACTGTCTCCCAGTCTTCATCATTTCTTC  
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*C. imperialis* I-Superfamilie (aus MELAUN 2003)

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*C. imperialis* I-Superfamilie (aus MELAUN 2003)

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*C. imperialis* O-Superfamilie (aus MELAUN 2003)

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 GGTGCCTTTTCGTCTGCCTGTGA

*C. leopardus* T-Superfamilie AY591769

ATGCGCTGTGTCCCAGTCTTCATCATTTCTTCTGCTGCTGATTCCATCTGCACCCAG  
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*C. leopardus* M-Superfamilie Lp3.2 AY880682

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*C. litteratus* contulakin lt1 DQ345391

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AGGTCGTAAATTGAACGACGCAATTCGGGGTTTGGTGGCAGATTACTTAACCCCA  
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*C. litteratus* Contulakin lt 2 DQ345390

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CAGCTTTTGCAAAGTCTGGTTTCCCGTCGTCATCGTGTGTTTCATCTTGACAACAC  
TTATCTCAAGATACCCATATGTGCCTGGAAGGTATGTCCACCAACCCCATGGAGA  
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AGAAATCAGCTGCTTTAAACGATTGGATCTTTCCTTATTTAAGAGTTGTATTGATG  
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*C. litteratus* contryphan lt 1 DQ345389

GATCTACACTCCGCCTGCTGAACCGTCAACTACACTCTCTGTCTCCCTGATTGCTG  
CCTTCAGTCCACCCGCCCTCATCACAGCGCAGACTGGAAGTGAAGAACCTTTATC  
ATGGGGAAGCTGACAATTCTGCTTCTTGTTGCTGCTGCACTGTTGTGACCCAGGT  
CATGGTTCAAGGTGGCGGAGATCAACCTGCAGCTCGTAATGCAGTGCCAAGAGA  
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TGTCCGTGGGAACCTTGGTGTGGCTGATCGGAATCTTCGATTGCTCTGACAGCCA  
ACGGTGCCGCACTCCAATTACCCTATAGTGGTCTGATCGTTCCAGAACAATGATG  
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*C. litteratus* P-Superfamilie DQ345386

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*C. litteratus* M-Superfamilie DQ345381

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*C. litteratus* O-Superfamilie DQ345368

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*C. litteratus* T-Superfamilie IDQ345363

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*C. litteratus* L-Superfamilie DQ205654

AACAGATACGTCAGCTACGCTACTCTACTCTGCCTAACATCTACAATTTGAACGA  
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*C. lividus* LiCr95P O-Superfamilie DQ141167

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*C. magus* MgJr93P O-Superfamilie DQ141173

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*C. marmoreus* O-Superfamilie DQ141177

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*C. marmoreus* T-Superfamilie BD270190

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*C. marmoreus* M-Superfamilie Mr3.8 AY880684

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*C. miles* A-Superfamilie AY588975

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*C. miles* O-Superfamilie (aus MELAUN 2003)

ATGAAACTGACGTGCGCGTTGATCATCACCTTGCTGTTCCCTGAGTATTACAGCCG  
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*C. pennaceus* O-Superfamilie AF215075

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*C. pennaceus* M-Superfamilie AF214931

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*C. pennaceus* M-Superfamilie AF214950

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*C. planorbis* pl14.1 J-Superfamilie DQ447641

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*C. planorbis* pl14.2 J-Superfamilie DQ447642

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*C. planorbis* pl14.3 J-Superfamilie DQ447643

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CACCTGTATCCCTTTTGCAATTGCGATGGGAAACGGGACGTGGTTTCTTCATCGAT  
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*C. pulicarius* PuIIA O-Superfamilie AF132130

ATGAAACTGACGTGTGTGGTGATCGTCGCCGTGCTGTTCTTGACGGCCTGTCAAC  
TCATTACAGCTGAGACTTACTCCAGAGGTGAGCAGAAGCACCGTGCTCTGTCTGTC  
AACTGACAAAACTCCAAGTTGACCAGGACTTGCAACACTCCCACTCAATATTGT  
ACTTTGCATCGACACTGCTGCAGCCTCTACTGCCATAAAACAATCCACGCATGTG  
CATAA

*C. quercinus* T-Superfamilie BD270193

ATGCGCTGTGTCCCAGTCTTCATCATTCTTCTGCTGCTGAGTCCATCTGCACCTAG  
CGTTGATGCCCATCCGATGACCAAAGATGATGTACCCAGGCATCTCTCCATGAT  
GATGCAAAGCGAACCCCTACAAGTACCTTGGATGAAACGCGGGTGCTGCGCAATG  
TTGACTTGCTGCGTTGGACGATAAAGGGAAATGACTTTGGATGAGACCCCTACGA  
ACTGTCCCTGGATGTGAAATTTGGACAGCAGACTGCTCCTTTTCGCACGTGTTCTGT  
GAATTTGAATGGTCGTTAACAACACGCTGCCACTTGCAAGCTATTATCTCTCTGT  
CCCTTTATCTGTGGAACCTGGATAATCTAACAACCTGAAACGTCATTGAAAATTTTC  
AATGGATATATATTATGATCCATATA

*C. quercinus* M-Superfamilie Qc3.1 AY880685

ATGTTGAAAATGGGAGTGGTGCTATTCACCTTTCTGGTCCTGTTTCCCCTGGCAAC  
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 CCTCAACCCAAATGAAAGGAAGGAAATGATGTTGTCTGCTCTGAGGCAGCGGGC  
 ATGCTGTGATCCTGACTGGTGCGACGCAGGTTGTTATGATGGGTGCTGCTAGTAG  
 CGCCCAACATCCATGGCGGTGTGCTGGGCGGTTTTATCCACAACGACAGCGTTTG  
 TTGATCTCATGTATTATCGCGCACATACTTTCTAAGAATGACGAACATGATTACA  
 CTCTAGTTCAGATTTTCGTGTTCTTTTCTGACAATAAATGACTAAACTCCAAAAAAA  
 AAA

*C. striatus* M-Superfamilie SIIIA AY207469

TCAAGAACAGAGCGCCACAGCTAAGACAAGAGGGATCGATAGCAGTTCATGATG  
 TCTAAACTGGGAGTCTTGTTGACCGTCTGTCCGCTTCTGTTTCCCCTTACTGCTCTT  
 CCGCCGGATGGAGATCAACCTGCGGACCGACCTGCAGAGCGTATGCAGGACGAC  
 ATTTTCATCTGACGAGCATCCCTTGTTTGATAAGAGACAAAACCTGTTGCAATGGGG  
 GATGCTCCAGCAAATGGTGCAGAGATCACGCACGTTGTTGCGGTGCGATGATAACG  
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 AATGATTGCAGTCTTGCTCAGACTTGCTGTTGTGTTTTTGGTCTAAAGATCAATGA  
 CCAAACCGTTGTTTTGATGCGGGTTTTTCATCTATTTCTCGATTCTGTCCAACACT  
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 ACACACACACACACACACACACACAAAATTATGAACATTATTCATTTATTGATTG  
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 TTATTTGAACTGCTTCATTGTATATGAGTACTTCGTGCTTTGAAACACTGCTGAAA  
 ATAAAAGAAACACTGACGTAGCAGAAAAA

*C. striatus* O-Superfamilie (aus MELAUN 2003)

ATGAAACTGACGTGTGTGGTGATCATCGCCGTGCTGCTCCTGACCGCCTGTCAAC  
 TCATCACAGCTGATGACTCCAGAGGTGTGCAGAAGCATCGTTCCCTGAGGTGCGAC  
 CACCAAAGTCTCCAAGTCGACTAGCTGCATGGAAGCCGGATCTTATTGCGGCTCT  
 ACTACGAGAATCTGCTGCGGTTATTGCGCTTATTTTCGGCAAAAATGTATTGACT  
 ATCCCAGCAACTGA

*C. striatus* I-Superfamilie (aus MELAUN 2003)

ATGATGTTTCGATTGACGTCAGTCAGCTGTTTCCTGCTGGTCATCGTTTGTCTGAA  
 CTTGTTTCAGGTTGTGCTTACCAGACGCTGCGTCCCTCCATCAAGGTACTGCACAA  
 GACATCGCCCCTGCTGTGCTGGAACGTGCTGTTCTGGGTTGTGCAGACCAATGTG  
 TAATCTATGGTATGGAAAGAGG

*C. tessulatus* T-Superfamilie AF215097

GTTCAGGACACATTCTTTTCACGTGGACACGGGAAACTGATAACAAGCAGAATGC  
 ACTGCCTCCAGTCCTCGTCATTCTTCTGCTGCTGATTGCATCTACACCTAGCGTT  
 GATGCTCGACCGAAGACCAAGGATGATGTGCCCTAGCATCTTTCCACGGTGCAG  
 ATAATGCGAATCGAATCCTACGAACACTTTGGAACCTTACGCGGTTGCTGCGAAGA  
 TAAAACTTGCTGTTTTATTGGATGATCGACTGAAAACGTGCATTTGTACTTTGGAT  
 GAGACCCCTGCGAACTGTCCCTGGATGTGAGATTTGGAAGCAGACTGTTCTTT  
 CGCGYGTGTTCTGTGGAATTTTCAATGGTCGTC

*C. tessulatus* M-Superfamilie AF214951

GAGGTTTCGTGATGTTGAAAATGGGAGTGGTGCTATTCACCTTTCTGGTCCTGTTTC  
 CCCTGGCAACGCTCCAGCTGGATGCAGATCAACCTGTAGAACGATATGCGGAGA  
 ACAAACAGGGCCTCAACCCAGATGAAAGCAGGGAAATCATATTGTCTGCTCTGA  
 GGCAGCGGGATTGTTGTGAACAGGGATGGTGCGACGGAGGTTGTGATTGCTGCC  
 AGTAGCCCCCAACATCCATGGCAGTGTACTGGGCGGTTTTATCCACAACGACAGC  
 GTTTGTTGATCTCATGTATTATCGCGCCACGTCTCTTGTCTAAGAAC

*C. tessulatus* O-Superfamilie AF215065

TTTCAACTCACTACGTGGCAGTTGCAGTTTTTCAACGTGTTGACAGTTCAGGATTGA  
 ACAAATTCAGGATGTCAGGATTGGGAATCATGGTGCTAACCCTTCTACTTCTTGT  
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 TAATTTGATAAGCATTGTTCACTG

*C. tessulatus* M-Superfamilie AF214946

GAGGTTTCGTGATGTTGAAAATGGGAGTGGTGCTATTCGTCTTTCTGGTCCTGTTTC  
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 GGCAGCGACAATGCTGCGATTGGCAATGGTGTGACGGAGCTTGTGATTGCTGCGC  
 GTAGCGCTGAACGTCCATAGCGCTGTGCTGGGCGGCTTTATCCAACAACGACAGC  
 GTTTGTTGATTTTCATATATCATTGCGCCACACCTCTTGTCTAAGAAT

*C. tessulatus* M-Superfamilie AF214939

GAGTCAACCCCACTGCCACGCCAAGAGCGGAGCGCCACAGCGAAGACAAGAAGG  
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 CTTTATTACTGCGGCTACGTCAAGTGCCTGATGAATAAATAAAATGATTGCAGTC  
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 TCTTGTACATGACCGCTTCGTACTTTGAAACACTGCTGAAAATAAAAGAAACACT  
 GGCGTAGCAAARMWAMAAAAA

*C. textile* M-Superfamilie AF214944

GAGGTTTCGTGATGTTGAAAATGGGAGTGGTGCTATTCATCTTTCTGGTACTGTTTC  
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 GGACGCGAGTATGCTGTCCTTTCGGAGGCTGCCACGAACCTTTGTCAATGCTGCGA  
 GGGTTAGCGCCGAACATCAATGGCGCTGTGCTGGGCGGTTTTATCCAACAACGAC  
 AGCGTTTGTTGATTTTCATGTATCATTGCGCCACGTCTCTTGTCTAAGAAT

*C. textile* M-Superfamilie AF214927

GGATCGATAGCAGTTCATGATGTCTAAACTGGGAGCCTTGTTGACCATCTGTCTA  
 CTTCTGTTTTCCCTTACTGCTGTTCCGCTGGATGGAGATCAACATGCAGACCAACC  
 TGCACAGCGTCTGCAGGACCGCATTCCAACCTGAAGATCATCCCTTATTTGATCCC

AACAAACGGTGTGCGATGATTCGGAATGCAGCTATTCATGCTGGCCTTGCTGTT  
ATGGATAA

*C. textile* T-Superfamilie AF214970

CTTCAGGACACATTCTTTACACCTGGACACGGGAACTGACTATAAGCAGAATGC  
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GATGCCCAACTGAAGACCAAAGATGATATGTCCTTGGCATCATTCCACGATAATG  
TAAAGCGAATCCTGCAAATACGTACGACCGAAGAATGCTGCCCATTCATCGTGGG  
GTGCTGTTCTCGATAGTGATAAAGGATGATAAAGGGAAATGACTTAAGATGAGA  
CCCCTGCAAAATATCCCTGGATCTGAGATTTGGAAAGCAGACTGTTCTTTTGCA  
CGTGTTCTGTGGAATTTTCAATGGTCGT

*C. textile* O-Superfamilie DQ141166

TCATCGTCAAGATGAAACTGACGTGCATGATGATCGTTGCTGTGCTGTTCTTGACC  
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GGTGCTATGATAGTGGGACAAGTTGTAACACTGGAAACCAATGCTGCAGTGGCTG  
GTGCATTTTCGTCCTCTAAAACTGCCGTGATGTCTTCTACTCCTCTCTGTGCTA  
CCTGGCTTGATCTTTGATTGGCGCGTGCCCTTCACTGGTTATGAACCCCTCTGATC  
CGACTCTCTGGGGGCCTAGGGGATCCAACATCAAAATAAAGCGACAGCACAAATC  
TAAAAA

*C. textile* T-Superfamilie BD270187

ATGCGCTGTTTCCCAGTCTTCATCATTCTTCTGTTGCTAATTGCATCTGCACCTTGC  
TTTGATGCCCCGAACGAAGACCGATGATGATGTGCCCTGTCTCTCCGCGATA  
ATCTAAAGCGAACGATACGAACACGCCTGAACATACGCGGGTGCTGCGAGGATG  
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TGCAAGCCACCATCTCTCTGTCTTTTCGTATGTGGAAGTGTATGATCTAACAAGT  
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*C. textile* T-Superfamilie BD270181

GGTACTCAACGAACCTTCAAGACACATTCTTTTACCTGGACACGGGAAGCTGACT  
ACAAGCAGAATGTGCTGTCTCCAGTGTTTCGTCATTCTTCTGCTGCTGATTGCATC  
TGCACCTAGCGTTGATGCCCAACCGAAGACCAAAGATGATGTGCCCTGGCACCT  
TTGCACGATAATGCAAAGAGTGCCTACAACATTTGAACCAACGCTGCTGCCAAA  
CATTCTATTGGTGCTGTGTTCAAGGGAAATGAATTTGGATGAGACCCCTGCGAAC  
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CTTTCATCTGTGGAAGTGGATGACCTAACAAGTGAATATCATAGAAATTTTCA  
GTGGGTATACACTATGACCATGTAGTCAGTAATTACATCATTGACCTTTTGAA  
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T

*C. textile* TeA52P O-Superfamilie DQ141152

GACCCTGCCGTCATCTCAGCGCAGACTTGGAAGAAGTGAAAAACCTTTATCATG  
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AAGAAAGAGAGCTGCTGACAGGGGGATGTGGGGCGAATGCAAAGATGGGTAAAC  
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ATGTGGTGATGAATTCTGACCACAAGCCATCTGACATCACCCTCTCCTCTTCAG  
AGACTTCAAGGCTA

*C. textile* spasmodic peptide P-Superfamilie tx9a AF193510

ATGCATCTGTCACTGGCACGCTCAGCTGTTTTGATGTTGCTTCTGCTGTTTGCCTT  
GGGCAACTTTGTTGTGGTCCAGTCAGGACAGATAACAAGAGATGTGGACAATGG  
ACAGCTCACAGACAACCGCCGTAACCTGCAATCGAAGTGGAAGCCAGTGAGTCT  
CTACATGTCACGACGGGGTTGTAACAATTCTTGCCAGGAGCATTCCGATTGCGAA  
TCCCATTGTATTTGCACGTTTAGAGGATGCGGAGCTGTTAATGGTTGA

*C. ventricosus* O-Superfamilie AF215080

TTTCAACTCACTACGTGGCAGTTGCAGTTTTCAACGTGTGGACAGGATTGAAAAA  
AATTCAGGATGTCAGGATTGGAAATTATGGTGCTAACCCTTCTACTTCTTGTGTCC  
ATGGCAACCAGTCATCAGGATGGAGGAGAGAAGCAGGCGACACAAAGGGACGC  
AATCAACGTCAGACGGAGATCAATCACTCGAAGTGAAGCGTGCTATGAGTACTGT  
AAGGAGCAGAACAAGACCTGCTGTGGCATAAGCAATGGACGTCCCATTTGTGTC  
GGTGGATGCATCAGATAGTTTCTGTACACTGTCTCATTATTATCTTATCACTACA  
AGTGTAACGAGACCGATCAGAAAGTCGAAGTTGTGCATAATTTGATAAGCATT  
GTTTACTG

*C. ventricosus* T-Superfamilie AF214994

CGTGTTTACCAACAGCTACGCCTGCCAACCGATCCTTTCTCTGCGCTACGTGGCAC  
TTTGCAGTGAATCTGACTACAAGCACAATGCTGTGTCTTCCGGTCTTCATCATCCT  
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TTGAAAACGACACCTCCAAACTGTACCCGGATATGAGATGTAAAAACAGGCTGTT  
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NGACAT

*C. ventricosus* T-Superfamilie AF214972

CTTCAGGACACATTCTTTTACCTGGACACGGGAAACTGACTACAAGCAGAATGC  
GCTGTCTCCCAGTCTTCGTCATTCTTCTGCTGCTGATTGCATCTGCACCTAGCGTT  
GATGCCCCGACCGAAGACCAAAGATGATGTGCCCTGGCATCTTCCACGGAAATG  
CAGAGCGAACCCTACTAAACATACTTCGGGACGGTGACAATTGCTGCATAGATAA  
ACAAGGGTGCTGTCTTGGGGATAAAGAAAAATGACTTTAGATGAGACCCCTGC  
GAACTGTCCCTGGATGTGAGATTGGAAGCAGACTGTTCTTTCGCACGTGTTT  
GTGGAATTTCAACGGTTCGT

*C. ventricosus* M-Superfamilie AF214949

GAGGCTCGTGATGTTGAAAATGGGAGTGGTGCTATTCATCTTTCTGGTCCTGTTTA  
CCCTGGCAACGCTCCAGCTGGATGCAGATCAACCTGTAGAACGATATGCGGAGA  
ACAAACAGCTCCTGAGCCCAGATGAAAGGAGGGATATCATATTGCATGCTCTGG  
GGCAGCGGAGATGCTGTGATCCGGATTGGTGCGATGCAGGTTGTTACGACGGCTG  
CTGCTAGGACTAGCGCCCAACATCCATGGCGCTGTGCTGGGTGGTTATATCCGCA  
ACGACAGCGTTTGTAGATTTTCATATATCATTGCGCCACGTCTCTTGTCTAAGAAA

*C. vexillum* O-Superfamilie (aus MELAUN 2003)

ATGAAACTGACGTGCGTGTTGATCATCACTGTGCTGTTTCCTGACGGCCAGTCAGC  
TCATTACAGCTGATTACTCCAGAGGTCAGCGGCAGTACCGTGCAGTGAGGTTGGG  
AGATGAAATGCGGAATTTCAAAGGTGCCAGGGACTGCGGGGGACAAGGTGAAGG  
TTGTTATACTCAACCTTGCTGCCCTGGTCTGCGGTGCCGTGGCGGCGGTACTGGA  
GGAGGCTCATGCCAGCCATAG

*C. vexillum* I-Superfamilie (aus MELAUN 2003)

ATGATGTTTCGATTGACGTCAGTCAGCTGTTTCCTGCTGGTCATCGCTTGTCTGAA  
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CCTATCTCCCCTGCTGTTGGGGAATTTGCTGTGATACGTGCAGAAATGTGTGTCAT  
TTGAGGATTGGAAAGAGG

*C. virgo* O-Superfamilie (aus MELAUN 2003)

ATGAAACTGACGTGCGTGTTGATCATCACTGTGCTGTTTCCTGACGGCCAGTCAGC  
TCATTACAGCTGATTACTCCAGAGATCAGCGGCAGTACCGTGCAGTGAGGTTGGG  
AGATGAAATGCGGAATTTCAAAGGTGCCAGGGACTGCGGGGGACAAGGTGAAGG  
TTGTTATACTCAACCTTGCTGCCCTGGTCTGCGGTGCCGTGGCGGCGGTACTGGA  
GGAGGCGTATGCCAGCTGTAG

*C. virgo* I-Superfamilie (aus MELAUN 2003)

ATGATGTTTCGATTGACGTCAGTCAGCTGTTTCCTGCTGGTCATCGCTTGTCTGAA  
CTTGTTTCAGGTTGTGCTTACCAGCCGCTGCTTCCCTCCAGGAATATACTGCACAC  
CCTATCTCCCCTGCTGTTGGGGAATTTGCTGTGGGACGTGCAGAAATGTGTGTCAT  
TTGAGGATTGGAAAGAGGGCG

































































































