**Table III.** Results of the identification simulations from “Species in common” datasets using Best Close Match (BCM) and BOLD ID criteria based on SPIDER and tree-based comparison of efficiency among the studied barcoding markers using the percentage of monophyletic groups recovered from the neighbor-joining phylogenetic reconstructions.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | Distance-based evaluation | | | | | | | | | | | | | | | | | | | |  |  |  |  | Tree-based evaluation | |
|  |  |  | threshVal | | | | LocalMinima | | | | 1.00% | | | | 3.00% | | | | 6.00% | | | |  | 10.00 |  |  | Monophyly | |
| Species in common (31 sp) |  |  | Correct (%) | Incorrect (%) | Ambiguous (%) | No ID (%) | Correct (%) | Incorrect (%) | Ambiguous (%) | No ID (%) | Correct (%) | Incorrect (%) | Ambiguous (%) | No ID (%) | Correct (%) | Incorrect (%) | Ambiguous (%) | No ID (%) | Correct (%) | Incorrect (%) | Ambiguous (%) | No ID (%) | Correct (%) | Incorrect (%) | Ambiguous (%) | No ID (%) | Correct (%) | Incorrect (%) |
| 12s  (444 spm) | Threshold value | 0.15% | | | | 0.86% | | | | 1.00% | | | | 3.00% | | | | 6.00% | | | | 10.00% | | | | 58.06 | 41.94 |
| BCM | 74.77 | 1.58 | 5.18 | 18.47 | 88.06 | 2.48 | 6.08 | 3.38 | 88.74 | 2.48 | 6.08 | 2.70 | 90.77 | 2.93 | 6.31 | 0.00 | 90.77 | 2.93 | 6.31 | 0.00 | 90.77 | 2.93 | 6.30 | 0.00 |
| BOLD ID | 67.79 | 12.39 | 1.35 | 18.47 | 39.64 | 0.68 | 56.31 | 3.38 | 38.06 | 0.68 | 58.56 | 2.70 | 20.95 | 0.23 | 78.83 | 0.00 | 5.86 | 0.00 | 94.14 | 0.00 | 2.70 | 0.00 | 97.30 | 0.00 |
| 16s  (499 spm) | ThreshID value | 0.45% | | | | 1.02% | | | | 1.00% | | | | 3.00% | | | | 6.00% | | | | 10.00% | | | | 51.61 | 48.39 |
| BCM | 77.51 | 2.90 | 10.02 | 9.58 | 82.18 | 3.34 | 10.24 | 4.23 | 82.18 | 3.34 | 10.24 | 4.23 | 85.52 | 3.79 | 10.47 | 0.22 | 85.52 | 3.79 | 10.47 | 0.22 | 85.52 | 3.79 | 10.46 | 0.23 |
| BOLD ID | 63.92 | 1.34 | 25.17 | 9.58 | 58.80 | 1.34 | 35.63 | 4.23 | 58.80 | 1.34 | 35.63 | 4.23 | 32.29 | 0.22 | 67.26 | 0.22 | 15.59 | 0.22 | 83.96 | 0.22 | 7.57 | 0.00 | 92.20 | 0.23 |
| COI  (504 spm) | ThreshID value | 0.65% | | | | 7.72% | | | | 1.00% | | | | 3.00% | | | | 6.00% | | | | 10.00% | | | | 70.97 | 29.03 |
| BCM | 92.86 | 0.20 | 0.00 | 6.94 | 98.41 | 0.99 | 0.00 | 0.60 | 93.45 | 0.40 | 0.00 | 6.15 | 96.23 | 0.99 | 0.00 | 2.78 | 97.42 | 0.99 | 0.00 | 1.59 | 98.61 | 0.99 | 0.00 | 0.40 |
| BOLD ID | 89.88 | 0.20 | 2.98 | 6.94 | 77.38 | 0.60 | 21.43 | 0.60 | 86.31 | 0.40 | 7.14 | 6.15 | 77.38 | 0.60 | 19.25 | 2.78 | 77.38 | 0.60 | 20.44 | 1.59 | 75.99 | 0.40 | 23.21 | 0.40 |
| Cytb  (1449 spm) | ThreshID value | 0.70% | | | | 1.14% | | | | 1.00% | | | | 3.00% | | | | 6.00% | | | | 10.00% | | | | 77.42 | 22.58 |
| BCM | 96.34 | 0.35 | 0.69 | 2.62 | 96.89 | 0.35 | 0.69 | 2.07 | 96.75 | 0.35 | 0.69 | 2.21 | 98.14 | 0.48 | 0.69 | 0.69 | 98.55 | 0.55 | 0.69 | 0.21 | 98.62 | 0.69 | 0.69 | 0.00 |
| BOLD ID | 95.38 | 0.07 | 1.93 | 2.62 | 93.79 | 0.00 | 4.14 | 2.07 | 94.00 | 0.00 | 3.79 | 2.21 | 93.30 | 0.14 | 5.87 | 0.69 | 89.85 | 0.14 | 9.80 | 0.21 | 60.25 | 0.07 | 39.68 | 0.00 |