**Table S1: Tabular key of *Biarmifer* species.** When different from males, the information about females is provided between brackets.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Species | Lateral differentiation of cuticle | P.c. | a | b | c | c' | Amphideal turns | Amphid cdb % | Spicule length (µm) | Nº Supplem. |
| *B. cochleatus* Wieser, 1954 | A | 4 | 20-28 | 5-7.5 | 6.1-9 | 4.5-5 | 4.5 | 37 | 60 | 5 |
| *B. dayi* (Inglis, 1963) Cunha *et al*., 2022 | A | 4 | 31 | 4.8 | 12.4 | 3 | 3.75 | 20 | 65 | 0 |
| *B. hopperi* (Sharma & Vincx, 1982) Cunha *et al.*, 2022 | A | 8 | 25.1-36.5 (18-25.5) | 6.8-7.8 | 9.9-10.2 (8.8-9.6) | 3.3-5.2 (6.7) | 5 | 45 | 88 | 5 |
| *B. laminatus* Wieser, 1954 | P1 | 4 | 40 (20.5 -25.9) | 8 (5.2-6.1) | 12 (11.4-15.6) | 3.6 (2.75-3) | 8.25 (5.5) | 54 (50) | 32 | n.a |
| *B. madrynensis* Pastor de Ward, 2001 | P | 4 | 27.2-45.3 | 4.7-6.3 | 5.3-8 | 8-9 | 3.5 | 20-32.5 | 62-78 | 3 |
| *B. nesiotes* sp. nov. | P | 8 | 17.4-26.6 | 5.8-6.8 | 7.3-10.5 | 3.5-4.2 | 5 (4-5) | 47-50 (40-46) | 72-84 | 5 |
| *B. punctata* (Jensen, 1985) Cunha *et al*., 2022 | P | 4 | 29-30 | 6.2 (4.9) | 8.4 (6.6) | 5 (6.5) | 5 | 53 | 60 | 6 |

1Lateral differentiation was observed only on the tail.

Abbreviations: a, body length/maximum body diameter; b, body length/pharynx length; c, body length/tail length; c′, tail length/anal or cloacal body diameter; n.a, information not available; P.c., number of longitudinal rows of pore-complex. A, absent; P, present.

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