**Table S2: Tabular key of *Pomponema* species.** When different from males, the information about females is provided between brackets. Types of lateral differentiation of cuticle (L.d.): (1) Two to four longitudinal rows of dots not connected transversely, (2) Two to four longitudinal rows of dots connected transversely by lines, (3) Widely spaced dots, (4) Two longitudinal rows of bigger dots with wide space between them.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Species | L.d. | V.t. | R.d. | a | b | c | c' | Amphid. width (%) | Amphid. turns | O.l.s (µm) | Nº Supplem. | Spicule length (µm) |
| *P. ammophilum* Lorenzen, 1972 | A | P | P | 28-40 | 5.5-6.8 | 7.7-9 | n.a | ~55 | 5(4.5) | 15-16 | 19-22 | 54-65 |
| *P. astrodes* Lorenzen, 1972 | 1 | P | A | 40-53 | 7 | 4.4-5.6 | n.a | ~51 | 6 | 6 | 11 | 33-35 |
| *P. clavicaudatum* (Schuurmans Stekhoven, 1935) Lorenzen, 1972 | 1 | A | A | 48.1 (36) | 7.3 (5.6) | 8.7 (7.7) | 4.5 | 50 | 5 | 14 (9) | 22 | 48 |
| *P. compactum* Lorenzen, 1972 | 3 | P | P | 36-41 (30-31) | 4.7-5.3 (4.2-4.5) | 7.5-9.2 (5.9-6.7) | n.a | 56-60 (46-48) | 5-5.25 (4-4.5) | 11-16 | 13-16 | 30-35 |
| *P. concinnum* (Wieser, 1954)Lorenzen, 1972 | 2 | A | A | 28 | 5.6 | 7 | 6 | 40 | 4 | 6 | 20 | 36 |
| *P. coomansi* Vincx, 1981 | 2 | P | A | 42.7-47.5 | 6 | 4.7-6.2 | 11 | 38 | 5.3 | 16 | 2 | n.a |
| *P. corniculata* Gourbault, 1980 | 4 | P | A | 22.9-23.7 (20.9-22.4) | 4.3-4.8 | 11.2-13.5 | 2.3-2.5 (3-3.4) | 45 | 6 | 2.5-3 | 20 | 41-47 |
| *P. cotylophorum* (Steiner, 1916) Lorenzen, 1972 | 4 | A | A | 30 | 5 | 12 | n.a | n.a | n.a | A? | 15 | n.a |
| *P. debile* Lorenzen, 1972 | 2 | P | P | 40-45 | 5.5-6.1 | 8.7-9.5 | n.a | 42-46 | 4-5 | 8.5-9.5 | 15-18 | 27-29 |
| *P. elegans* Lorenzen, 1972 | 2 | P | P | 49-60 (41) | 6.5-7.8 | 7.7-9.2 (5.4) | n.a | ~70 (40) | 6 | 8-9 | 12-15 | 30-34 |
| *P. foeticolum* (Ott, 1972) Cidreira *et al*., 2019 | A | P | A | 42.9-60.9 | 7-9.8 | 12.5-18.3 | 3.1-3.8 (4.9) | 44-46 (38) | 5 (3.5) | 11-14 | 13-16 | 39-44 |
| *P. golikovi* Platonova, 1988 | A | P | A | 34.5 | 6.8 | 9.7 | 3.5 | 50 | 5 | 6.5 | 13 | 50 |
| *P. hastatum* (Ott, 1972) Cidreira *et al*., 2019 | 4 | P | A | 47.7-55.5 | 4.7-5 | 17.9-18.2 (14.5-16.3) | 3.1-3.4 (4.7-4.8) | 53-54 (38) | 3.25-3.75 | 11-13 | 19-20 | 25-28 |
| *P. koesterae* Jensen, 1992 | 4 | A | P | 24 (18-21) | 4.2-6.1 | 7.3-7.6 (5.7-7.9) | 5.6-9 | 55 | 10 | 3-4 | 15-17 | 37-41 |
| *P. lineatum* (Gerlach, 1953) Wieser, 1959 | 1 | P | A | 38 (25) | 5.9 (5.6) | 8.8 (7) | 5 (6-7) | 75 | 2.5 | 8-13 | 13 | 30 |
| *P. litorium* (Cobb, 1920) Lorenzen, 1972 | 2 | P | P | 41.7 | 5.8 | 10 | 5.3 | n.a | n.a | n.a | n.a | n.a |
| *P. longispiculum* sp. nov. | 1 | P | P | 28-39.7 | 5.7-7 | 6-9.6 | 4.7-5.8 (6.1-7.5 | 54.8-59.6 (29.2-32.9) | 5.5-6 (4-5) | 11.5-15 | 19-22 | 72.5-78 |
| *P. loticum* Lorenzen, 1972 | 2 | P | P | 30.5-31 (26) | 5.2-5.6 (4.9) | 7.3-84 | 4.6-5 (5.4) | n.a | n.a | 16 | 19 | 35-35.5 |
| *P. macrospirale* (Ott, 1972) Cidreira *et al*., 2019 | 4 | P | A | 45.1-49.7 | 4.2-4.6 | 15.4-16.1 | 3.4-3.6 | 63-76 | 4.75-5.75 | 15-16 | 18 | 27-30 |
| *P. mirabile* Cobb, 1917 | n.a | P | A? | 52.6 | 4.8 | 13.7 | 4.9 | ~75 | 6 | n.a | 20 | n.a |
| *P. multipapillatum*1(Filipjev, 1922) Wieser, 1954 | 2 | P | P | 18-30 | 5.5-7.6 | 7.3-9.6 | n.a | n.a | 5 | 4-8 | 15-19 | 34-46 |
| *P. polydontus* Murphy, 1963 | 1 | P | P | 43.1-63.2 | 5.4-7.4 | 9.9-12.5 | 6 (5.2) | 35 | 4.5 | 23 | 24 | 55 |
| *P. proximamphidum* Tchesunov, 2008 | 4 | P | P | 27.6-34 | 4.7-6.2 | 4-6 | 7.4-8.1 | 55-59 | 5 | 2-5.5 | 13-14 | 41-46 |
| *P. reductum* Warwick, 1970 | 1 | P | P | 43.4-46.2 (33.3-42.6) | 6.2-7 | 9.7-10.9 | 4.5-5.5 (5.6-6) | 37-42 (27-31) | 4-4.5 (3.5) | 8-10 | 20-24 | 43-46 |
| *P. sedecima* Platt, 1973 | 2 | P | P | 48.1-49.5 (37.5) | 7-7.4 (6.5) | 12.2-12.9 (10.4) | 3.9-4.9 | 32-35 | 3.5 | 9-10 | 15-17 | ~32 |
| *P. segregatum* Wieser, 1959 | 4 | P | A | 24 | 6 | 9.1 | 4.8 | 48 | 4 | 14 | 9 | 26 |
| *P. stomachor* Wieser, 1954 | 1 | P | P | 35-40.7 (31.6-34.1) | 6.2-6.6 (6.5-8.1) | 7.1-8 (6.4-7.3) | 7 | 50 | 6-6.5 (4-5) | 18 (9) | 23 | 75 |
| *P. syltense* Blome, 1974 | A | P | P | 21-24 (17-19) | 4.7-5.2 | 4.8-6.5 | 4.5-6.5 | 37-43 (28-29) | 3.5 | 24 | 26-29 | 45-50 |
| *P. tautraense* (Allgén, 1933) Lorenzen, 1972 | A | A | A | 46.6 | 7.3 | 8.3 | n.a | ~50 | 4.5 | n.a | 12 | n.a |
| *P. tesselatum* Wieser & Hopper, 1967 | 1 | P | A | 36.4 | 4.25 | 11.6 | 3.6 | 68 | 4.5 | 16 | 15 | 45 |
| *P. veronicae* Cidreira *et al*., 2019 | 2 | P | P | 38.9-45.9 (31.6-35.8) | 5.9-6.2 | 6.9-7.4 (5.7-7.2) | 6.8-7.9 (8.9-9.7) | 44-50 (33-34) | 4.5 (3.5) | 20-23 (18-19) | 20 | 44-47 |
| *P. websteri* (Sharma & Vincx, 1982) Cidreira *et al.* 2019 | A | P | A | 80.5-88.4 (64.4) | 13.4-14.9 | 7.1-10.1 (5.7) | 12 (18) | 58 (41) | 5.5 | 4 | 13-15 | 42 |

1Data from Lorenzen (1972)

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; cbd, corresponding body diameter; n.a, information not available; O.l.s: outer labial setae length; V.t.: ventral teeth; R.d.: rows of denticles on the buccal cavity. A: absent; P: present.

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