

Supplementary tables S2a–b. Comparison of morphological traits in several species of the genera *Catatropis* and *Pseudocatatropis* (Notocotylidae): maritae (a) and cercariae (b). Species names *C. verrucosa* and *P. joyeuxi* are used according to Kanev *et al.*, 1994. Asterisks indicate values calculated in ImageJ based on the published figure(s).

a.

Maritae (sexual adults)	Our data	Odhner, 1905	Joyeux, 1922 from Dubois, 1951	Erkina, 1953	Odening, 1966 ¹	Filimonova, 1985	Kanev <i>et al.</i> , 1994	Izrailskaia <i>et al.</i> , 2019
Species	<i>C. onobae</i>	unclear	<i>P. joyeuxi</i>	<i>C. verrucosa</i>	<i>P. joyeuxi</i>	mixture?	<i>C. verrucosa</i>	<i>P. dvoryadkini</i>
Body L	1775–3375 (2657)	1000–5000	1400–1720	2970–5475	1464–1904	N/A	2300–5700	1525–1728
Body W	725–1225 (961)	750–1250	600–700	785–1275	608–716	N/A	750–1500	446–539
Oral sucker	125–220 × 130–195 (155 × 168)	d 130–160	N/A	135 × 120–240 × 225	70–80 × 81–103	N/A	100–140 × 90–130	77–81 × 81–92
Oesophagus	60–130 (103)	N/A	N/A	“short”	116–121	N/A	<300	92–104
Spines	tegumental spines on both dorsal and ventral body sides; see text for details	dense “diamond-shaped” spines ventr., decrease posteriorly; sparse fine spines dors. ant.	N/A	dense minute spines on the ventral body side	N/A	N/A	“minute scale-like spines”	ventrally in the anterior half of the body
Median ridge	from 33–50 % of cirrus sac to just in front of the rear end	from 25–33 % of the body length to just before the rear end	450–500 from the anterior body extremity; at 28–33 % of body length	anterior to papillae, in the middle of cirrus sac; to the level of 2nd last pair of papillae	from 29 % of the body length to just anterior to the excretory pore	anterior edge at 18–33 % of body length	anterior to papillae (based on figures); at 25–27 %* of body length	anterior edge at 40 % of the body
Papillae number	8–12	8–12	8	9–14 (most frequently 11–12)	8	10–14 (mean 11–12)	12 (11–14)	6–7 (6–9 in Dvoryadkin, 1989)
Anterior papillae	at 50–75 % of cirrus sac, symmetrical or asymmetrical	behind the front edge of the ridge by one pair	540–800 from the anterior body extremity; at 37–49 (43) % of body length	front or middle of the 2/4 of body; 1.230–1.725 from the anterior end; at the level of posterior part of cirrus sac	at 38.6 % of body length	24–48 (38) %	at 32–35 %* of body length, symmetrical or asymmetrical	posterior to the edge of the ridge
Posterior papillae	small, immediately posterior to hind edge of median ridge	right behind the rear part of the ridge	N/A	a bit median, at 0.135–0.275 from the hind end	slightly behind the rear part of the ridge	N/A	slightly behind the rear part of the ridge	at testes level (their anterior or posterior half)
Testes	100–300 × 210–	lobed	N/A	even medially,	356–397 × 169–	N/A	420–920 × 180–430,	193–250 × 116–162,

¹ All maritae measurements were performed in ImageJ 1.52p on the basis of the figure from Odening, 1966.

	455 (221 × 352) somewhat elongated and lobed			lobed laterally; 390–900 × 225– 375	184		emarginate laterally	lobed on external and internal edges
Cirrus sac	610–1250 (952), reaching 40–49 (45) %	extends to the middle of the body and may reach it (up to 50 %)	reaches 37–48 (44) % of the body	extends almost to the middle of the body (~50 %); 1200–1850	198–386; extends to 32–38 % of the body length	33–51 (42) %	850–1850; extends to 42 %* of the body length	492–616, reaches 45 %* of the body
Cirrus	tubercles seen through the c.s.	in distal 2/3 of c.s. protrusions are visible (?)	N/A	spines directed backwards	N/A	N/A	cirrus with minute spines	cirrus covered with papillae
Ovary	80–185 × 120–215 (121 × 170), slightly lobed	N/A	N/A	even, 1–2 lobes; 225–450 × 165– 345	140–238 × 119– 181		224 × 218*	116–169 × 108–119
Uterus loops	total 14–21	N/A	N/A	total 18–20	total ~14, previtelline ~5–6	15–22 (1–10 previtelline)	total 18, previtelline 5 (based on figure)	15–17, 4–5 previtelline
Metra- ter- m	500–1150 (772), 73–92 (83) % of c.s.	well-developed, almost equal to c.s. (~100 %)	63–75 % of c.s.	well-developed, a bit shorter than c.s. (<100 %)	64–79 % of c.s.	25–70 (40) %	well-differentiated, 780–1500, 76 %* of c.s.	45–56 (50) %* of c.s.
Ant. vitelline follicles	50–60 (55) %	just behind the centre of the body (>50 %)	49–55 %	midbody (~50 %)	45–53 %	44–66 (59) %	extends close to midbody (~50 %)	in posterior half of the body (53 %*)
Genital pore	at, posterior or (one case) anterior to bifurcation	directly behind bifurcation	N/A	posterior to bifurcation	behind the bifurcation	N/A	immediately post- bifurcal	immediately posterior to caecal bifurcation
Eggs	16.8 (15.3–18.7) × 8.7 (7.6–10.0)	18–20 long	N/A	25–29 × 12–13, filaments 100–135 long	N/A	N/A	25–30 × 12–14, filaments 100–150 long, 6–8 wide proximally, very thin distally	19–23 × 11.6–15.4

b.

Cercariae	Our data	Joyeux, 1922	Erkina, 1953	Odening, 1966	Kanev <i>et al.</i> , 1994	Izrailaskaia <i>et al.</i> , 2019
Host species	<i>Onoba aculeus</i>	<i>Anisus leucostomus</i>	<i>Bithynia</i> spp.	<i>Segmentina nitida</i> , <i>Gyraulus albus</i>	<i>Bithynia</i> spp.	<i>Helicorbis suffunensis</i>
Host family	Rissoidae	Planorbidae	Bithyniidae	Planorbidae	Bithyniidae	Planorbidae
Morphotype	Yenchingensis, ex. gr. 1.45–2.28 (1.86)	N/A, ex. gr. 4–5	N/A	Imbricata	Monostomi (drawing) / Yenchingensis (text)	Imbricata, ex. gr. 1.45– 2.28 (1.86)
Eyespots	three	absent	three, lateral 19 × 23	absent	three, lateral d 20–25	absent
Tail	normal, 322–588 (463) × 33–48 (41)	stumpy, 50–60	normal, 300–430 × 43–90	stumpy, 45–72 × 31–41	normal, 300–450 × 30–70	stumpy, length 45–62
Body size	243–361 (300) × 118–180 (145)	200–350 × 100–130	330–525 × 119–225	311–499 × 162–250	330–530 × 120–250	231–258 × 104–116
Oral sucker	27–40 × 30–43	d 45–60	40 × 50	37–51 × 46–53	d 40–50	35–42 × 39–46

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