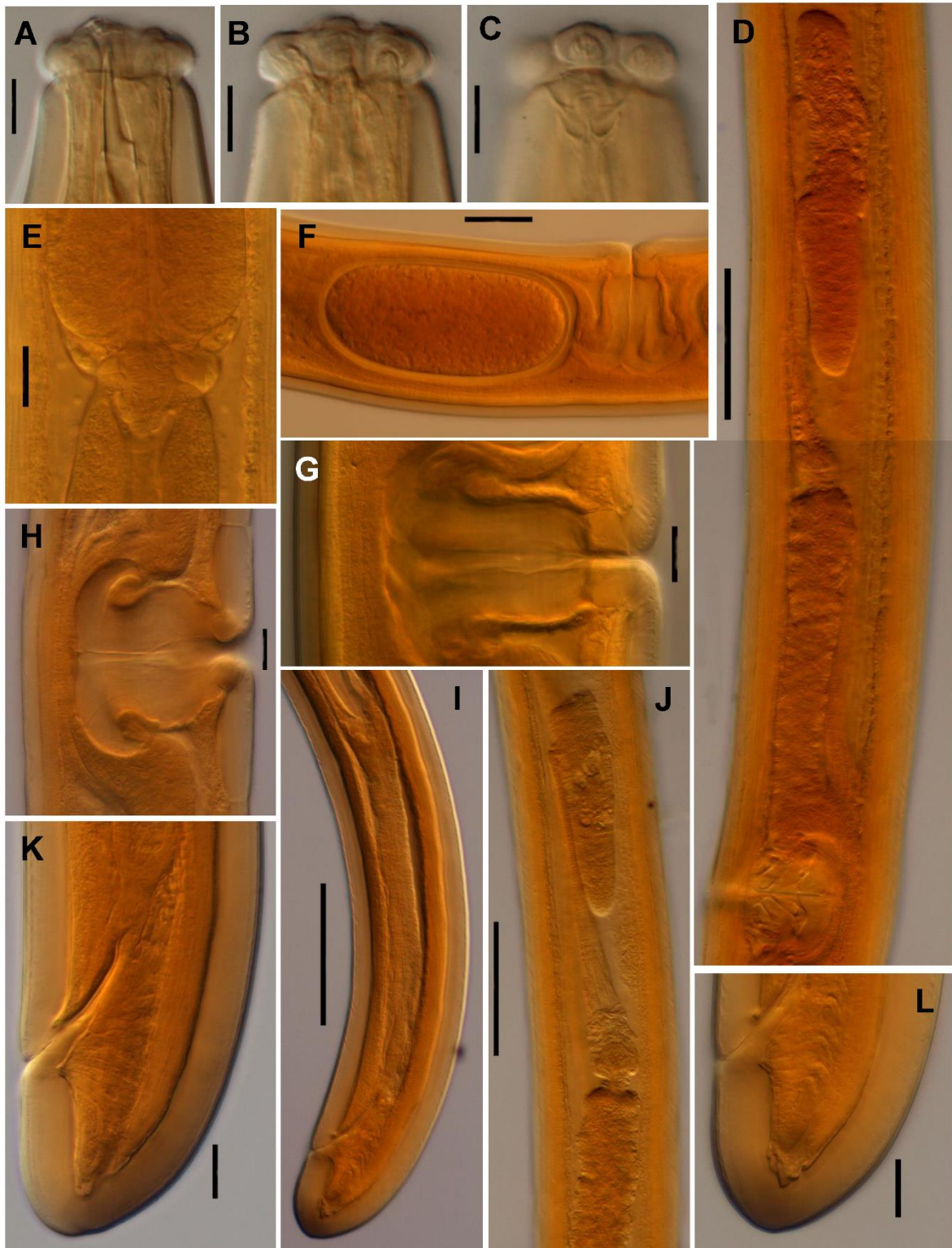


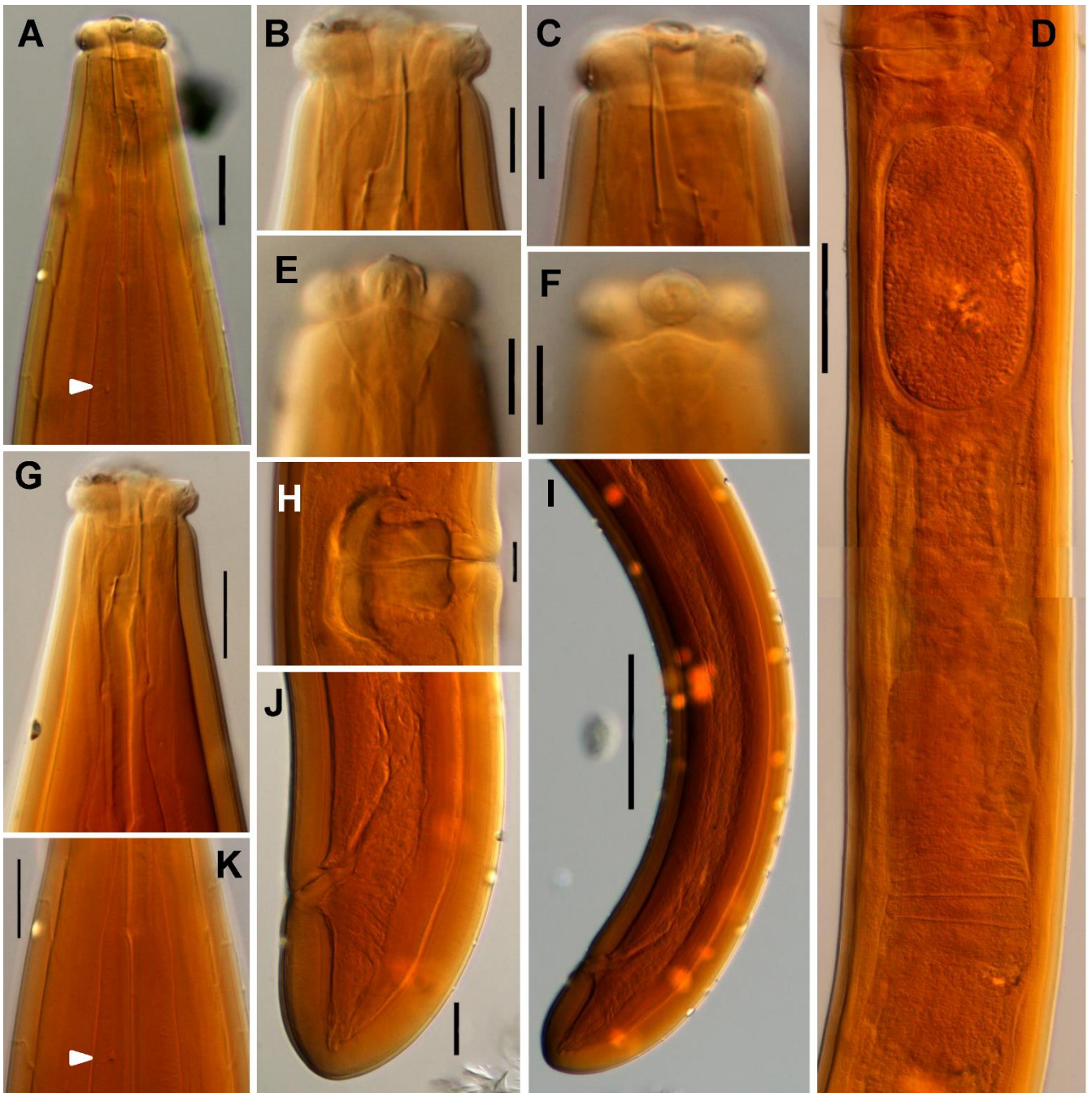
'Journal of Helminthology'

On the identity of the genus *Epacrolaimus* Andrásy, 2000 (Nematoda,
Dorylaimida), with new insights into its phylogeny

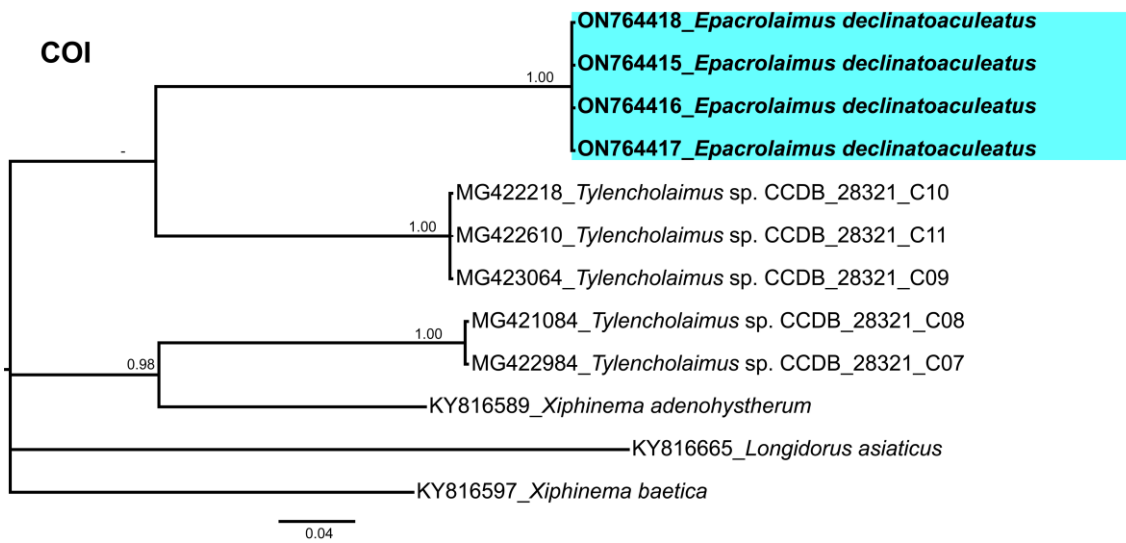
R. Peña-Santiago & P. Castillo



Supplementary Figure S1. Light micrographs of *Aporcelaimus vorax* Thorne & Swanger, 1936 (New York population, female). (a) anterior region in lateral, median view; (b) same in submedian view; (c) same in surface view; (d, j) anterior genital branch; (e) pharyngo-intestinal junction; (f) uterine egg; (g, h) vagina; (i) posterior body region; (k, l) caudal region. (Scale bars: a-c = 10 μm ; d, i, j = 100 μm ; e, g, h, k, l = 20 μm ; f = 50 μm .)



Supplementary Figure S2. Light micrographs of *Aporcelaimus vorax* Thorne & Swanger, 1936 (Utah population, female). (a-c, g, k) anterior region in lateral, median view, white arrow head pointing at a mucro located behind the odontophore base; (d) posterior genital branch; (e, f) anterior region in lateral, surface view; (h) vagina; (i) posterior body region; (j) caudal region. (Scale bars: a, g, k, h, j = 20 μm; b, c, e, f = 10 μm; d, i = 100 μm.)



Supplementary Figure S3. Phylogenetic relationships of *Epacrolaimus declinatoaculeatus* with species of Dorylaimida. Bayesian 50% majority rule consensus tree as inferred from cytochrome c oxidase subunit I (COI) mtDNA gene sequence alignment under the TIM1 + I+G model ($-\ln L = 1794.5284$; AIC = 3649.056880; freqA = 0.2733; freqC = 0.1679; freqG = 0.2093; freqT = 0.3495; R(a) = 1.0000; R(b) = 23.6308; R(c) = 18.0225; R(d) = 18.0225; R(e) = 59.8927; R(f) = 1.0000; Pinva = 0.4440; and Shape = 2.0240). Posterior probabilities more than 0.70 are given for appropriate clades. Newly obtained sequences in this study are shown in bold, and coloured box indicate clade association of the studied species. Scale bar = expected changes per site.

Supplementary Table S1. Morphometrics of previous records of *Epacrolaimus declinatoaculeatus* (Kreis, 1924) Andrassy, 2000 (= *Aporcelaimus vorax* Thorne & Swanger, 1936). Measurements in μm except L in mm. [See printed text for additional information.]

Character	Species	<i>E. declinatoaculeatus</i>						<i>A. vorax</i>				
	Population Reference ¹ n	Switzerland 1-5 ♀	?Switzerland 6 ♀J	?Poland 5, 7 ♀	Hungary 8, 9 5♀♀ ³	Hungary 8, 9 ♂	Spain 10 10♀♀ ³	Spain 10 2♂♂ ³	USA ³ 2, 12 ♀	Utah 11, 12, 13 ♂	Germany 14 ♀	Several 5 ??♀♀
L		6.91	2.60	3.5	7.15-8.25	9.30	6.1-7.8	6.4, 6.9	7.0-9.0	7.2	5.80	5.69-9.00
a		47	38	33	48-62	70	43-58	48, 63	50	59	44	50-74
b		5.5	4.1	5.8	4.9-6.0	6.1	4.8-7.0	5.6, 6.1	6.3	6.8	4.3	4.6-6.3
c		102	104	90	103-116	130	102-136	102, 163	125	111	90	90-139
c'		0.7 ²	0.9 ²	0.6 ²	0.8	0.8	0.6-0.9	0.8, 0.6	0.8 ²	0.9	0.7	0.8-1.0
V		45	58	46	48-54	-	49-55	-	54	-	53	50-53
Lip region diameter		?	28	?	28-29	28-29	25-31	?	?	?	?	26-33
Odontostyle length		?	20	23	22-25	22-25	22-25	?	?	?	22	24-26
Odontophore length		?	?	?	?	?	?	?	?	?	?	?
Neck length		1257 ²	634 ²	603 ²	1300-1495	1525 ²	1046-1485	?	?	1059 ²	1348 ²	?
Pharyngeal expansion length		?	393 ²	?	?	?	727-966	?	?	?	931 ²	?
Body diameter at neck base		?	65	?	?	?	?	?	?	?	?	?
midbody		148 ²	68 ²	106 ²	123-140 ²	133 ²	?	?	?	122 ²	132 ²	?
anus/cloaca		93 ²	28 ²	65 ²	79-94 ²	94 ²	?	?	?	73 ²	98 ²	?
Distance vulva – anterior end		3109 ²	1508 ²	1610 ²	3962-4293 ²	-	?	?	?	-	3074 ²	?
Prerectum length		?		?	?	?	?	?	?	?	-	?
Rectum/cloaca length		?		?	?	?	?	?	?	?	-	?
Tail length		68	25 ²	39 ²	63-75	75	46-70	?	?	65 ²	64 ²	?
Spicules length		-	-	-	-	215	-	147, 179	-	122 ²	-	-
Ventromedian supplements		-	-	-	-	12	-	6, 10	-	11	-	-

¹ References: 1 - Kreis (1924). 2 - Thorne and Swanger (1936). 3 - Schneider (1939). 4 - Meyl (1961). 5 - Loof (1999). 6 - Altherr (1950). 7 - Brzeski (1964). 8 - Andrassy (2000). 9 - Andrassy (2009). 10 - Martínez-Olías *et al.* (2005). 11 - Thorne (1937). 12 - Bongers (1988). 13 - Thorne (1939). 14 - Altherr (1974).

² Calculated from original illustrations and/or other morphometrics.

³ Specimens from two or more locations.

