

Supplement 1. List of morphological characters and character states used in the analyses (based on females only).

1. *Gnathosoma situated*: (0) apically; (1) displaced on dorsal side; (2) displaced on ventral side.
2. *Fixed cheliceral digit*: (0) spinous (smooth or with tines); (1) rounded (greatly reduced).
3. *Movable cheliceral digit*: (0) without basal spur; (1) with basal spur.
4. *Cheliceral shaft (narrow part)*: (0) longer than swollen cheliceral base; (1) equal or subequal with swollen cheliceral base; (2) shorter than swollen cheliceral base.
5. *Setal form of dorsal seta (dF) of palpal femur*: (0) tapered; (1) spur-like.
6. *Palp setae dF*: (0) smooth; (1) serrate.
7. *Serration of setae dF*: (0) serrate only distally; (1) serrate on all length.
8. *Shape of setae dF*: (0) tapered; (1) spur-like.
9. *Length of setae dF*: (0) shorter than dG; (1) equal or subequal with dG; (2) longer than dG.
10. *Palp setae dG*: (0) smooth; (1) serrate.
11. *Serration of setae dG*: (0) serrate only on distal half; (1) serrate on all length.
12. *Lateral seta l' on palpal tibia (l'Ti)*: (0) smooth; (1) with barely discernible serration.
13. *Palpal tarsus*: (0) fully articulated from palpal tibia; (1) partially or completely fused with palpal tibia.
14. *Seta sul of palpal tarusus*: (0) present; (1) absent.
15. *Eupathidion ul' of palpal tarsus*: (0) present ; (1) absent.
16. *Eupathidion ul" of palpal tarsus*: (0) present; (1) absent.
17. *Solenidion ω1 on palpal tarsus*: (0) present; (1) absent.
18. *Length of setae n*: (0) very short (35–45 long); (1) short (55–65 long); (2) average (70–90 long); (3) long (100–110 long); (4) very long (≥125 long).
19. *Subcapitular setae n*: (0) smooth; (1) serrate.
20. *Serration of setae n*: (0) serrate only at tip; (1) with barely discernible serration on all length; (2) slightly serrate on all length; (3) densely serrate on all length.
21. *Peritremes*: (0) with barely visible chambers; (1) with clearly visible chambers.
22. *Number of peritremal chambers*: (0) less than 6; (1) 19–22; (2) 23–26; (3) >27.
23. *Free peritremal branch*: (0) present; (1) absent.
24. *Length of free peritremal branch (in μm)*: (0) short (<10 long); (1) average (40 long); (2) long (>55).
25. *Shape of idiosoma*: (0) longer than wide; (1) wider than long; (2) circular (almost as long as wide).
26. *Eyes situated*: (0) dorsally, outside propodonotal shield in lateral parts of idiosoma; (1) dorsally on propodonotal shield; (2) on ventral side between antero-lateral setae.

27. *Idiosomal hypertrichy*: (0) absent; (1) present.
28. *Numerous setae in mid-dorsal part of idiosoma*: (0) present; (1) absent.
29. *Numerous antero-median dorsal setae*: (0) grouped into mid-dorsal cluster; (1) not grouped into cluster.
30. *Setae of mid-dorsal cluster*: (0) increase in length from anterior to posterior part of the cluster; (1) subequal in length.
31. *Setae in mid-dorsal cluster grouped*: (0) in two distinct rows (small clusters); (1) in several rows (one large cluster).
32. *Length of setae in mid-dorsal cluster*: (0) short (<30 μm); (1) long (55–95 μm).
33. *Number of setae in mid-dorsal cluster*: (0) 10–20; (1) 40–50; (2) 60–70; (3) 80–90; (4) > 110.
34. *Antero-median setae*: (0) plumose; (1) with minute serration.
35. *Number of antero-lateral setae*: (0) 210–230; (1) 150–209; (2) 149–90; (3) <90.
36. *Number of dorso-median setae dm*: (0) >15 pairs of setae; (1) 1–5 pairs of setae.
37. *One much longer seta situated between antero-lateral setae*: (0) present; (1) absent.
38. *Setae vm1*: (0) smooth; (1) serrate.
39. *Serrate setae vm1*: (0) with barely discernible serration; (1) slightly serrate; (2) densely serrate.
40. *Number of ventro-median setae vm*: (0) over 10 pairs; (1) only 1–3 setae on each side.
41. *Setae vm*: (0) densely serrate; (1) slightly serrate.
42. *Setae on postero-lateral part of idiosomal dorsum*: (0) subequal with the remaining dorsal setae situated in anterior half of idiosoma; (1) much longer than the setae in anterior half of idiosoma.
43. *Setal form of long peripheral setae*: (0) tapered; (1) slightly apically expanded at tip.
44. *Peripheral setae*: (0) much longer than dorsal setae situated medially and laterally; (1) subequal with median and lateral setae on idiosomal dorsum.
45. *Peripheral setae situated dorsally and ventrally*: (0) much longer than the setae situated in anterior half of idiosomal dorsum; (1) subequal with setae situated in anterior half of idiosomal dorsum.
46. *Genital slit situated*: (0) ventrally; (1) dorsally or terminally.
47. *Genital setae*: (0) smooth; (1) serrate.
48. *Serration of genital setae*: (0) with barely discernible serration; (1) clearly serrate.
49. *Genital setae g2*: (0) absent; (1) present.
50. *Genital setae g3*: (0) absent; (1) present.
51. *Genital setae g4*: (0) absent; (1) present.
52. *Genital setae g5*: (0) absent; (1) present.
53. *Pseudoanal setae ps1*: (0) present; (1) absent.
54. *Setal form of setae ps1*: (0) tapered; (1) slightly apically expanded at tip.
55. *Pseudoanal setae ps2*: (0) present; (1) absent.

56. *Setal form of setae ps2*: (0) tapered; (1) slightly apically expanded.
57. *Pseudoanal setae ps3*: (0) present; (1) absent.
58. *Setal form of setae ps3*: (0) tapered; (1) slightly apically expanded.
59. *Pseudoanal setae ps4*: (0) absent; (1) present.
60. *Pseudoanal setae ps5*: (0) absent; (1) present.
61. *Length of legs II*: (0) considerably shorter than legs I; (1) slightly shorter than legs II; (2) subequal with legs I.
62. *Legs III and IV*: (0) directed posteriorly; (1) directed anteriorly.
63. *Length of coxae I*: (0) subequal to coxae II; (1) longer than coxae II.
64. *Coxal setae 1c*: (0) absent; (1) present.
65. *Setae 1a situated*: (0) on coxal plate; (1) outside coxal plate.
66. *Coxal field II*: (0) with a thick or fine line of separation between coxa III and IV; (1) without a line of separation between coxa III and IV.
67. *Coxal setae 2a*: (0) present; (1) absent.
68. *Setal form of coxal setae 2b*: (0) simple; (1) spur-like.
69. *Shape of setae 3a*: (0) tapered; (1) spur-like.
70. *Coxal setae 3a*: (0) smooth; (1) serrate.
71. *Serration of coxal setae 3a*: (0) slightly serrate or with barely discernible serration; (1) densely serrate.
72. *Setae 3a situated*: (0) on coxal plate; (1) outside coxal plate.
73. *Coxal setae 3c*: (0) present; (1) absent.
74. *Coxal setae 3d*: (0) present; (1) absent.
75. *Coxal setae 4a*: (0) present; (1) absent.
76. *Setal form of setae 4a*: (0) simple; (1) spur-like.
77. *Coxal setae 4b*: (0) absent; (1) present.
78. *Coxal setae 4c*: (0) present; (1) absent.
79. *Setal form of vTrI*: (0) tapered; (1) spur-like.
80. *Setal form of vTrII*: (0) tapered; (1) spur-like.
81. *Setal form of vTrIV*: (0) tapered; (1) spur-like.
82. *Setae vTrI-IV*: (0) serrate; (1) smooth.
83. *Serration of seta vTrI-IV*: (0) slightly serrate; (1) densely serrate.
84. *Seta ld'FI*: (0) present; (1) absent.
85. *Seta lv' on femur I*: (0) present; (1) absent.
86. *Seta dFII*: (0) present; (1) absent.
87. *Seta ld'' on femur II*: (0) present; (1) absent.

88. *Seta lv'' on femur II: (0) absent; (1) present.*
89. *Seta d on femur III: (0) present; (1) absent.*
90. *Seta ld' on femur III: (0) present; (1) absent.*
91. *Seta ld'' on femur III: (0) absent; (1) present.*
92. *Seta lv' on femur III: (0) absent; (1) present.*
93. *Seta v on femur III: (0) present; (1) absent.*
94. *Seta d on femur IV: (0) present; (1) absent.*
95. *Seta ld' on femur IV: (0) present; (1) absent.*
96. *Seta ld'' on femur IV: (0) absent; (1) present.*
97. *Seta lv' on femur IV: (0) absent; (1) present.*
98. *Seta v on femur IV: (0) present; (1) absent.*
99. *Seta d on genu I: (0) present; (1) absent.*
100. *Seta ld'' on genu I: (0) present; (1) absent.*
101. *Seta v'' on genu I: (0) present; (1) absent.*
102. *Seta d on genu II: (0) present; (1) absent.*
103. *Seta ld' on genu II: (0) present; (1) absent.*
104. *Seta ld'' on genu II: (0) present; (1) absent.*
105. *Seta v'' on genu II: (0) present; (1) absent.*
106. *Seta d on genu III: (0) present; (1) absent.*
107. *Seta ld' on genu III: (0) present; (1) absent.*
108. *Seta lv' on genu III: (0) present; (1) absent.*
109. *Seta d on genu IV: (0) present; (1) absent.*
110. *Seta ld' on genu IV: (0) present; (1) absent.*
111. *Seta lv' on genu IV: (0) present; (1) absent.*
112. *Solenidion on tibia III: (0) absent; (1) present.*
113. *Solenidion $\omega 2$ on tarsi I: (0) present; (1) absent.*
114. *Length of fastigial seta ft: (0) shorter than solenidion $\omega 1$; (1) longer than solenidion $\omega 1$.*
115. *Seta tc'' on tarsi II: (0) serrate; (1) smooth.*
116. *Solenidion w on tarsi III: (0) present; (1) absent.*
117. *Setae a' and a'' of tarsi I: (0) smooth; (1) serrate.*
118. *Setae tc' and tc'' of legs II–IV: (0) smooth; (1) serrate.*
119. *Serration of setae tc' and tc'' of legs II–IV: (0) with barely discernible serration; (1) slightly serrate; (2) clearly serrate .*

Taxa	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	
<i>Pim. pod.</i>	-	-	-	-	-	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0
<i>Gec. nit.</i>	0	0	-	1	1	0	0	-	1	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	1	0	0	0	0	-	0	0	0	0	0	0	0	1	0	0
<i>Gec. ger.</i>	-	1	1	1	0	0	0	-	1	1	0	0	1	-	1	-	1	-	0	0	2	1	0	0	-	1	0	1	1	1	1	-	0	0	0	1	1	0	1	1	
<i>Gec. hir.</i>	-	0	-	1	1	0	0	-	1	1	1	0	1	-	1	-	1	-	0	0	2	1	0	0	-	1	0	1	1	1	1	-	1	1	0	1	0	1	0	0	
<i>Neo. pat.</i>	0	0	-	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	1	0	0	1	1	0	0	1	0	0	0	0	1	-	0	1	0	0	
<i>Neo. for.</i>	0	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	0	0	1	0	0	0	0	1	-	0	1	0	0	
<i>Neo. ova.</i>	0	1	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	1	1	0	0	1	0	1	0	0	1	-	0	1	0	0	
<i>Neo. lig.</i>	0	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1	1	0	0	1	0	0	0	0	1	-	0	1	0	0	
<i>Neo. lev.</i>	0	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0 ⁺	1	1	0	0	0	-	1	0	0	1	-	0	1	0	0	
<i>Neo. chil.</i>	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	1	1	1	0	0	0	-	1	0	0	1	-	0	1	0	0	
<i>Neo. schr.</i>	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	1	1	0	0	0	-	1	0	0	1	-	0	1	0	0	
<i>Neo. cya.</i>	0	1	1	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	1	1	0	0	1	0	0	0	0	1	-	0	1	0	0	
<i>Neo. rob.</i>	0	1	1	0	0	0	1	1	1	1	1	1	0	1	0	1	0	1	1	1	1	0	1	0	0 ⁺	1	1	0	0	0	-	1	0	0	1	-	0	1	0	0	

Taxa	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	
<i>Pim. pod.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	
<i>Gec. nit.</i>	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	0	1	1	1	2	3	
<i>Gec. ger.</i>	1	0	1	1	1	1	0	0	1	1	1	0	0	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	1	1	0	-	1	
<i>Gec. hir.</i>	0	0	1	1	1	0	1	0	0	1	1	0	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	1	1	?	?	?	
<i>Neo. pat.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	1	1	1	1	0	0	-	0
<i>Neo. for.</i>	0	1	-	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	1	1	0	1	1	1	2	0	
<i>Neo. ova.</i>	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	1	0	1	1	1	2	2	
<i>Neo. lig.</i>	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0/1	0	0	0	1	0	0	1	0	0	0	0	1	1	0	1	0	1	2	2	
<i>Neo. lev.</i>	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	1	0	1	1	1	2	0	
<i>Neo. chil.</i>	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	1	0	1	1	1	2	1	
<i>Neo. schr.</i>	0	1	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	1	0	1	0	1	2	1	
<i>Neo. cya.</i>	0	0	0+	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	1	0	1	0	0	-	1	
<i>Neo. rob.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	1	0	1	0	0+ 1	0	0	