

**Supplementary material**

**Phylogenetic placement of the spider genus *Taczanowskia* (Araneae: Araneidae) and description of a new species from Ecuador**

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**Table S1. Character state matrix for species phylogeny**

Table depicting the character states for nine species of Araneidae, including all species of the genus *Taczanowskia*, scored for 23 morphological characters. Column numbers correspond to the morphological characters described in the methodology

Species	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
<i>Gasteracantha cancriformis</i>	1	0	1	0	1	–	–	0	1	0	0	0	1	0	0	0	1	1	1	0	0	1	0
<i>Cyrtarachne ixodoides</i>	1	1	1	0	1	–	–	2	1	0	1	?	?	1	1	1	1	1	1	0	0	1	0
<i>Mastophora extraordinaria</i>	0	1	1	0	1	–	–	2	1	1	1	0	1	0	1	1	1	1	1	0	1	0	0
<i>Taczanowskia mirabilis</i>	0	1	0	1	0	0	1	0	1	1	1	1	0	1	0	1	0	0	0	1	1	0	1
<i>Taczanowskia sextuberculata</i>	0	1	0	0	0	1	0	0	1	1	1	1	0	1	0	1	0	0	0	1	1	0	1
<i>Taczanowskia striata</i>	0	1	0	0	0	0	1	0	0	1	1	1	0	1	0	1	0	0	0	1	1	0	1
<i>Taczanowskia trilobata</i>	0	1	1	0	1	–	–	1	1	1	1	1	0	1	0	1	0	0	0	1	1	0	1
<i>Taczanowskia gustavoi</i>	0	1	0	0	0	1	0	0	1	1	1	1	0	1	0	1	0	0	0	1	1	0	1
<i>Taczanowskia onowoka</i>	0	1	0	1	0	0	1	0	0	1	1	1	0	1	0	1	0	1	0	1	1	0	1

**Table S2. Summary of phylogenetic hypotheses of the most parsimonious trees (MPTs) under EW and IW analysis (k values from 1–11) of the phylogeny of Araneidae**

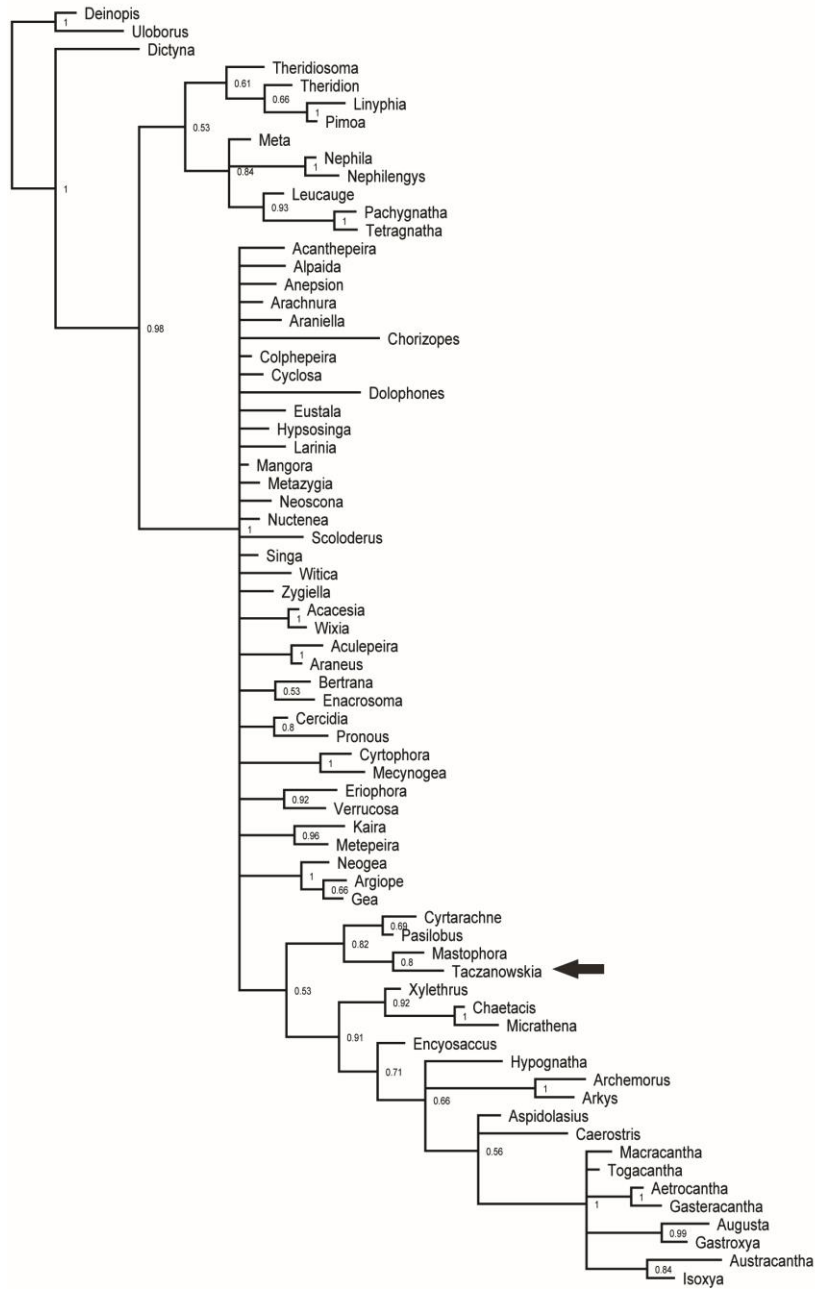
Av. Sym., average support of symmetric resampling

	Length	MPTs	Consistency index	Retention index	Av. Sym.
EW	312	12	0.31	0.7	30
1	428	10	0.23	0.54	29.2
2	391	8	0.25	0.59	29.4
3	394	3	0.25	0.59	29.9
4	388	1	0.25	0.6	30.4
5	377	79	0.26	0.61	30.8
6	381	36	0.26	0.61	30.8
7	373	11	0.26	0.62	31.2
8	359	4	0.27	0.64	31.5
9	355	3	0.29	0.67	31.5
10	337	3	0.29	0.67	31.6
11	333	3	0.29	0.67	31.7

**Table S3. Summary of phylogenetic hypotheses of the most parsimonious trees (MPTs) under EW and IW analysis (k values from 1–11) of the phylogeny of species of *Taczanowskia***

Av. Sym., average support of symmetric resampling

	Length	MPTs	Consistency index	Retention index	Av. Sym.
EW	32	6	0.75	0.72	46
1	31	6	0.77	0.75	45.2
2	31	6	0.77	0.75	45
3	31	6	0.77	0.75	45.2
4	31	6	0.77	0.75	44.9
5	31	6	0.77	0.75	45
6	31	6	0.77	0.75	44.9
7	31	6	0.77	0.75	45.2
8	31	6	0.75	0.72	45.3
9	31	6	0.77	0.75	44.9
10	31	6	0.77	0.75	45.3
11	31	6	0.77	0.75	45



**Fig. S1.** Bayesian optimal tree obtained under the (MkvI) model indicating the generic placement of the genus *Taczanowskia* (arrow) in the phylogeny of the family Araneidae. Values in nodes represent posterior probabilities.