Supporting Information

Blackledge et al. 10.1073/pnas.0901377106

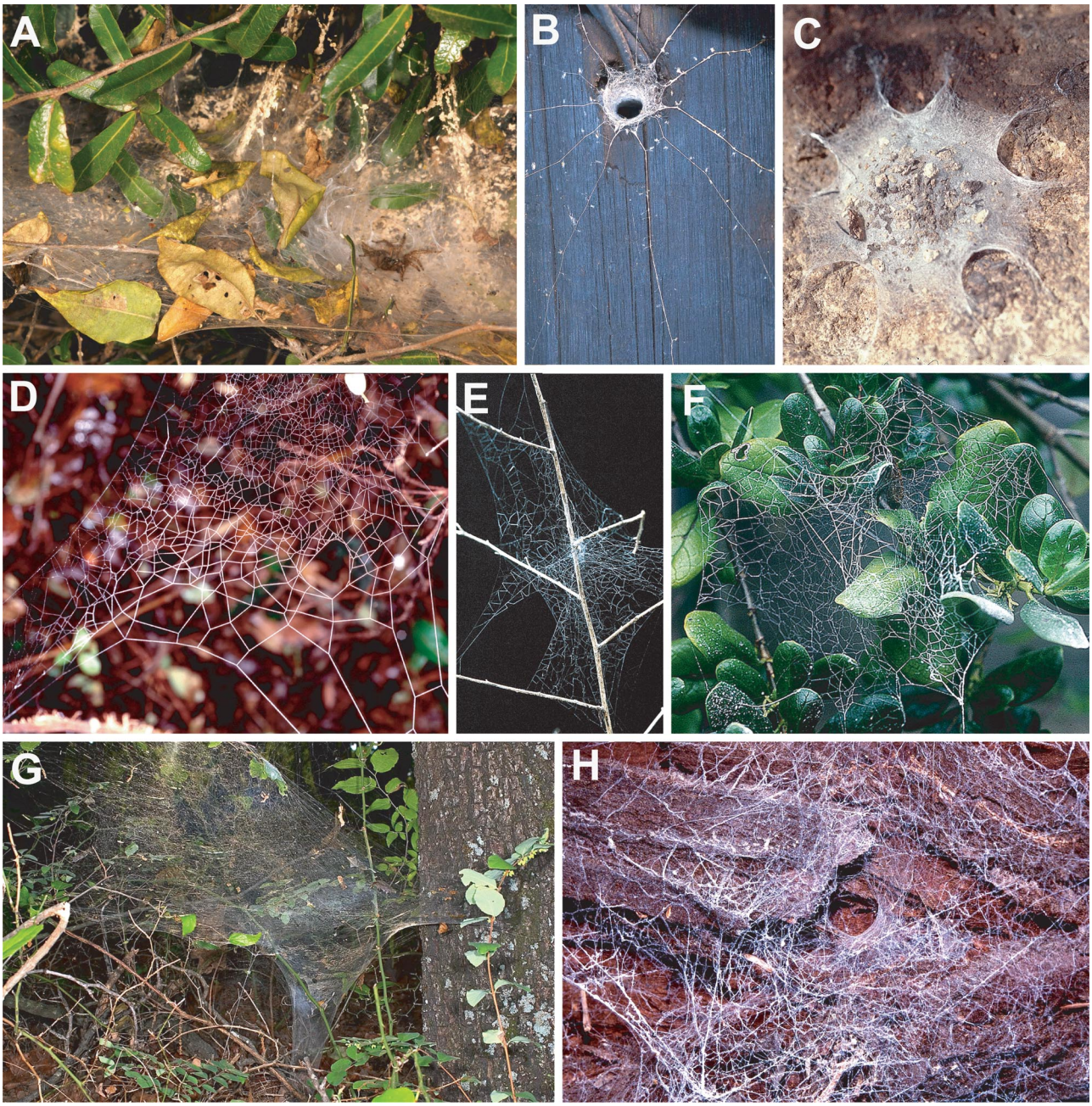

Fig. S1. Webs of nonorbicularian spiders. (*A*) Dipluridae. (*B*) *Ariadna*. (*C*) *Oecobius*. (*D*) *Austrochilus*. (*E*) *Dictyna*. (*F*) *Badumna*. (*G*) *Agelenopsis*. (*H*) *Callobius*.

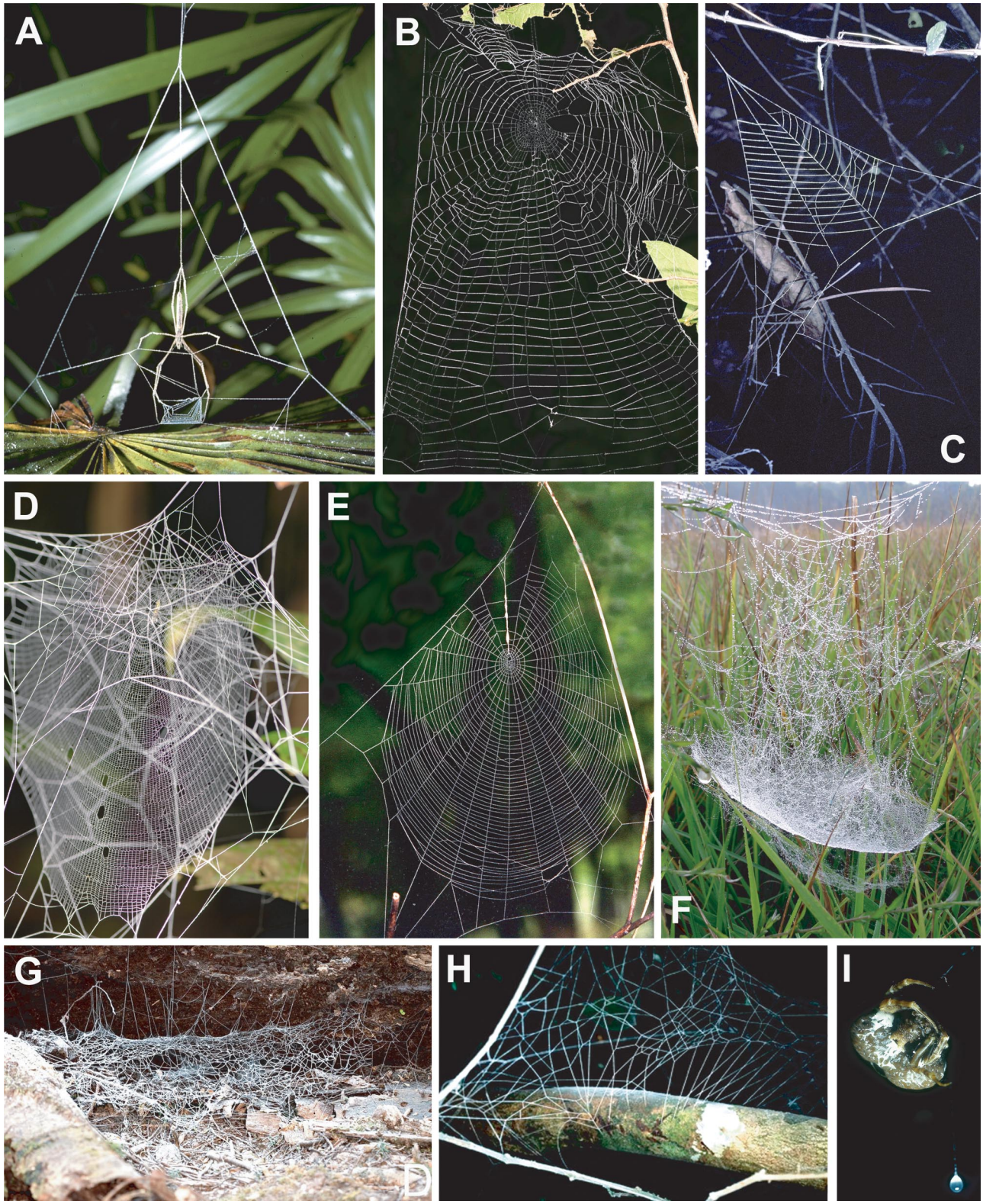

Fig. S2. Webs of orbicularian spiders. (*A*) *Deinopis*. (*B*) *Uloborus*. (*C*) *Hyptiotes*. (*D*) *Nephila*. (*E*) *Cyclosa*. (*F*) *Linyphia*. (*G*) *Megadictyna*. (*H*) *Achaearanea*. (*I*) *Mastophora*.

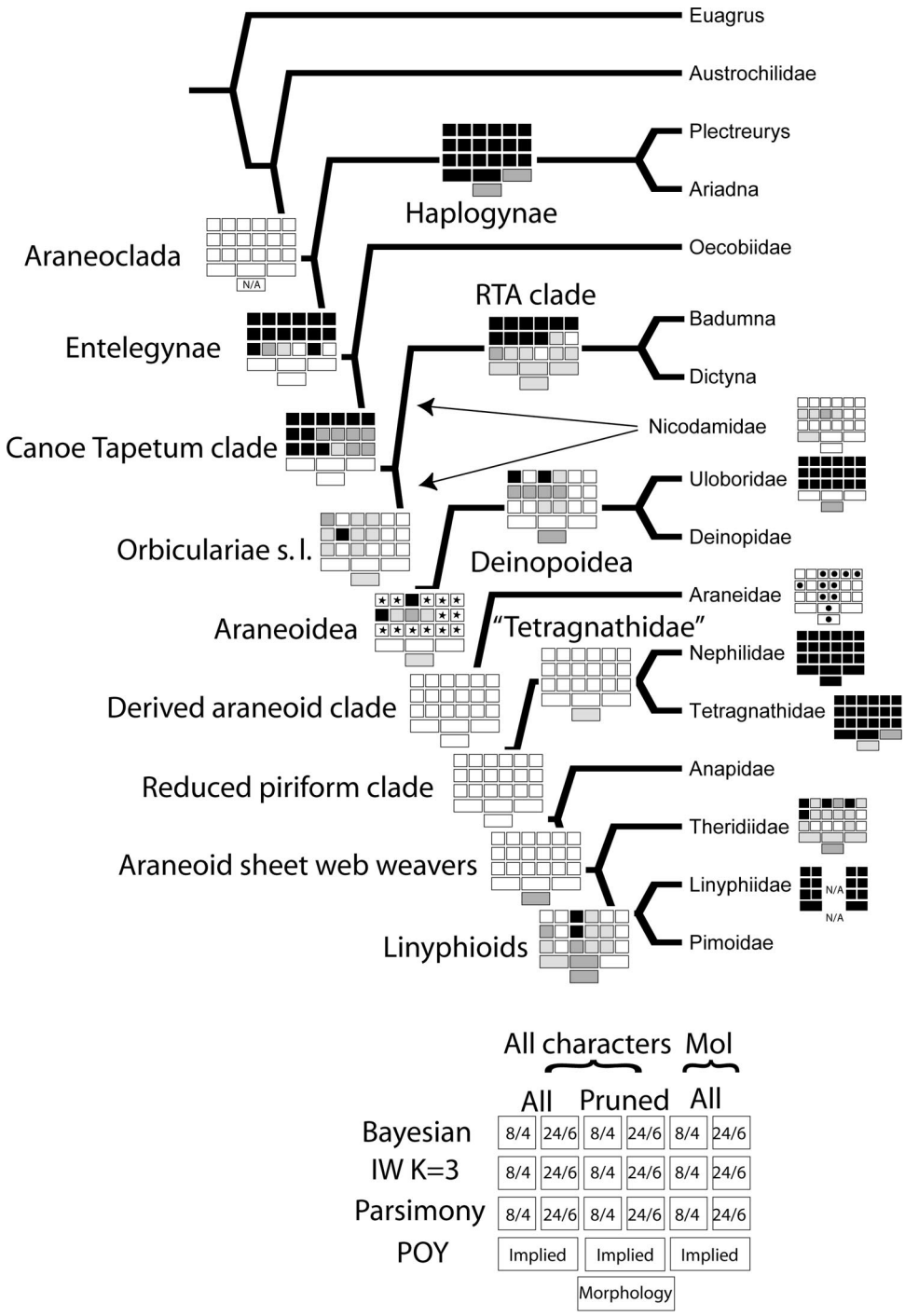

Fig. S3. Classical phylogenetic hypothesis from Kullmann EJ [(1972) *Am Zool* 12:395–405]. Boxes indicate support from current analyses. Black indicates strong support (i.e., posterior probabilities >90% or jackknife >75%), and gray indicates moderate support (i.e., posterior probabilities <90% but >75% or jackknife <75% but >50%).

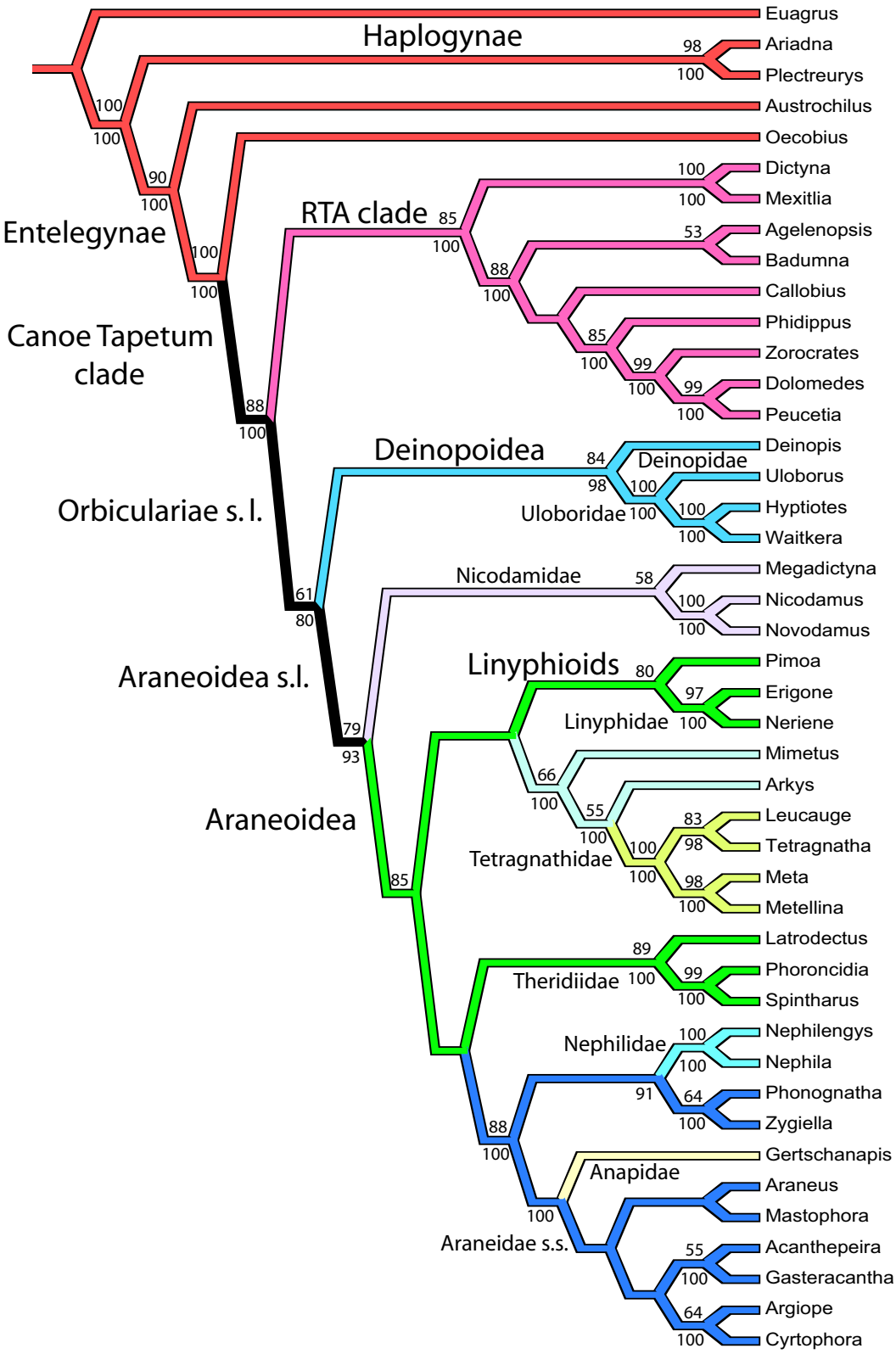

Fig. S4. Preferred tree (all taxa and all characters, implied weighting $K = 3$, 8/4 alignment). Jackknife support is shown above branches and posterior probability from Bayesian analysis of the same dataset is shown below. The colors denote traditional taxonomic groups, with red denoting outgroups.

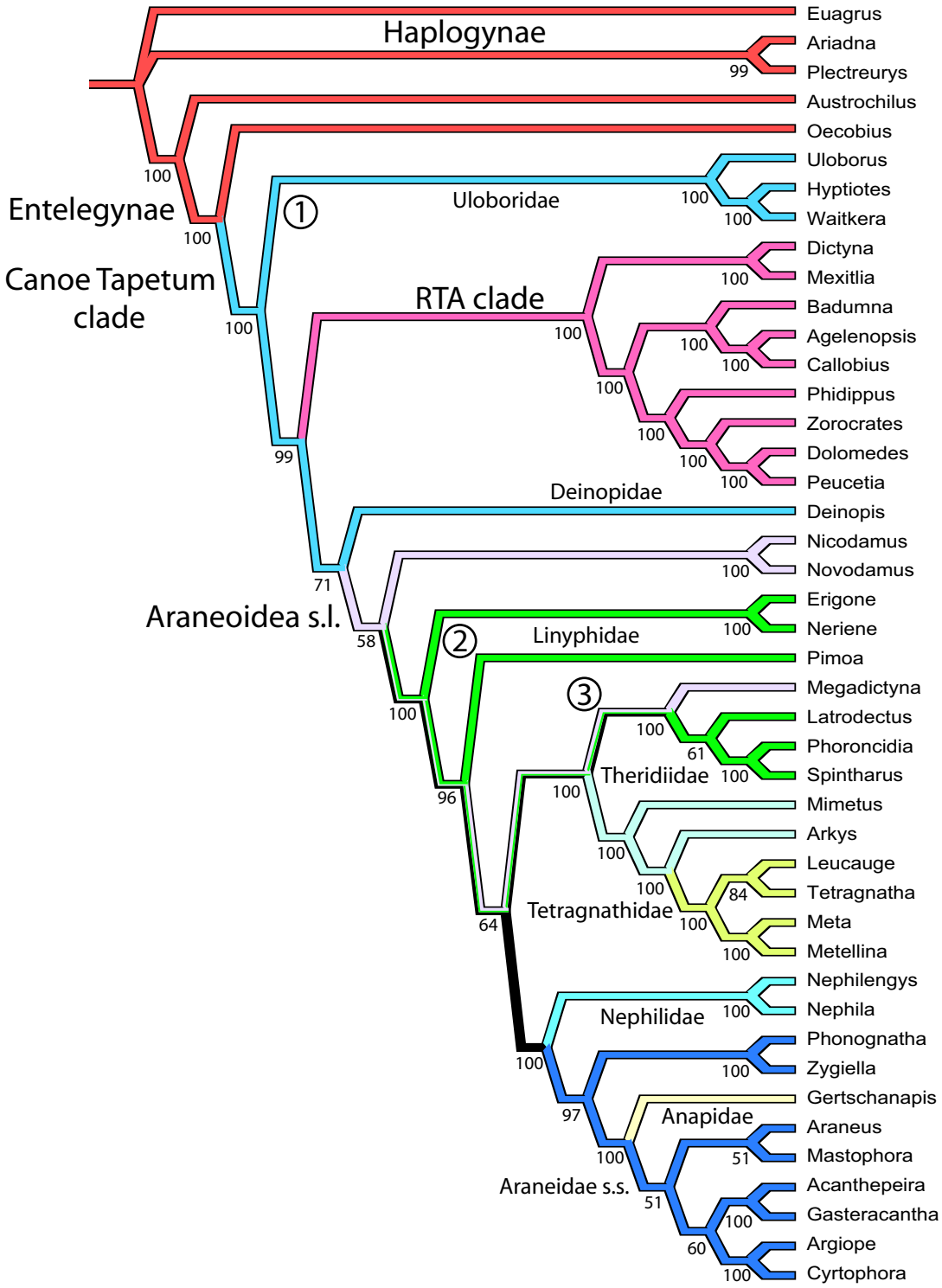

Fig. S5. Analysis of molecular data only for all data (24/6 alignment). Posterior probability is shown below each node. The colors denote traditional taxonomic groups, with red denoting outgroups.

Table S1. Taxonomic information and GenBank accession numbers for specimens

Family	Genus	Specific epithet	Locality	COI	16S	H3	Wingless	18S	28S
Agelenidae	Agelenopsis	aperta	USA:CA,Encinitas	FJ607552	FJ607444	FJ607591	FJ607629	FJ607478	FJ607517
Amaurobiidae	Callobius	sp.	USA: CA, Big Sur	FJ607559	FJ607450	FJ607598	FJ607632	FJ607485	FJ607524
Anapidae	Gertschanapis	shantzi	USA: CA, Hastings	FJ607565	–	FJ607603	–	–	FJ607530
Araneidae	Acanthepeira	stellata	USA: FL, Gainesville	FJ607551	FJ607443	FJ607590	–	FJ607477	FJ607516
Araneidae	Araneus	diadematus	*	FJ607553	FJ607445	FJ607592	FJ607630	FJ607479	FJ607518
Araneidae	Argiope	argentata	USA: CA, Encinitas	FJ607554	FJ607446	FJ607593	FJ607631	FJ607480	FJ607519
Araneidae	Arkys	cornutus	AUSTRALIA: Queensland	FJ607556	FJ607448	FJ607595	–	FJ607482	FJ607521
Araneidae	Cyrtophora	moluccensis	AUSTRALIA: Queensland	FJ607560	FJ607451	FJ607599	FJ607633	FJ607486	FJ607525
Araneidae	Gasteracantha	cancriformis	USA: FL, Gainesville	FJ525321	FJ525354	FJ525340	FJ607637	FJ525391	FJ525373
Araneidae	Mastophora	phrynosoma	USA: FL, Gainesville	FJ607569	FJ607458	FJ607607	FJ607639	FJ607495	FJ607534
Aranediae	Zygiella	atrica	DENMARK: Zealand	FJ607589	FJ607476	FJ607627	–	FJ607515	FJ607550
Austrochilidae	Austrochilus	sp.	CHILE: Parque Nacional Puyehe	FJ607557	–	FJ607596	–	FJ607483	FJ607522
Deinopidae	Deinopis	spinosa	USA: FL, Gainesville	FJ525318	FJ525351	FJ525337	FJ607634	FJ525388	FJ525370
Desidae	Badumna	longiqua	USA: CA, Alameda	FJ607558	FJ607449	FJ607597	–	FJ607484	FJ607523
Dictynidae	Dictyna	sp.	USA: CA, Lake Arrowhead	FJ607561	FJ607452	FJ607600	–	FJ607487	FJ607526
Dictynidae	Mexitlia	trivittata	USA: AZ, Cochise Co.	FJ607573	FJ607462	FJ607611	–	FJ607499	FJ607537
Dipluridae	Euagrus	chisoseus	USA: AZ, Tucson	FJ607564	FJ607454	FJ607602	FJ607628	FJ607490	FJ607529
Linyphiidae	Erigone	dentosa	USA: CA, Chico	FJ607563	–	–	FJ607636	FJ607489	FJ607528
Linyphiidae	Neriene	sp.	USA: CA, Arrowhead Lake	FJ607576	FJ607465	FJ607614	FJ607643	FJ607502	FJ607539
Mimetidae	Mimetus	sp.	USA: CA, —	FJ607574	FJ607463	FJ607612	–	FJ607500	FJ607538
Nephilidae	Nephila	clavipes	USA: FL, Gainesville	FJ525328	FJ525361	FJ525344	FJ607642	FJ525398	FJ525379
Nephilidae	Nephilengys	malabarensis	THAILAND: Surat Thani Province	FJ607575	FJ607464	FJ607613	FJ607641	FJ607501	–
Nicodamidae	Ambicodamus	marae	AUSTRALIA: WA	FJ607577	–	FJ607615	–	FJ607503	–
Nicodamidae	Megadictyna	thilenii	NEW ZEALAND: South Island	FJ607570	FJ607459	FJ607608	–	FJ607496	FJ607535
Nicodamidae	Novodamus	sp.	AUSTRALIA: Tasmania	FJ607578	–	FJ607616	–	FJ607504	–
Oecobiidae	Oecobius	sp.	USA: CA, Riverside	FJ607579	FJ607466	FJ607617	FJ607644	FJ607505	FJ607540
Oxyopidae	Peucetia	viridans	USA: CA, Riverside	FJ607580	FJ607467	FJ607618	FJ607645	FJ607506	FJ607541
Pimoidae	Pimoa	sp.	USA: CA, Camp Dunlap	FJ607584	FJ607471	FJ607622	–	FJ607510	FJ607545
Pisauridae	Dolomedes	tenebrosus	USA: OH, Columbus	FJ607562	FJ607453	FJ607601	FJ607635	FJ607488	FJ607527
Plectreuridae	Plectreurys	tristis	Purchased from SpiderPharm	FJ607585	FJ607472	FJ607623	FJ607648	FJ607511	FJ607546
Salticidae	Paraphidippus	aurantius	USA: AZ, Tucson	FJ607581	FJ607468	FJ607619	FJ607646	FJ607507	FJ607542
Segestriidae	Ariadna	fidicina	USA: CA, Big Sur	FJ607555	FJ607447	FJ607594	–	FJ607481	FJ607520
Tetragnatha	Leucauge	venusta	USA: FL, Gainesville	FJ607568	FJ607457	FJ607606	FJ607638	FJ607494	FJ607533
Tetragnatha	Meta	ovalis	USA: OH, Yellow Springs	FJ607571	FJ607460	FJ607609	–	FJ607497	–
Tetragnatha	Metellina	segmentata	DENMARK: Zealand	FJ607572	FJ607461	FJ607610	FJ607640	FJ607498	FJ607536
Tetragnatha	Phonognatha	graeffei	AUSTRALIA: New South Wales	FJ607582	FJ607469	FJ607620	–	FJ607508	FJ607543
Tetragnatha	Tetragnatha	versicolor	USA: AZ, Tucson	FJ525317	FJ525350	FJ525336	–	FJ525387	FJ525369
Theridiidae	Latrodectus	geometricus	USA: GA, —	FJ607567	FJ607456	FJ607605	–	FJ607493	FJ607532
Theridiidae	Phoroncidia	americana	USA: KY, Red River Gorge	FJ607583	FJ607470	FJ607621	FJ607647	FJ607509	FJ607544
Theridiidae	Spintharus	flavidus	USA: FL, Gainesville	FJ607586	FJ607473	FJ607624	–	FJ607512	FJ607547
Uloboridae	Hyptiotes	gertschi	USA: FL, Gainesville	FJ607566	FJ607455	FJ607604	–	FJ607492	FJ607531
Uloboridae	Uloborus	diversus	USA: CA, Riverside	FJ525329	FJ525362	FJ525345	FJ607649	FJ525399	FJ525380
Uloboridae	Waitkera	waitakerensis	NEW ZEALAND:	FJ607587	FJ607474	FJ607625	FJ607650	FJ607513	FJ607548
Zorocratidae	Zorocrates	fuscus	Purchased from SpiderPharm	FJ607588	FJ607475	FJ607626	FJ607651	FJ607514	FJ607549

*genomic extract from Gatesy et al. 2001 study.

Table S2. Loci amplified for the analysis.

Locus	Forward	Reverse	Internal sequencing primers	bp	Annealing temp.
COI	LCO(13)	C1-N-2776(14)	HCO (13) C1-J-2183 (15) C1-N-2191 (15)	1261	44–48
16S	LR-N-13398 (15)	16Sb (16)	—	≈450	44–48
H3	H3f (17)	H3r (17)	—	328	46–50
Wingless	Spwgf1 gyaaatgccayggwatgtcmgg	Spwgr1 acttgrcaacaccartgaaawg	—	352	50–54
18S	18Sai0.7 (18)	9r (19)	5f (19) 18Sbi (20)	≈1,200	48–52
28S	28SB (21)	28SO (14)	-	≈780	48–52

Other Supporting Information Files

Dataset S1
SI Appendix