

Ecography

**E6306**

Casner, K. L. and Pyrcz, T. W. 2010. Patterns and timing of diversification in a tropical montane butterfly genus, *Lymanopoda* (Nymphalidae, Satyrinae). – *Ecography* 33: 251–259.

**Supplementary material**

Table S1. List of specimens and GenBank accession numbers for each gene used in molecular study.

Genus	Species	Sub-species	Specimen ID	Locality	Province	Country	Elevation	COI	EFI-alpha	GAPDH	RPS5	WG
<i>Lymanopoda</i>	<i>acraeida</i>		KA205	Wayqecha Reserve	Cuzco	Peru	1400 m	GQ861922	GQ861984	GQ861920	GQ862022	GQ861835
<i>Lymanopoda</i>	<i>affineola</i>		KA136	Carcel Punco	Puno	Peru	2700 m	GQ861923	GQ861979			
<i>Lymanopoda</i>	<i>albocincta</i>		KA54	Yanayacu Reserve	Napo	Ecuador	2100 m	GQ861924	GQ861997	GQ861919	GQ862023	GQ861836
<i>Lymanopoda</i>	<i>albomaculata albomaculata</i>		KA193	Locotal	Cochabamba	Bolivia	2750 m	GQ861925	GQ862013	GQ861877	GQ862024	GQ861837
<i>Lymanopoda</i>	<i>altis</i>		KA49	Banos, El Tablon	Tungurahua	Ecuador	2700 m	GQ861926	GQ862020	GQ861878	GQ862025	GQ861838
<i>Lymanopoda</i>	<i>altis</i>		KA50	Banos, El Tablon	Tungurahua	Ecuador	2360 m	GQ861927	GQ862007	GQ861879	GQ862026	
<i>Lymanopoda</i>	<i>apulia</i>		KA104	Cueva Blanca-Milpo	Pasco	Peru	2600 m	GQ861928	GQ861986	GQ861880	GQ862027	
<i>Lymanopoda</i>	<i>araneola</i>		KA217	Molinopampa	Amazonas	Peru	2870 m	GQ861929		GQ861881	GQ862028	GQ861839
<i>Lymanopoda</i>	<i>caeruleata</i>		KA98	Sierra Nevada de Santa Marta	Cesar	Colombia	1200 m	GQ861930	GQ862014	GQ861882	GQ862029	GQ861840
<i>Lymanopoda</i>	<i>caracara</i>		KA176	Reserva Ecológica Cayambe-Coca	Napo	Ecuador	3600 m	GQ861931	GQ861982	GQ861883	GQ862030	GQ861841
<i>Lymanopoda</i>	<i>caucana</i>		KA106	Amaga	Antioquia	Colombia	1800 m	GQ861932	GQ861975		GQ862031	GQ861842
<i>Lymanopoda</i>	<i>caudalis</i>		KA89	Cueva Blanca-Milpo Rd	Pasco	Peru	2600 m	GQ861933	GQ861987	GQ861884	GQ862032	GQ861843
<i>Lymanopoda</i>	<i>confusa</i>		KA101	Arcoiris Reserve	Zamora-Chinchipe	Ecuador	2100 m	GQ861934	GQ861991	GQ861885	GQ862033	GQ861844
<i>Lymanopoda</i>	<i>dietzi</i>	<i>argentata</i>	KA28	Timotes, Alto de Tafayas	Merida	Venezuela	2910 m	GQ861937	GQ862005	GQ861888	GQ862034	GQ861876
<i>Lymanopoda</i>	<i>dietzi</i>	<i>dietzi</i>	KA23	La Mucuy	Merida	Venezuela	2700 m	GQ861936	GQ862004	GQ861887	GQ862035	GQ861846
<i>Lymanopoda</i>	<i>dietzi</i>	<i>josefina</i>	KA36	El Baho-Santo Domingo	Merida	Venezuela	2800 m	GQ861939	GQ862011	GQ861890	GQ862036	GQ861875
<i>Lymanopoda</i>	<i>dietzi</i>	<i>rosanna</i>	KA31	Bocono, Guaramacal	Trujillo	Venezuela	2600 m	GQ861938	GQ862008	GQ861889	GQ862037	GQ861847
<i>Lymanopoda</i>	<i>dietzi</i>	<i>vetula</i>	KA17	Pmo. De Batallon	Tachira	Venezuela	2900 m	GQ861935	GQ861998	GQ861886	GQ862038	GQ861845
<i>Lymanopoda</i>	<i>eubugioides</i>		KA85	Alfamayo-San Luis	Cuzco	Peru	2600 m	GQ861940	GQ862021	GQ861891		GQ861848
<i>Lymanopoda</i>	<i>euopis</i>		KA84	Volcano Irazu	Cartago	Costa Rica	2690 m	GQ861941	GQ861977	GQ861892	GQ862039	GQ861849
<i>Lymanopoda</i>	<i>excisa</i>		KA60	Saraguro	Loja	Ecuador	3025 m	GQ861942	GQ862002	GQ861893	GQ862040	
<i>Lymanopoda</i>	<i>ferruginosa</i>		KA207	Wayqecha Reserve	Cuzco	Peru	2050 m	GQ861943		GQ861894	GQ862041	GQ861850
<i>Lymanopoda</i>	<i>hazelana</i>		KA66	Saraguro	Loja	Ecuador	3025 m	GQ861944	GQ862000	GQ861895		GQ861851
<i>Lymanopoda</i>	<i>hockingi</i>		KA170	Qda. Malambo	Junin	Peru	2650 m	GQ861945	GQ861981	GQ861896	GQ862042	GQ861852
<i>Lymanopoda</i>	<i>hyagnis</i>		KA137	Qda. San Luis	Cuzco	Peru	2950 m	GQ861946	GQ861989			
<i>Lymanopoda</i>	<i>inde</i>		KA184	Molinopampa	Amazonas	Peru	3200 m	GQ861948	GQ861973		GQ862044	GQ861853

<i>Lymanopoda ionius</i>	KA95	La Linea	Tolima	Colombia	3200 m	GQ861949	GQ861978	GQ861897	GQ862045	GQ861854
<i>Lymanopoda bilinskii</i>	KA62	Yanayacu Reserve	Napo	Ecuador	2100 m	GQ861950	GQ862010		GQ862047	GQ861855
<i>Lymanopoda labda</i>	KA108	El Retiro	Antioquia	Colombia	2700 m	GQ861951	GQ861990	GQ861898	GQ862048	GQ861856
<i>Lymanopoda lezromi</i>	KA146	El Tamá	Tachira	Venezuela	2700 m	GQ861952	GQ861999	GQ861899	GQ862049	GQ861857
<i>Lymanopoda magna</i>	KA199	Molinopampa	Amazonas	Peru	2870 m	GQ861953	GQ862018	GQ861900	GQ862050	GQ861858
<i>Lymanopoda marianna</i>	KA41	Pmo. De Batallon	Tachira	Venezuela	2900 m	GQ861954	GQ862019	GQ861902	GQ862051	GQ861860
<i>Lymanopoda marianna</i>	KA160	Mucujun	Merida	Venezuela	3100 m	GQ861955	GQ862017	GQ861901	GQ862052	GQ861859
<i>Lymanopoda melia</i>	KA139	San Borja	Tungurahua	Ecuador	3600 m	GQ861956	GQ861974		GQ862046	
<i>Lymanopoda nadia</i>	KA64	Guamote-Macas	Morona-Santiago	Ecuador	2800 m	GQ861957	GQ862003	GQ861903	GQ862053	GQ861861
<i>Lymanopoda nivea</i>	KA58	Papallacta	Napo	Ecuador	2700 m	GQ861958	GQ861995	GQ861904	GQ862054	GQ861862
<i>Lymanopoda obsoleta</i>	KA46	Banos, El Tablon	Tungurahua	Ecuador	2700 m	GQ861959	GQ861992	GQ861905	GQ862055	GQ861863
<i>Lymanopoda obsoleta</i>	KA120	Buenos Aires-Cende	Lara	Venezuela	2100 m		GQ861985	GQ861906	GQ862057	
<i>Lymanopoda obsoleta</i>	KA148	Alfamayo-San Luis	Cuzco	Peru	2800 m	GQ861960	GQ862006	GQ861907	GQ862056	GQ861864
<i>Lymanopoda obsoleta</i>	KA150	Colonias-Tovar	Aragua	Venezuela	2100 m	GQ861961	GQ861988		GQ862058	GQ861865
<i>Lymanopoda panacea</i>	KA56	Rio San Francisco	Zamora-Chinchipe	Ecuador	2100 m	GQ861962	GQ861994	GQ861908	GQ862059	GQ861866
<i>Lymanopoda pieridina</i>	KA110	La Linea	Tolima	Colombia	3050 m	GQ861963	GQ862001	GQ861909	GQ862060	GQ861867
<i>Lymanopoda prusia</i>	KA200	San Luis	Cuzco	Peru	2800 m	GQ861964	GQ862016	GQ861910	GQ862061	GQ861868
<i>Lymanopoda rana</i>	KA91	Oxampampa-Villa Rica	Pasco	Peru	2400 m	GQ861965	GQ861996	GQ861911	GQ862062	GQ861869
<i>Lymanopoda samius</i>	KA161	El Tamá	Tachira	Venezuela	3150 m	GQ861966	GQ862012	GQ861912	GQ862063	GQ861870
<i>Lymanopoda shefteli</i>	KA87	Alfamayo-San Luis	Cuzco	Peru	2500 m	GQ861967	GQ862009	GQ861913	GQ862064	
<i>Lymanopoda tolima</i>	KA111	Pmo. del Ruiz	Tolima	Colombia	3600 m	GQ861968	GQ861980	GQ861914		GQ861871
<i>Lymanopoda umbratilis</i>	KA212	Wayqecha Reserve	Cuzco	Peru	2600 m	GQ861969	GQ862015	GQ861915	GQ862065	GQ861872
<i>Lymanopoda umbratilis</i>	KA226	Macapata	Cuzco	Peru	2200 m	GQ861970		GQ861916	GQ862066	GQ861873
<i>Lymanopoda venosa</i>	KA181	Ollachea-San Gaban	Puno	Peru	1200 m	GQ861971	GQ861976			
<i>Lymanopoda vivienteni</i>	KA115	Pmo. Guasca	Cundinamarca	Colombia	3200 m	GQ861972	GQ861993	GQ861917	GQ862067	GQ861874
<i>Ianusiusa maso</i>	KA119	Runtun	Tungurahua	Ecuador	2600 m	GQ861947	GQ861983	GQ861918	GQ862043	GQ861921

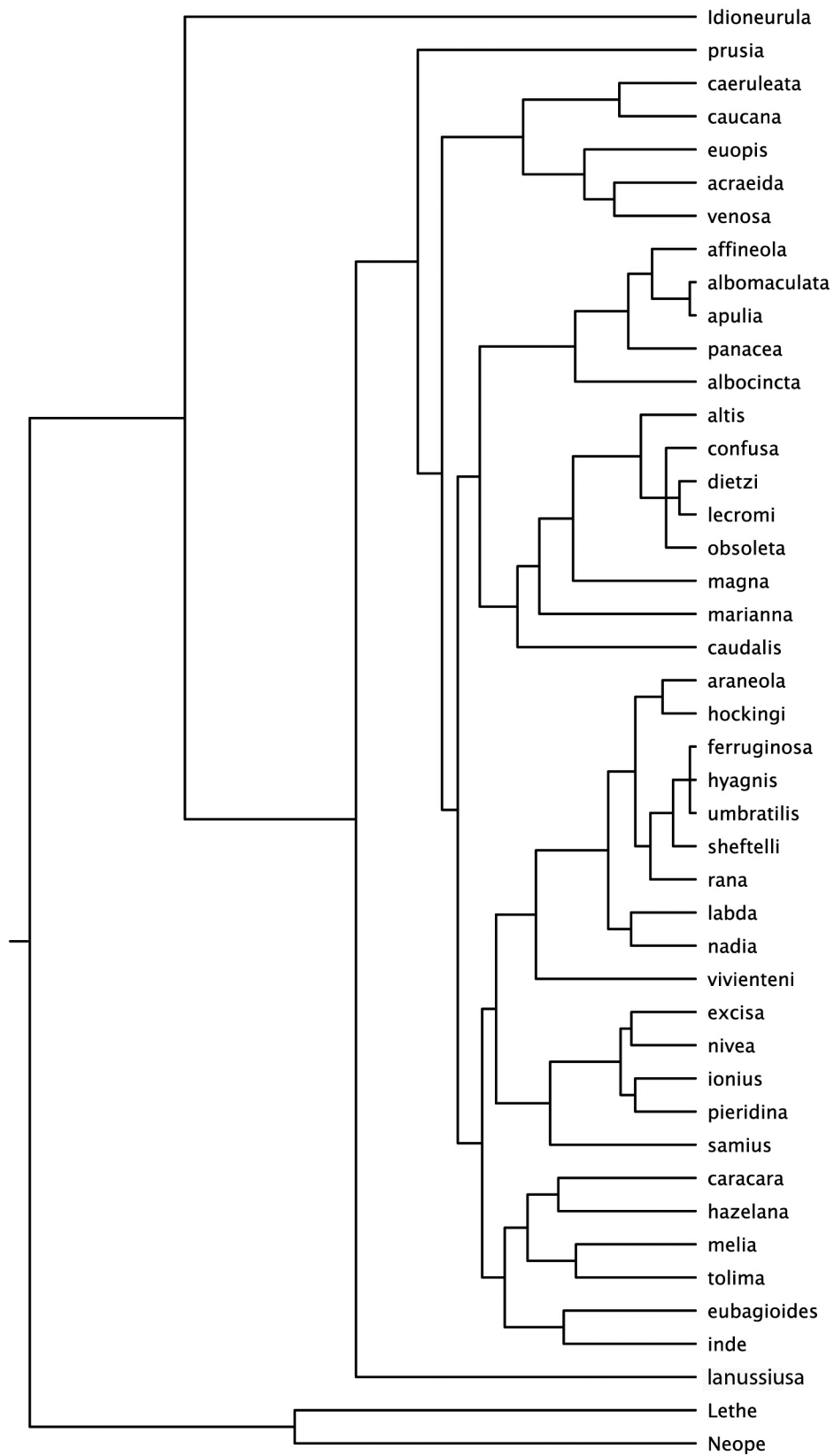


Figure S1. The genus *Lymanopoda* is monophyletic and sister to genus *Lanussiusa*.

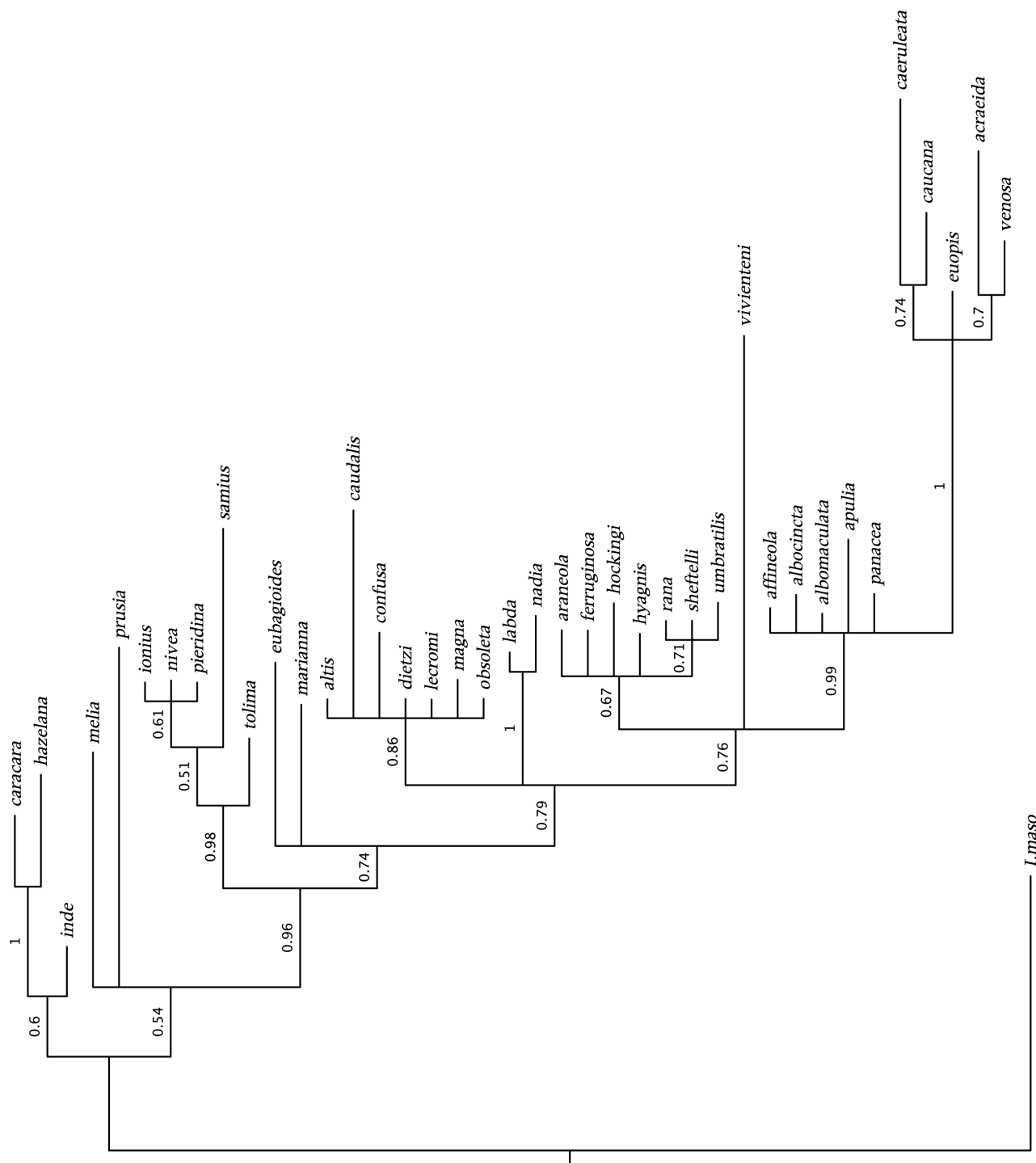


Figure S2. Elongation Factor 1-alpha (EF-1a) gene tree. Posterior probability support values are above branches.

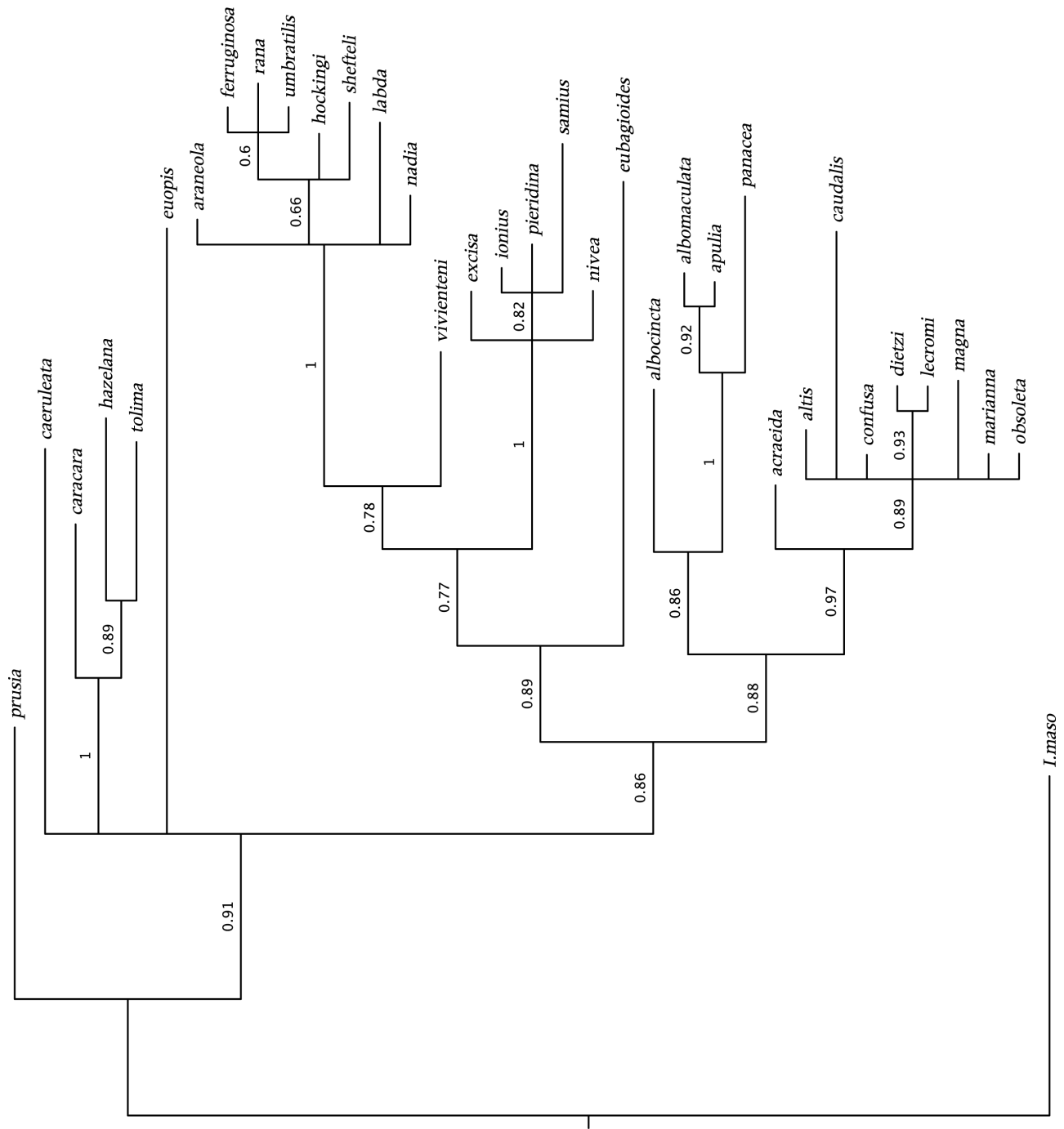


Figure S3. Glyceraldehyde 3-phosphate dehydrogenase (GAPDH) gene tree. Posterior probability support values are above branches.

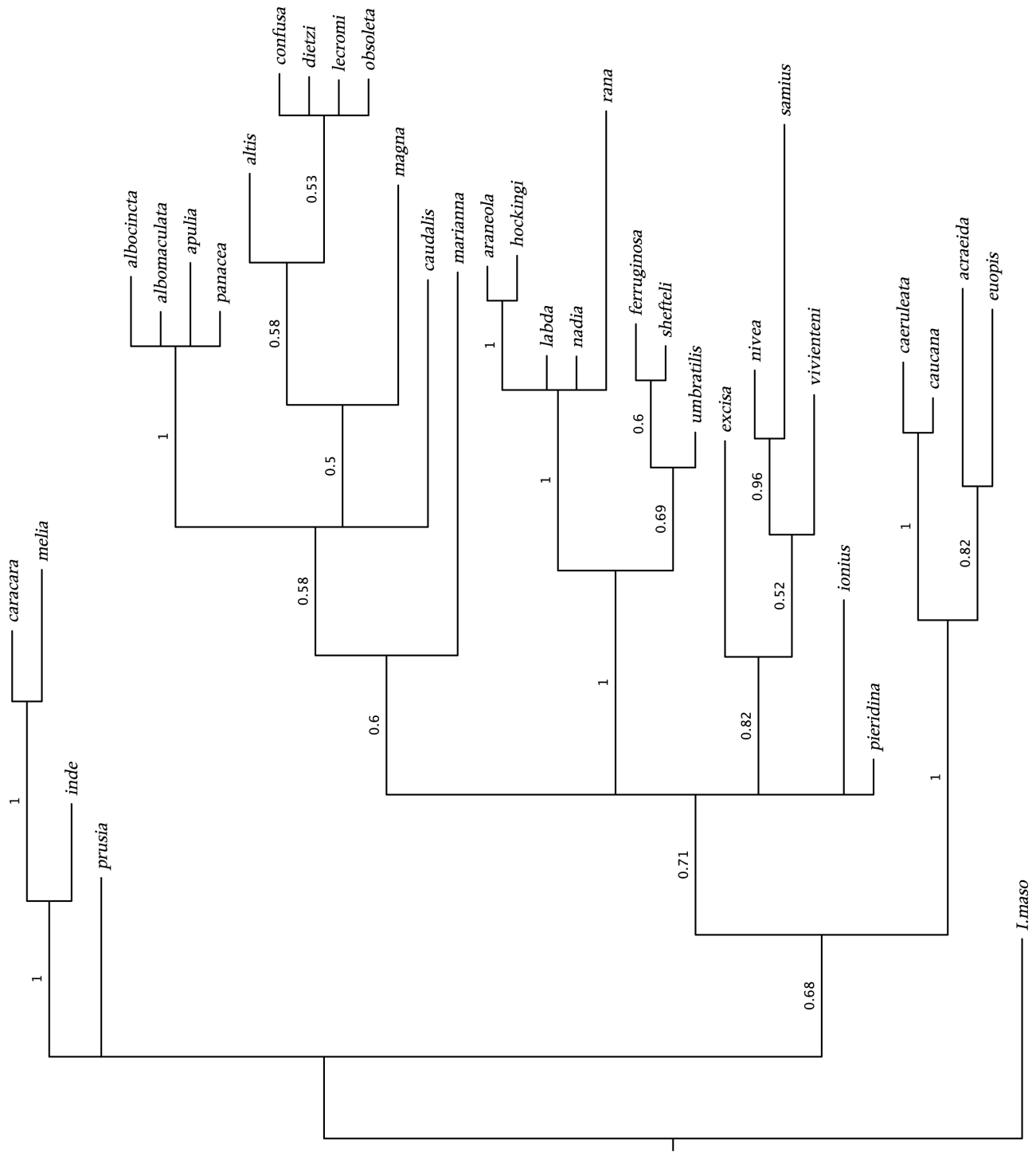


Figure S4. Ribosomal protein S5 (RPS5) gene tree. Posterior probability support values are above branches.

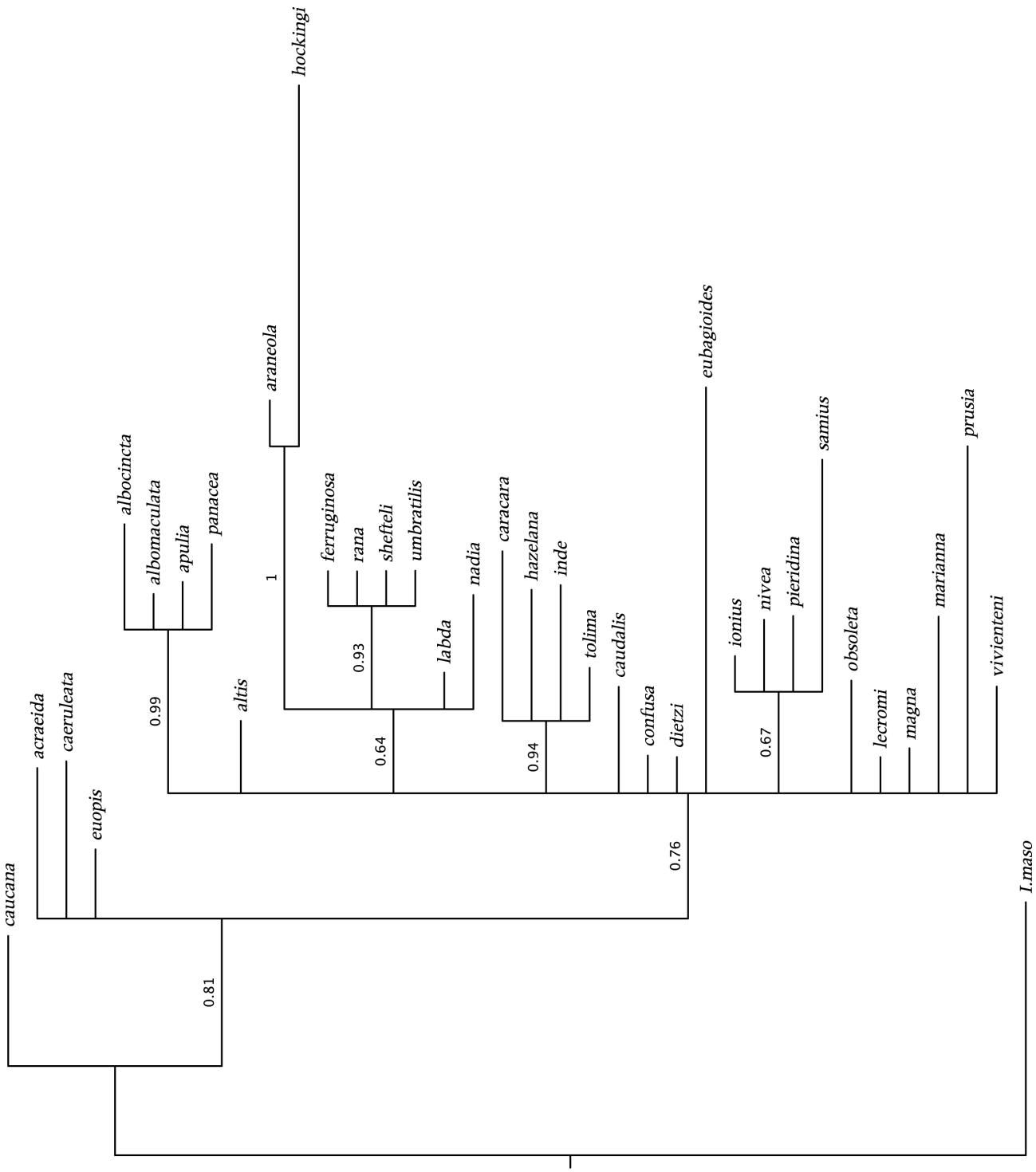


Figure S5. *Wingless (wg)* gene tree. Posterior probability support values are above branches.



