

Supplementary Information

Genetic diversity and population histories of two species of *Phidippus* (Araneae: Salticidae) from Northwestern Mexico

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Supplementary Tables

Table S1. Collection locality and sequence data for the individuals of *Phidippus johnsoni* and *P. phoenix* used in this study

Species	Individual code	Locality	GB COI	GB H3a_1	GB H3a_2
<i>P. johnsoni</i>	MABCB004	Valle de Guadalupe (VG)	OL505743	-	-
<i>P. johnsoni</i>	MABCB005	Valle de Guadalupe (VG)	OL505744	-	-
<i>P. johnsoni</i>	Ph002	Punta Colonet (PC)	OL505746	OP442123	OP442124
<i>P. johnsoni</i>	Ph006	Ensenada (EN)	OL505750	OP442125	OP442126
<i>P. johnsoni</i>	Ph007	Valle de Guadalupe (VG)	OL505751	OP442127	OP442128
<i>P. johnsoni</i>	Ph008	Valle de Guadalupe (VG)	OL505752	OP442129	OP442130
<i>P. johnsoni</i>	Ph011	Valle de Guadalupe (VG)	OL505754	OP442131	OP442132
<i>P. johnsoni</i>	Ph014	Valle de Guadalupe (VG)	OL505757	OP442133	OP442134
<i>P. johnsoni</i>	Ph015	Valle de Guadalupe (VG)	OL505758	OP442135	OP442136
<i>P. johnsoni</i>	Ph016	Valle de Guadalupe (VG)	OL505759	OP442137	OP442138
<i>P. johnsoni</i>	Ph017	Valle de Guadalupe (VG)	OL505760	OP442139	OP442140
<i>P. johnsoni</i>	Ph019	Valle de Guadalupe (VG)	OL505762	OP442141	OP442142
<i>P. johnsoni</i>	Ph020	Valle de Guadalupe (VG)	OL505763	-	-
<i>P. johnsoni</i>	Ph022	Valle de Guadalupe (VG)	-	OP442143	OP442144
<i>P. johnsoni</i>	Ph023	Valle de Guadalupe (VG)	OL505766	OP442145	OP442146
<i>P. johnsoni</i>	Ph025	Valle de Guadalupe (VG)	OL505768	OP442147	OP442148
<i>P. johnsoni</i>	Ph026	Ensenada (EN)	OL505769	-	-
<i>P. johnsoni</i>	Ph028	Ensenada (EN)	OL505771	OP442149	OP442150
<i>P. johnsoni</i>	Ph035	Ensenada (EN)	OL505777	OP442151	OP442152
<i>P. johnsoni</i>	Ph037	Valle de Guadalupe (VG)	OL505778	-	-
<i>P. johnsoni</i>	Ph043	Ensenada (EN)	OL505782	OP442153	OP442154
<i>P. johnsoni</i>	Ph057	Ensenada (EN)	OL505795	OP442155	OP442156
<i>P. johnsoni</i>	Ph058	Valle de Guadalupe (VG)	OL505796	OP442157	OP442158
<i>P. johnsoni</i>	Ph059	Valle de Guadalupe (VG)	OL505797	OP442159	OP442160

<i>P. johnsoni</i>	Ph062	Ensenada (EN)	OL505799	OP442161	OP442162
<i>P. johnsoni</i>	Ph064	Ensenada (EN)	OL505800	OP442163	OP442164
<i>P. johnsoni</i>	Ph066	Ensenada (EN)	OL505801	OP442165	OP442166
<i>P. johnsoni</i>	Ph067	Ensenada (EN)	OL505802	-	-
<i>P. johnsoni</i>	Ph068	Ojos Negros (ON)	OL505803	OP442167	OP442168
<i>P. johnsoni</i>	Ph074	Ensenada (EN)	OL505809	OP442169	OP442170
<i>P. johnsoni</i>	Ph075	Ensenada (EN)	OL505810	OP442171	OP442172
<i>P. johnsoni</i>	Ph078	Ensenada (EN)	OL505813	OP442173	OP442174
<i>P. johnsoni</i>	Ph085	Valle de Guadalupe (VG)	OL505818	OP442175	OP442176
<i>P. johnsoni</i>	Ph091	Valle de Guadalupe (VG)	-	OP442177	OP442178
<i>P. johnsoni</i>	Ph092	Ensenada (EN)	OL505825	-	-
<i>P. johnsoni</i>	Ph093	Valle de Guadalupe (VG)	OL505826	-	-
<i>P. johnsoni</i>	Ph095	Ensenada (EN)	OL505828	OP442179	OP442180
<i>P. johnsoni</i>	Ph098	Valle de Guadalupe (VG)	OL505831	-	-
<i>P. johnsoni</i>	Ph100	Valle de Guadalupe (VG)	OL505833	OP442181	OP442182
<i>P. johnsoni</i>	Ph107	Valle de Guadalupe (VG)	OL505838	OP442183	OP442184
<i>P. johnsoni</i>	Ph108	Valle de Guadalupe (VG)	OL505839	OP442185	OP442186
<i>P. johnsoni</i>	Ph109	Valle de Guadalupe (VG)	OL505840	OP442187	OP442188
<i>P. johnsoni</i>	Ph110	Ensenada (EN)	OL505841	OP442189	OP442190
<i>P. johnsoni</i>	Ph113	Valle de Guadalupe (VG)	OL505844	OP442191	OP442192
<i>P. johnsoni</i>	Ph115	Valle de Guadalupe (VG)	OL505846	OP442193	OP442194
<i>P. johnsoni</i>	Ph116	Valle de Guadalupe (VG)	OL505847	OP442195	OP442196
<i>P. johnsoni</i>	Ph117	Valle de Guadalupe (VG)	-	OP442197	OP442198
<i>P. johnsoni</i>	Ph129	Valle de Guadalupe (VG)	OL505854	-	-
<i>P. johnsoni</i>	Ph153	Ensenada (EN)	OL505860	OP442199	OP442200
<i>P. phoenix</i>	Ph005	Santa Catarina (SC)	OL505749	-	-
<i>P. phoenix</i>	Ph010	Santa Catarina (SC)	OL505753	OP442201	OP442202
<i>P. phoenix</i>	Ph030	El Sauzal (SZ)	OL505772	OP442203	OP442204
<i>P. phoenix</i>	Ph031	Punta Colonet (PC)	OL505773	OP442205	OP442206
<i>P. phoenix</i>	Ph032	Punta Colonet (PC)	OL505774	-	-
<i>P. phoenix</i>	Ph033	Punta Colonet (PC)	OL505775	OP442207	OP442208
<i>P. phoenix</i>	Ph034	Punta Colonet (PC)	OL505776	OP442209	OP442210
<i>P. phoenix</i>	Ph039	El Sauzal (SZ)	OL505780	-	-
<i>P. phoenix</i>	Ph040	Punta Colonet (PC)	-	OP442211	OP442212
<i>P. phoenix</i>	Ph041	Ensenada (EN)	-	OP442213	OP442214
<i>P. phoenix</i>	Ph042	El Sauzal (SZ)	OL505781	OP442215	OP442216
<i>P. phoenix</i>	Ph045	Punta Colonet (PC)	OL505783	OP442217	OP442218
<i>P. phoenix</i>	Ph046	Punta Colonet (PC)	OL505784	OP442219	OP442220
<i>P. phoenix</i>	Ph047	Punta Colonet (PC)	OL505785	OP442221	OP442222
<i>P. phoenix</i>	Ph048	Punta Colonet (PC)	OL505786	OP442223	OP442224
<i>P. phoenix</i>	Ph049	Punta Colonet (PC)	OL505787	OP442225	OP442226
<i>P. phoenix</i>	Ph050	Punta Colonet (PC)	OL505788	OP442227	OP442228
<i>P. phoenix</i>	Ph051	Punta Colonet (PC)	OL505789	OP442229	OP442230

<i>P. phoenix</i>	Ph052	Punta Colonet (PC)	OL505790	-	-
<i>P. phoenix</i>	Ph053	Punta Colonet (PC)	OL505791	OP442231	OP442232
<i>P. phoenix</i>	Ph054	Punta Colonet (PC)	OL505792	OP442233	OP442234
<i>P. phoenix</i>	Ph055	Punta Colonet (PC)	OL505793	OP442235	OP442236
<i>P. phoenix</i>	Ph056	Punta Colonet (PC)	OL505794	OP442237	OP442238
<i>P. phoenix</i>	Ph060	Punta Colonet (PC)	OL505798	OP442239	OP442240
<i>P. phoenix</i>	Ph069	El Sauzal (SZ)	OL505804	OP442241	OP442242
<i>P. phoenix</i>	Ph070	Ensenada (EN)	OL505805	OP442243	OP442244
<i>P. phoenix</i>	Ph071	Ensenada (EN)	OL505806	OP442245	OP442246
<i>P. phoenix</i>	Ph072	Ensenada (EN)	OL505807	OP442247	OP442248
<i>P. phoenix</i>	Ph077	Ensenada (EN)	OL505812	OP442249	OP442250
<i>P. phoenix</i>	Ph079	Ensenada (EN)	OL505814	OP442251	OP442252
<i>P. phoenix</i>	Ph081	El Sauzal (SZ)	OL505816	OP442253	OP442254
<i>P. phoenix</i>	Ph090	El Sauzal (SZ)	OL505823	OP442255	OP442256
<i>P. phoenix</i>	Ph096	Punta Colonet (PC)	OL505829	OP442257	OP442258
<i>P. phoenix</i>	Ph102	Santa Catarina (SC)	OL505834	OP442259	OP442260
<i>P. phoenix</i>	Ph111	El Sauzal (SZ)	OL505842	OP442261	OP442262
<i>P. phoenix</i>	Ph137	El Sauzal (SZ)	-	OP442263	OP442264
<i>P. phoenix</i>	Ph144	Punta Colonet (PC)	OL505857	-	-

### Supplementary Figures

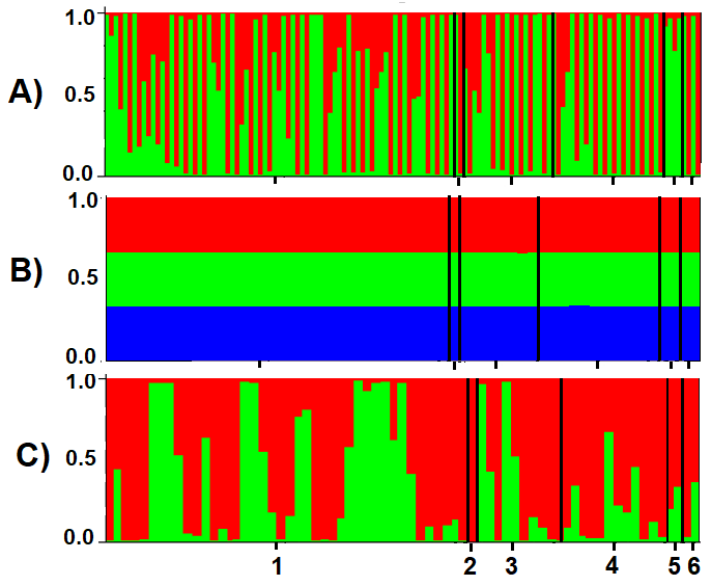


Figure S1. Population assignments for *Phidippus johnsoni* individuals based on mcmc runs in Structure, using A) COI data matrix, B) H3a haplotype matrix and C) combined COI and H3a data matrix. The numbers at the bottom represent the localities (1 = Valle de Guadalupe, 2 = Punta Colonet, 3 = El Sauzal, 4 = Ensenada, 5 = Ojos Negros, 6 = Maneadero).

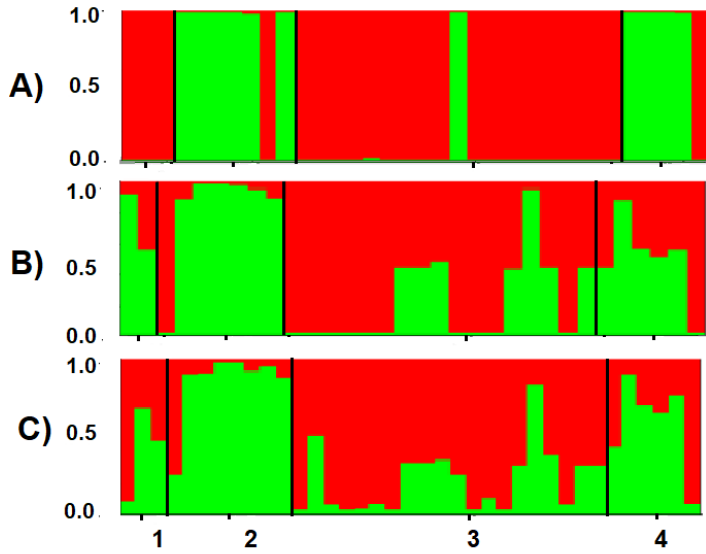


Figure S2. Population assignments for *Phidippus phoenix* individuals based on mcmc runs in Structure, using A) COI data matrix, B) H3a haplotype matrix and C) combined COI and H3a data matrix. The numbers at the bottom represent the localities (1 = Santa Catarina, 2 = Ensenada, 3 = Punta Colonet, 4 = El Sauzal).

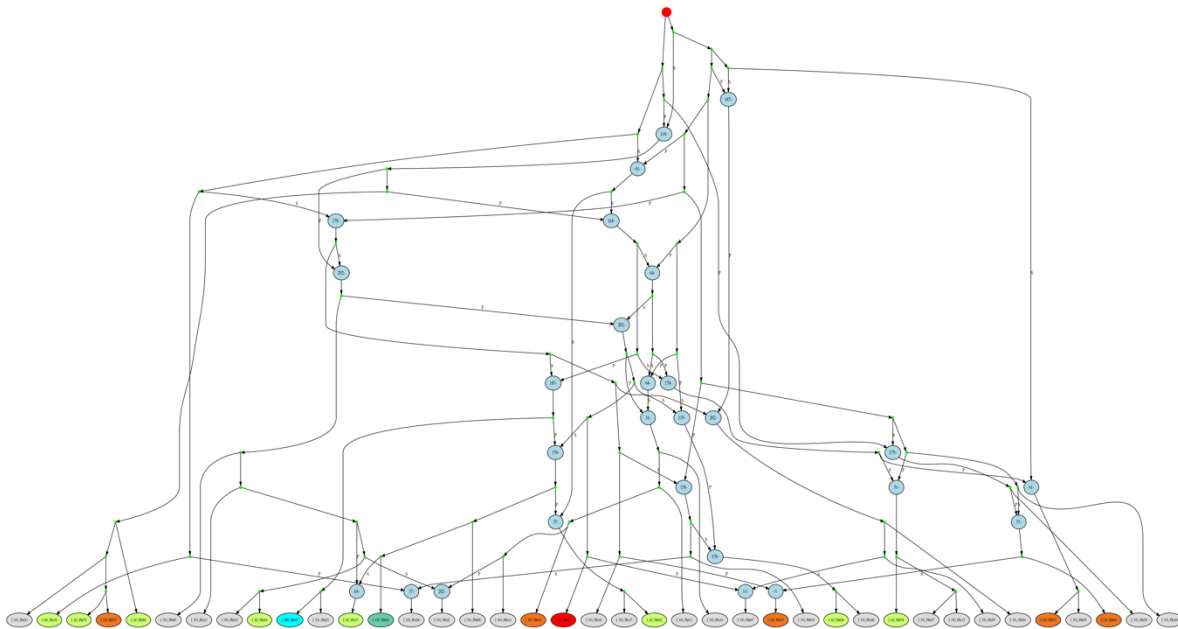


Figure S3. ARG constructed for the *Phidippus johnsoni* H3a data. Recombination nodes, in blue, are labelled with the recombination breakpoint, edges labeled P indicate sites upstream of and including the breakpoint inherited from the “prefix” lineage, and edges labeled S represent downstream sites inherited from the “suffix” lineage, in green are the coalescent nodes, and in red are the most recent common ancestor node.

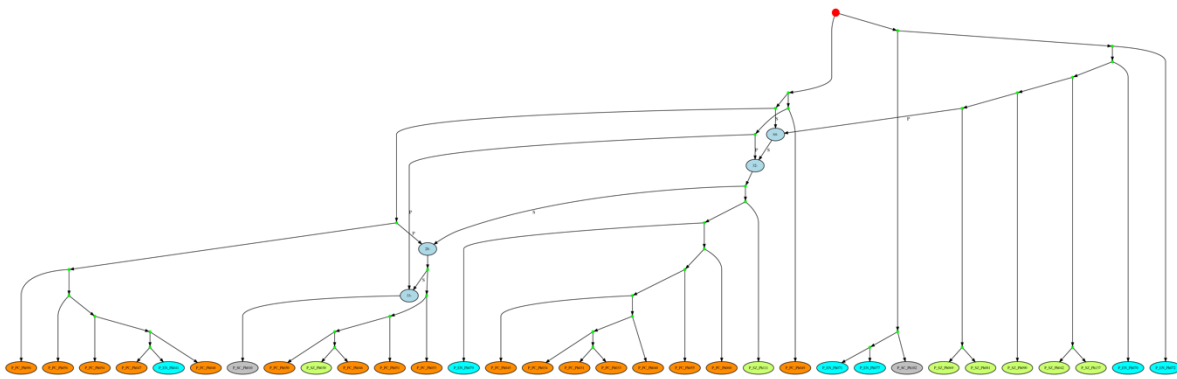


Figure S4. ARG constructed for the *Phidippus phoenix* H3a data. Recombination nodes, in blue, are labelled with the recombination breakpoint, edges labeled P indicate sites upstream of and including the breakpoint inherited from the “prefix” lineage, and edges labeled S represent downstream sites inherited from the “suffix” lineage, in green are the coalescent nodes, and in red are the most recent common ancestor node.