

**Local Endemism within the
Western Ghats-Sri Lanka Biodiversity Hotspot**

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Supporting Online Material

Materials and Methods

1. Sampling

Specimens of the six groups were sampled from 125 and 70 locations in Sri Lanka and southern India, respectively (Table S1). For each group, a wide variety of both morphologically similar and divergent specimens from both sides of the oceanic barrier were randomly selected.

Table S1. List of specimens sampled.

Hapl.	Genus	Species	Locality	Country
Treefrogs				
H1	<i>Philautus</i>	<i>sp. 1</i>	Chikmalagur-Bhadra Reservoir Road	India
H1	<i>Philautus</i>	<i>sp. 1</i>	Madikeri, Karnataka	India
H2	<i>Philautus</i>	<i>signatus</i>	Ooty, Tamil Nadu	India
H2	<i>Philautus</i>	<i>signatus</i>	Sims Park, Coonoor, Tamil Nadu	India
H2	<i>Philautus</i>	<i>signatus</i>	Ooty, Tamil Nadu	India
H3	<i>Philautus</i>	<i>tinniens</i>	Ooty, Tamil Nadu	India
H4	<i>Philautus</i>	<i>sp. 2</i>	Coonoor, Tamil Nadu	India
H5	<i>Philautus</i>	<i>griet</i>	Munnar, Kerala	India
H5	<i>Philautus</i>	<i>griet</i>	Munnar, Kerala	India
H6	<i>Philautus</i>	<i>charius</i>	Chikmalagur-Bhadra Reservoir Road	India
H6	<i>Philautus</i>	<i>charius</i>	Madikeri, Karnataka	India
H7	<i>Philautus</i>	<i>sp. 3</i>	Munnar, Kerala	India
H8	<i>Philautus</i>	<i>sp. 4</i>	Trivandrum - Ponmudi Road, Kerala	India
H9	<i>Philautus</i>	<i>sp. 5</i>	Madikeri, Karnataka	India
H10	<i>Philautus</i>	<i>sp. 6</i>	Madikeri, Karnataka	India
H11	<i>Philautus</i>	<i>sp. 7</i>	Sultans Battery, Kerala	India
H12	<i>Philautus</i>	<i>sp. 8</i>	Ponmudi, Kerala	India
H13	<i>Philautus</i>	<i>sp. 9</i>	Neyyar Dam, Kerala	India
H13	<i>Philautus</i>	<i>sp. 9</i>	Ponmudi, Kerala	India
H13	<i>Philautus</i>	<i>sp. 9</i>	Neyyar Dam, Kerala	India
H13	<i>Philautus</i>	<i>sp. 9</i>	Ponmudi, Kerala	India
H14	<i>Philautus</i>	<i>wynaadensis</i>	Sultans Battery, Kerala	India
H15	<i>Philautus</i>	<i>sp.12</i>	around Kandy, Central Province	Sri Lanka
H16	<i>Philautus</i>	<i>sp. 13</i>	Unawatuna, Southern Province	Sri Lanka
H17	<i>Philautus</i>	<i>sp.14</i>	Kitulgala, Sabaragamuwa Province	Sri Lanka
H18	<i>Philautus</i>	<i>sp.15</i>	Unknown	Sri Lanka
H19	<i>Philautus</i>	<i>sp. 16</i>	Kitulgala, Sabaragamuwa Province	Sri Lanka
H20	<i>Philautus</i>	<i>sp. 17</i>	Unawatuna, Southern Province	Sri Lanka
H21	<i>Philautus</i>	<i>sp.18</i>	Kitulgala, Sabaragamuwa Province	Sri Lanka
H22	<i>Philautus</i>	<i>sp.19</i>	Kottawa, Southern Province	Sri Lanka
H22	<i>Philautus</i>	<i>sp.19</i>	Kottawa, Southern Province	Sri Lanka
H23	<i>Philautus</i>	<i>sp.20</i>	Unknown	Sri Lanka
H24	<i>Philautus</i>	<i>microtypanum</i>	Nuwara Eliya, Central Province	Sri Lanka
H25	<i>Philautus</i>	<i>sp.21</i>	Unknown	Sri Lanka
H26	<i>Philautus</i>	<i>sp.22</i>	Unknown	Sri Lanka
H27	<i>Philautus</i>	<i>sp.23</i>	Unknown	Sri Lanka
H28	<i>Philautus</i>	<i>sp. 24</i>	Nuwara Eliya, Central Province	Sri Lanka
h28	<i>Philautus</i>	<i>sp. 24</i>	Nuwara Eliya, Central Province	Sri Lanka
H29	<i>Philautus</i>	<i>sp.25</i>	Unknown	Sri Lanka
H30	<i>Philautus</i>	<i>sp 26</i>	Nuwara Eliya, Central Province	Sri Lanka
H31	<i>Philautus</i>	<i>sp. 27</i>	Knuckles, Central Province	Sri Lanka
H32	<i>Philautus</i>	<i>sp.28</i>	Unknown	Sri Lanka
H33	<i>Philautus</i>	<i>sp. 10</i>	Kumarakum, Kerala	India
H34	<i>Philautus</i>	<i>sp. 11</i>	Thekkady, Kerala	India
Out	<i>Laliostoma</i>	<i>labrosa</i>	unknown	Madagascar
Out	<i>Boophis</i>	<i>xerophilus</i>	unknown	Madagascar
Out	<i>Rhacophorus</i>	<i>malabaricus</i>	Ponmudi, Kerala	India
Out	<i>Polypedates</i>	<i>cruciger</i>	unknown	Sri Lanka

Hapl.	Genus	Species	Locality	Country
Fishes				
H1	<i>Puntius</i>	<i>bandula</i>	Galapitamada	Sri Lanka
H2	<i>Puntius</i>	<i>bimaculatus</i>	Galle, Southern Province	Sri Lanka
H3	<i>Puntius</i>	<i>sp 16</i>	Mineriya	Sri Lanka
H4	<i>Puntius</i>	<i>sp 4</i>	Galle, Southern Province	Sri Lanka
H4	<i>Puntius</i>	<i>sp 4</i>	Galle, Southern Province	Sri Lanka
H4	<i>Puntius</i>	<i>sp 4</i>	Galle, Southern Province	Sri Lanka
H5	<i>Puntius</i>	<i>sp 5</i>	Mineriya	Sri Lanka
H6	<i>Puntius</i>	<i>sp 6</i>	Anuradhapura	Sri Lanka
H6	<i>Puntius</i>	<i>sp 6</i>	Anuradhapura	Sri Lanka
H7	<i>Puntius</i>	<i>chola</i>	Kottayam, Kerala	India
H7	<i>Puntius</i>	<i>chola</i>	Kottayam, Kerala	India
H7	<i>Puntius</i>	<i>chola</i>	Kottayam, Kerala	India
H8	<i>Puntius</i>	<i>sp 7</i>	Madras, Tamil Nadu	India
H9	<i>Puntius</i>	<i>sp 15</i>	Kelani	Sri Lanka
H10	<i>Puntius</i>	<i>cumingii</i>	Galle, Southern Province	Sri Lanka
H11	<i>Puntius</i>	<i>sp 2</i>	Homadola	Sri Lanka
H12	<i>Puntius</i>	<i>sp 3</i>	Menik	Sri Lanka
H13	<i>Puntius</i>	<i>dorsalis</i>	Galle, Southern Province	Sri Lanka
H14	<i>Puntius</i>	<i>fasciatus1</i>	Chenganur	India
H15	<i>Puntius</i>	<i>fasciatus2</i>	Kerala	India
H16	<i>Puntius</i>	<i>sp 9</i>	Neyyettinkara, near Trivandrum, Kerala	India
H17	<i>Puntius</i>	<i>sp 8</i>	Neyyettinkara, near Trivandrum, Kerala	India
H18	<i>Puntius</i>	<i>sp 10</i>	Chalakkudy, Kerala	India
H19	<i>Puntius</i>	<i>filamentosus</i>	Trivandrum, Kerala	India
H20	<i>Puntius</i>	<i>sp 1</i>	Coonoor, Tamil Nadu	India
H21	<i>Puntius</i>	<i>martenstyini</i>	Rattota, Central Province	Sri Lanka
H22	<i>Puntius</i>	<i>mahecola</i>	Kottayam, Kerala	India
H22	<i>Puntius</i>	<i>mahecola</i>	Kottayam, Kerala	India
H22	<i>Puntius</i>	<i>mahecola</i>	Kottayam, Kerala	India
H23	<i>Puntius</i>	<i>sp 14</i>	Kuruwita	Sri lanka
H24	<i>Puntius</i>	<i>sp 13</i>	Bentota	Sri lanka
H25	<i>Puntius</i>	<i>nigrofasciatus</i>	Galle, Southern Province	Sri lanka
H26	<i>Puntius</i>	<i>pleurotaenia</i>	Galle, Southern Province	Sri lanka
H27	<i>Puntius</i>	<i>sp 23</i>	Kuruwita, Sabaragamuva Province	Sri lanka
H28	<i>Puntius</i>	<i>sp 24</i>	Hambantota	Sri lanka
H29	<i>Puntius</i>	<i>sp 22</i>	Kottayam, Kerala	India
H30	<i>Puntius</i>	<i>sp 11</i>	Kelaniya	Sri lanka
H31	<i>Puntius</i>	<i>sinhala</i>	Galle, Southern Province	Sri lanka
H31	<i>Puntius</i>	<i>sinhala</i>	Galle, Southern Province	Sri lanka
H31	<i>Puntius</i>	<i>sinhala</i>	Galle, Southern Province	Sri lanka
H31	<i>Puntius</i>	<i>sinhala</i>	Galle, Southern Province	Sri lanka
H32	<i>Puntius</i>	<i>sp 12</i>	Kandalama	Sri lanka
H33	<i>Puntius</i>	<i>srilankensis</i>	Rattota, Central Province	Sri lanka
H34	<i>Puntius</i>	<i>ticto</i>	Kandalama	Sri lanka
H35	<i>Puntius</i>	<i>sp 17</i>	Galle, Southern Province	Sri lanka
H36	<i>Puntius</i>	<i>sp 18</i>	Bentota	Sri lanka
H37	<i>Puntius</i>	<i>titteya</i>	Galle, Southern Province	Sri lanka
H38	<i>Puntius</i>	<i>sp 19</i>	Kuruwita, Sabaragamuva Province	Sri lanka
H39	<i>Puntius</i>	<i>sp 21</i>	Galle, Southern Province	Sri lanka
H40	<i>Puntius</i>	<i>sp 20</i>	Anuradhapura	Sri lanka
H41	<i>Puntius</i>	<i>vittatus</i>	Neyyettinkara, near Trivandrum, Kerala	India
Out	<i>Crossostoma</i>	<i>lacustre</i>	-GenBank -	Unknown

Table S1. List of specimens sampled (continued).

Hapl. Genus	Species	Locality	Country	
Caecilians				
H1	<i>Uraeotyphlus</i>	<i>cf. malabaricus</i>	near Vandiperiyar, Kerala	India
H2	<i>Uraeotyphlus</i>	<i>cf. oxyurus</i>	near Payyanur, Kerala	India
H3	<i>Uraeotyphlus</i>	<i>narayani</i>	Kannam, Kerala	India
H4	<i>Ichthyophis</i>	<i>cf. malabarensis</i> 2	Palod, Kerala	India
H5	<i>Ichthyophis</i>	<i>cf. malabarensis</i>	near Thodupuzha, Kerala	India
H5	<i>Ichthyophis</i>	<i>cf. malabarensis</i> 1	Thodupuzha, Kerala	India
H6	<i>Ichthyophis</i>	<i>orthoplicatus</i> 2	near Passara, Uva Province	Sri Lanka
H7	<i>Ichthyophis</i>	<i>orthoplicatus</i> 1	Bibilegama, Uva Province	Sri Lanka
H8	<i>Ichthyophis</i>	<i>cf. tricolor</i> 1	near Vandiperiyar, Kerala	India
H9	<i>Ichthyophis</i>	<i>cf. tricolor</i> 2	near Punalur, Kerala	India
H10	<i>Ichthyophis</i>	<i>cf. beddomei</i> 2	near Periya, Kerala	India
H10	<i>Ichthyophis</i>	<i>cf. beddomei</i> 2	near Sulthan Bathery, Kerala	India
H11	<i>Ichthyophis</i>	<i>cf. beddomei</i> 1	Subramanya, Karnataka	India
H12	<i>Ichthyophis</i>	<i>sp.2</i>	Ban Tung Tao, Surat Thani Province	Thailand
H13	<i>Ichthyophis</i>	<i>sp.3</i>	Hat Yai, Songkhla Province	Thailand
H14	<i>Ichthyophis</i>	<i>sp.6</i>	Ban Na Sabaeng, Ubon Ratchathani Province	Thailand
H15	<i>Ichthyophis</i>	<i>sp.5</i>	Mae Saivalley, Chiang Mai Province	Thailand
H16	<i>Ichthyophis</i>	<i>sp.7</i>	Longling, Yunnan Province	China
H17	<i>Ichthyophis</i>	<i>sp.4</i>	Tam Dao, Vinh Phuv Province	Vietnam
H18	<i>Ichthyophis</i>	<i>sp.1</i>	Mang Xang	Vietnam
H19	<i>Ichthyophis</i>	<i>glutinosus</i> 1	Western Province, Kalutara District, nr. Palawatta	Sri Lanka
H19	<i>Ichthyophis</i>	<i>sp. 10</i>	near Haldummula, Sabaragamuwa Province	Sri Lanka
H20	<i>Ichthyophis</i>	<i>glutinosus</i> 2	near Nakiyadeniya, Southern Province	Sri Lanka
H20	<i>Ichthyophis</i>	<i>glutinosus</i> 2	near Galle, Southern Province	Sri Lanka
H21	<i>Ichthyophis</i>	<i>glutinosus</i> 3	near Oyata, Southern Province	Sri Lanka
H21	<i>Ichthyophis</i>	<i>glutinosus</i> 3	near Oyata, Southern Province	Sri Lanka
H21	<i>Ichthyophis</i>	<i>glutinosus</i> 3	near. Morawaka, Southern Province	Sri Lanka
H22	<i>Ichthyophis</i>	<i>glutinosus</i> 4	Suudagala, Sabaragamuwa Province	Sri Lanka
H22	<i>Ichthyophis</i>	<i>glutinosus</i> 4	Pussellawa, Central Province	Sri Lanka
H23	<i>Ichthyophis</i>	<i>glutinosus</i> 5	near Rattota, Central Province	Sri Lanka
H23	<i>Ichthyophis</i>	<i>glutinosus</i> 5	Gammaduwa, Central Province	Sri Lanka
H24	<i>Ichthyophis</i>	<i>glutinosus</i> 6	near Peradeniya, Central Province	Sri Lanka
H25	<i>Ichthyophis</i>	<i>glutinosus</i> 7	near Rattota, Central Province	Sri Lanka
H26	<i>Ichthyophis</i>	<i>glutinosus</i> 8	Bibilegama, Uva Province	Sri Lanka
H27	<i>Ichthyophis</i>	<i>sp. 8</i>	near Haldummula, Sabaragamuwa Province	Sri Lanka
H28	<i>Ichthyophis</i>	<i>sp. 9</i>	near Haldummula, Sabaragamuwa Province	Sri Lanka
Out	<i>Typhlonectes</i>	<i>natans</i>	unknown	unknown
Out	<i>Gegeneophis</i>	<i>ramaswamii</i>	unknown	India
Out	<i>Scolecormorphus</i>	<i>vittatus</i>	unknown	unknown

Hapl. Genus	Species	Locality	Country	
Snakes				
H1	<i>Brachyophidium</i>	<i>rhodogaster</i>	Shembagganur, Tamil Nadu	India
H2	<i>Melanophidium</i>	<i>punctatum</i>	Valparai, Tamil Nadu	India
H3	<i>Rhinophis</i>	<i>drummondhayi</i> 2	near Passara, Uva Province	Sri Lanka
H3	<i>Rhinophis</i>	<i>drummondhayi</i> 2	Talawakella, Central Province	Sri Lanka
H3	<i>Rhinophis</i>	<i>drummondhayi</i> 2	above Namunkula	Sri Lanka
H4	<i>Rhinophis</i>	<i>drummondhayi</i> 1	Madulsima, Uva Province	Sri Lanka
H4	<i>Rhinophis</i>	<i>drummondhayi</i> 1	Madulsima, Uva Province	Sri Lanka
H5	<i>Rhinophis</i>	<i>drummondhayi</i> 3	Pindarawatta	Sri Lanka
H6	<i>Uropeltis</i>	<i>sp. 2</i>	Ooruvasal, Kerala	India
H7	<i>Uropeltis</i>	<i>sp. 3</i>	Munnar, Kerala	India
H8	<i>Uropeltis</i>	<i>sp. 1</i>	unknown	India
H9	<i>Uropeltis</i>	<i>sp. 4</i>	Munnar, Kerala	India
H10	<i>Uropeltis</i>	<i>liura</i>	unknown	India
H10	<i>Uropeltis</i>	<i>liura</i>	unknown	India
H11	<i>Rhinophis</i>	<i>philippinus</i> 1	near Rattota, Central Province	Sri Lanka
H11	<i>Rhinophis</i>	<i>philippinus</i> 1	Kalugaltenna	Sri Lanka
H11	<i>Rhinophis</i>	<i>philippinus</i> 1	Kalugaltenna	Sri Lanka
H11	<i>Rhinophis</i>	<i>philippinus</i> 1	near Rattota, Central Province	Sri Lanka
H11	<i>Rhinophis</i>	<i>philippinus</i> 1	Palatenne	Sri Lanka
H12	<i>Rhinophis</i>	<i>dorsimaculatus</i>	Marichchikkadi	Sri Lanka
H13	<i>Rhinophis</i>	<i>travancoricus</i>	Palod, Kerala	India
H14	<i>Uropeltis</i>	<i>melanogaster</i>	Nicapota, North Western Province,	Sri Lanka
H15	<i>Uropeltis</i>	<i>phillipsi</i> 1	near Gammaduwa, Central Province	Sri Lanka
H16	<i>Uropeltis</i>	<i>phillipsi</i> 2	Gammaduwa, Central Province	Sri Lanka
H17	<i>Rhinophis</i>	<i>oxyrhynchus</i>	unknown	Sri Lanka
H17	<i>Rhinophis</i>	<i>oxyrhynchus</i>	Polonarywa	Sri Lanka
H18	<i>Rhinophis</i>	<i>homolepis</i>	near Rakwana, Sabaragamuwa Province	Sri Lanka
H19	<i>Rhinophis</i>	<i>philippinus</i> 2	Palatenne	Sri Lanka
H20	<i>Rhinophis</i>	<i>philippinus</i> 3	Palatenne	Sri Lanka
H21	<i>Rhinophis</i>	<i>blythii</i> 1	Talawakella, Central Province	Sri Lanka
H22	<i>Rhinophis</i>	<i>blythii</i> 2	Ingestre Estate	Sri Lanka
H22	<i>Rhinophis</i>	<i>blythii</i> 2	Ingestre Estate	Sri Lanka
H22	<i>Rhinophis</i>	<i>blythii</i> 2	Ingestre Estate	Sri Lanka
Out	<i>Cylindrophis</i>	<i>maculatus</i>	near Palawatta, Western Province	Sri Lanka

Table S1. List of specimens sampled (continued).

Hapl.	Genus	Species	Locality	Country
Crabs				
H1	<i>Ceylonthelphusa</i>	<i>sentosa</i>	Kanneliya, Southern Province	Sri Lanka
H1	<i>Ceylonthelphusa</i>	<i>sentosa</i>	Pitadeniya, Uva Province	Sri Lanka
H2	<i>Oziotelphusa</i>	<i>sp. 1</i>	Puwakpitiya Knuckles, Central Province	Sri Lanka
H2	<i>Oziotelphusa</i>	<i>sp. 1</i>	Tanamalwila, Uva province	Sri Lanka
H2	<i>Oziotelphusa</i>	<i>sp. 1</i>	Pathanegalle	Sri Lanka
H3	<i>Ceylonthelphusa</i>	<i>soror</i>	Bogowantalawa-Balanguda road	Sri Lanka
H3	<i>Ceylonthelphusa</i>	<i>soror</i>	Bogowantalawa-Balanguda road	Sri Lanka
H3	<i>Ceylonthelphusa</i>	<i>soror</i>	Bogowantalawa-Balanguda road	Sri Lanka
H4	<i>Ceylonthelphusa</i>	<i>scansor</i>	Hantane, Sabaragamuva Province	Sri Lanka
H4	<i>Ceylonthelphusa</i>	<i>scansor</i>	Hantane, Sabaragamuva Province	Sri Lanka
H5	<i>Oziotelphusa</i>	<i>sp. 2</i>	Tanamalwila, Uva Province	Sri Lanka
H5	<i>Oziotelphusa</i>	<i>sp. 2</i>	Tanamalwila, Uva Province	Sri Lanka
H5	<i>Oziotelphusa</i>	<i>sp. 2</i>	Tanamalwila, Uva Province	Sri Lanka
H6	<i>Perbrinckia</i>	<i>nana</i>	Kanneliya, Southern Province	Sri Lanka
H7	<i>Mahatha</i>	<i>iora</i>	Kumbalwela, Uva Province	Sri Lanka
H7	<i>Mahatha</i>	<i>iora</i>	Kumbalwela, Uva Province	Sri Lanka
H8	<i>Ceylonthelphusa</i>	<i>kandambyi</i>	Udugama, Sabaragamuva Province	Sri Lanka
H9	<i>Ceylonthelphusa</i>	<i>rugosa</i>	Gannoruwa, Central Province	Sri Lanka
H9	<i>Ceylonthelphusa</i>	<i>rugosa</i>	Puwakpitiya Knuckles, Central Province	Sri Lanka
H9	<i>Ceylonthelphusa</i>	<i>rugosa</i>	Darawala	Sri Lanka
H9	<i>Ceylonthelphusa</i>	<i>rugosa</i>	Hantane, Sabaragamuva Province	Sri Lanka
H10	<i>Ceylonthelphusa</i>	<i>cf. callista</i>	Knuckles, Central province	Sri Lanka
H11	<i>Ceylonthelphusa</i>	<i>cavatrix</i>	Pathanegala	Sri Lanka
H11	<i>Ceylonthelphusa</i>	<i>cavatrix</i>	Pathanegala	Sri Lanka
H11	<i>Ceylonthelphusa</i>	<i>cavatrix</i>	Pathanegala	Sri Lanka
H11	<i>Ceylonthelphusa</i>	<i>cavatrix</i>	Pathanegala	Sri Lanka
H11	<i>Ceylonthelphusa</i>	<i>cavatrix</i>	Pathanegala	Sri Lanka
H12	<i>Perbrinckia</i>	<i>morraysensis</i>	Tillierie Estate	Sri Lanka
H12	<i>Perbrinckia</i>	<i>morraysensis</i>	Tillierie Estate	Sri Lanka
H12	<i>Perbrinckia</i>	<i>nn</i>	Adams Peak, Sabaragamuva Province	Sri Lanka
H13	<i>Pastilla</i>	<i>ruhuna</i>	Hirimbura, Southern Province	Sri Lanka
H13	<i>Pastilla</i>	<i>ruhuna</i>	Hirimbura, Southern Province	Sri Lanka
H13	<i>Pastilla</i>	<i>ruhuna</i>	unknown	Sri Lanka
H14	<i>Oziotelphusa</i>	<i>sp. 3</i>	Deniyaya, Southern Province	Sri Lanka
H15	<i>Mahatha</i>	<i>sp.</i>	Bibilegama, Uva Province	Sri Lanka
H16	<i>Oziotelphusa</i>	<i>sp. 4</i>	Richmond hill	Sri Lanka
H17	<i>Oziotelphusa</i>	<i>hippocastanum</i>	unknown	Sri Lanka
H17	<i>Oziotelphusa</i>	<i>hippocastanum</i>	unknown	Sri Lanka
H18	<i>Spiralothelphusa</i>	<i>wuellerstorfi</i>	Madras, Tamil Nadu	India
H19	<i>Gubernatoriana</i>	<i>sp.</i>	Ponmudi, Kerala	India
H19	<i>Gubernatoriana</i>	<i>sp.</i>	Ponmudi, Kerala	India
H19	<i>Gubernatoriana</i>	<i>sp.</i>	Ponmudi, Kerala	India
H20	<i>Oziotelphusa</i>	<i>ceylonensis</i>	Colombo, Western Province	Sri Lanka
H21	<i>Travancoriana</i>	<i>sp. 3</i>	Ualur-Mangery Road, Tamil Nadu	India
H22	<i>Oziotelphusa</i>	<i>sp. 5</i>	Kottarakkar-Trivandrum Road, Kerala	India
H22	<i>Oziotelphusa</i>	<i>sp. 5</i>	Kolaththupuzha-Tenmalai Road, Kerala	India
H23	<i>Travancoriana</i>	<i>sp. 4</i>	Munnar-Pollachchi Road, Kerala	India
H24	<i>Spiralothelphusa</i>	<i>sp. 1</i>	Trissur-Chalakudy Road, Kerala	India
H24	<i>Oziotelphusa</i>	<i>sp. 1</i>	unknown	India
H24	<i>Spiralothelphusa</i>	<i>sp. 1</i>	Trissur, Kerala	India
H25	<i>Barytelphusa</i>	<i>cunicularis</i>	Manjery-Trissur Road, Kerala	India
H25	<i>Barytelphusa</i>	<i>cunicularis</i>	Manjery-Trissur Road, Kerala	India
H26	<i>Travancoriana</i>	<i>schirnerae</i>	Mettupalayam-Ooti Road, Tamil Nadu	India
H26	<i>Travancoriana</i>	<i>schirnerae</i>	Mettupalayam-Ooti Road, Tamilnadu.	India
H27	<i>Oziotelphusa</i>	<i>sp. 6</i>	Kolaththupuzha-Tenmalai Road, Kerala	India
H28	<i>Travancoriana</i>	<i>sp. 5</i>	Kumerli-Munnar Road, Kerala	India
H29	<i>Oziotelphusa</i>	<i>sp. 7</i>	Angamali-Thoduppasa Road, Kerala	India
H29	<i>Oziotelphusa</i>	<i>sp. 7</i>	Trissur-Chalakudy Road, Kerala	India
H29	<i>Oziotelphusa</i>	<i>sp. 7</i>	near Angamali, Kerala	India
H29	<i>Oziotelphusa</i>	<i>sp. 7</i>	Angamali- Thodoppusa Road, Kerala	India
H30	<i>Barytelphusa</i>	<i>lamellifrons</i>	Between Ranni-Kumerli, Kerala	India
H30	<i>Barytelphusa</i>	<i>lamellifrons</i>	unknown	India
H31	<i>Barytelphusa</i>	<i>sp. 1</i>	Chathankodu, Kerala	India
H31	<i>Barytelphusa</i>	<i>sp. 1</i>	Chathankodu, Kerala	India
H32	<i>Travancoriana</i>	<i>sp. 1</i>	Ponmudi, Kerala	India
H32	<i>Travancoriana</i>	<i>sp. 1</i>	Ponmudi, Kerala	India
H33	<i>Cylindrotelphusa</i>	<i>steniops</i>	Chathankodu, Kerala	India
H34	<i>Mahatha</i>	<i>iora</i>	Duhinda Falls, Uva Province	Sri Lanka
H34	<i>Mahatha</i>	<i>iora</i>	Duhinda Falls, Uva Province	Sri Lanka
H35	<i>Cylindrotelphusa</i>	<i>sp. 1</i>	Gammaduwa Knuckles, central Province	India
H36	<i>Ceylonthelphusa</i>	<i>armata</i>	Kadugannawa, Central Province	Sri Lanka
H37	<i>Perbrinckia</i>	<i>sp. 1</i>	Batadomba cave, Kuruwita, Sabaragamuva Province	Sri Lanka
H37	<i>Perbrinckia</i>	<i>sp. 1</i>	Batadomba cave, Kuruwita, Sabaragamuva Province	Sri Lanka
H38	<i>Ceylonthelphusa</i>	<i>cavatrix</i>	Pathanegala	Sri Lanka
H38	<i>Ceylonthelphusa</i>	<i>sp. 1</i>	Batambakuruwita	Sri Lanka
H39	<i>Travancoriana</i>	<i>sp. 2</i>	Ponmudi, Kerala	India
H40	<i>Mahatha</i>	<i>ornatipes</i>	Navinna, Southern Province	Sri Lanka
Out	<i>Portunus</i>	<i>trituberculatus</i>	-GenBank -	Unknown
Out	<i>Ilyoplax</i>	<i>pusilla</i>	-GenBank -	Unknown
Out	<i>Mictyris</i>	<i>brevidactylus</i>	-GenBank -	Unknown

Table S1. List of specimens sampled (continued).

Hapl. Genus	Species	Locality	Country	
Shrimps				
H1	<i>Caridina</i>	<i>typus</i>	Rumassala, Southern Province	Sri Lanka
H2	<i>Caridina</i>	<i>cruzi</i>	Imaduwa, Southern Province	Sri Lanka
H2	<i>Caridina</i>	<i>cruzi</i>	Kamburupitiya, Southern Province	Sri Lanka
H2	<i>Caridina</i>	<i>cruzi</i>	Kosmulla, Southern Province	Sri Lanka
H3	<i>Caridina</i>	<i>cumariae</i>	Rozella, Central Province	Sri Lanka
H4	<i>Caridina</i>	<i>pristis</i>	Pussellawa, Central Province	Sri Lanka
H4	<i>Caridina</i>	<i>pristis</i>	Peradeniya, Central Province	Sri Lanka
H5	<i>Caridina</i>	<i>propinqua</i>	Ratgama lake, Southern Province	Sri Lanka
H6	<i>Caridina</i>	<i>singhalensis</i>	Horton Plains, Central Province	Sri Lanka
H6	<i>Caridina</i>	<i>singhalensis</i>	Galpalama, Central Province	Sri Lanka
H7	<i>Caridina</i>	<i>sp. 1</i>	Kandy Lake, Central Province	Sri Lanka
H8	<i>Caridina</i>	<i>sp. 10</i>	Elledola, Southern Province	Sri Lanka
H9	<i>Caridina</i>	<i>sp. 11</i>	Batakitta, Sabaragamuwa Province	Sri Lanka
H10	<i>Caridina</i>	<i>sp. 12</i>	Lelkada, Southern Province	Sri Lanka
H10	<i>Caridina</i>	<i>sp. 12</i>	Thalduwa, Sabaragamuwa Province	Sri Lanka
H10	<i>Caridina</i>	<i>sp. 12</i>	Battaluoya	Sri Lanka
H10	<i>Caridina</i>	<i>sp. 12</i>	Babbarugahana ella, Central Province	Sri Lanka
H10	<i>Caridina</i>	<i>sp. 12</i>	Wellemedan, Southern Province	Sri Lanka
H11	<i>Caridina</i>	<i>sp. 13</i>	Midigahamulla, Sabaragamuwa Province	Sri Lanka
H12	<i>Caridina</i>	<i>sp. 14</i>	Kandy Lake, Central Province	Sri Lanka
H13	<i>Caridina</i>	<i>sp. 15</i>	Wasgomuwa, Northern Central Province	Sri Lanka
H14	<i>Caridina</i>	<i>sp. 16</i>	Madukotantarawa	Sri Lanka
H15	<i>Caridina</i>	<i>sp. 17</i>	Moneragala, Uva Province	Sri Lanka
H16	<i>Caridina</i>	<i>sp. 18</i>	Moderuwa, Western Province	Sri Lanka
H16	<i>Caridina</i>	<i>sp. 18</i>	Wakwella, Southern Province	Sri Lanka
H17	<i>Caridina</i>	<i>sp. 19</i>	Vikom, Kerala	India
H18	<i>Caridina</i>	<i>sp. 2</i>	Porunthanur, Kerala	India
H19	<i>Caridina</i>	<i>sp. 20</i>	near Sanchipuram, Tamil Nadu	India
H20	<i>Caridina</i>	<i>sp. 22</i>	Between Kanjirappalli-Palai, Kerala	India
H21	<i>Caridina</i>	<i>sp. 23</i>	near Thamarahulam, Kerala	India
H22	<i>Caridina</i>	<i>sp. 24</i>	Kattakada, Kerala	India
H23	<i>Caridina</i>	<i>sp. 25</i>	Vellikkunnam, Kerala	India
H24	<i>Caridina</i>	<i>sp. 26</i>	Kumarakom, Kerala	India
H24	<i>Caridina</i>	<i>sp. 26</i>	Achchankovil River, Kerala	India
H25	<i>Caridina</i>	<i>sp. 21</i>	unknown	India
H26	<i>Caridina</i>	<i>sp. 27</i>	Kottawa, Southern Province	Sri Lanka
H27	<i>Caridina</i>	<i>sp. 3</i>	Vellikkunnam, Kerala	India
H27	<i>Caridina</i>	<i>sp. 3</i>	Near Kanjirappalli, Kerala	India
H28	<i>Caridina</i>	<i>sp. 4</i>	Mawanana, Southern Province	Sri Lanka
H29	<i>Caridina</i>	<i>sp. 5</i>	Parhenegedera dola, Central Province	Sri Lanka
H30	<i>Caridina</i>	<i>sp. 6</i>	Ekneligoda, Sabaragamuwa Province	Sri Lanka
H31	<i>Caridina</i>	<i>sp. 7</i>	Mawanana, Southern Province	Sri Lanka
H32	<i>Caridina</i>	<i>sp. 8</i>	Rumassala, Southern Province	Sri Lanka
H33	<i>Caridina</i>	<i>sp. 9</i>	Mawanana, Southern Province	Sri Lanka
Out	<i>Caridina</i>	<i>celebensis</i>	Sg Keiling, Pulau Tioman Island	Malaysia

Table S1. List of specimens sampled (continued).

2. DNA methods and alignment

Mitochondrial DNA fragments were PCR-amplified and sequenced on both strands. Primers used in this study are provided in Table S2. The following fragments were amplified and sequenced:

Treefrogs: (i) a ~580 bp segment of the Cytb gene, (ii) a ~500 bp segment including portion of the ND1 gene, the complete tRNA^{Ile} and tRNA^{Gln} genes, and portion of the tRNA^{Met} gene, (iii) a ~370 bp segment of the 12S rRNA gene.

Caecilians: a ~375 bp segment of the 12S rRNA gene, a ~535 bp segment of the 16S rRNA gene and a ~690 bp segment of the Cytb gene.

Snakes: a ~375 bp segment of the 12S rRNA gene and a ~505 bp segment of the 16S rRNA gene.

Fishes: a ~590 bp segment of the 16S rRNA gene and a ~540 bp segment of the Cytb gene.

Shrimps and crabs: a ~1,310 bp segment including portion of the 16S rRNA gene, tRNA^{Val} and portion of the 12S rRNA gene.

Alias	Primer sequence (5' - 3')	Reference
Cytb-A	CCATGAGGACAAATATCATTYTGRGG	Bossuyt & Milinkovitch (2000) <i>PNAS</i> 97 : 6585-6590
Cytb-B	CTTCTACTGGTTGCCTCCGATTCA	Bossuyt & Milinkovitch (2000) <i>PNAS</i> 97 : 6585-6590
Cytb-C	CTACTGGTTGCCTCCGATTCATGT	Bossuyt & Milinkovitch (2000) <i>PNAS</i> 97 : 6585-6590
Cytb-D	TATGTTCTACCATGAGGACAAATATC	Simon et al. (1994) <i>Ann. Entomol. Soc. Am.</i> 87 : 651-701
Cytb-E	ACCTCTCATCCTTATGAAACTTTGG	this study
12V16-A	ACAAGCGCCAGGGWAYTACGAGC	Bossuyt & Milinkovitch (2000) <i>PNAS</i> 97 : 6585-6590
12V16-B	TTCATTGTTATTTAATCTTTCCC	Bossuyt & Milinkovitch (2000) <i>PNAS</i> 97 : 6585-6590
12V16-C	AAACTGGGATTAGATACCCCACTAT	Richards & Moore (1996) <i>Mol. Phylogenet. Evol.</i> 5 : 522-532.
12V16-D	GAGGGTGACGGGCGGTGTGT	this study
12V16-E	GCTAGACCATKATGCAAAAAGGTA	Richards & Moore (1996) <i>Mol. Phylogenet. Evol.</i> 5 : 522-532.
16S-A	CGCCTGTTTAYCAAAAACAT	Simon et al. (1994) <i>Ann. Entomol. Soc. Am.</i> 87 : 651-701
16S-B	CCGGTYTGAACCTCAGATCAYGT	Simon et al. (1994) <i>Ann. Entomol. Soc. Am.</i> 87 : 651-701
NDH-A	GCCCCATTTGACCTCACAGAAGG	this study
NDH-D	GGTATGGGCCAAAAGCTT	this study
MITO1-A	GTACATATCGCCCGTCGCTT	Kitaura et al. (1998) <i>Mol. Biol. Evol.</i> 15 : 626-637
MITO1-C	CATGTACATATCGCCCGTCG	this study
MITO1-B	TTGCACGGTCATAATACCGC	this study

Table S2. - Primers used in this study.

The use of mitochondrial DNA. - Biogeographic studies that are based solely on mitochondrial DNA should be interpreted with caution, because patterns in mitochondrial haplotypes can become at least partially decoupled from that in chromosomal DNA (*SI*). However, decoupling of mtDNA and nuDNA loci is a problem that generally occurs at a recent time scale (populations within species). In this study, differential sorting might cause some disagreements between mitochondrial and nuclear trees *within* each Sri Lankan/Indian clade, but it is hard to imagine the process to cause discrepancies between nuclear and mitochondrial loci regarding the existence of these clades.

3. Phylogenetic analyses

Sequences were aligned using ClustalX 1.64 (S2) and ambiguous sections were excluded for subsequent analyses. Plots of transitions and transversions against uncorrected and GTR-corrected pairwise distances indicated that none of the fragments showed saturation. The most appropriate likelihood model was determined with Modeltest 3.06 (S3). An overview of the results of parsimony and Modeltest 3.06 analyses are provided in table S3.

	Shrimps	Crabs	Snakes	Frogs	Caecilians	Fishes
Number of specimens sequenced	44	77	33	44	35	51
Unique haplotypes	33	40	22	34	28	41
Total data matrix (bp)	1363	1430	910	1489	1659	1153
Unambiguously aligned (bp)	836	764	815	1369	1366	1065
Parsimony informative (bp)	227	247	115	623	414	316
Constant (bp)	524	423	634	654	830	679
Number of MP trees	8	108	1	6	6	6
Length of MP trees (10,000 reps)	833	1126	372	4099	1479	1400
Hierarchical chi-square test	HKY+G+I	GTR+G+I	TrN+G+I	TrN+G+I	GTR+G+I	TrN+G+I
Akaike Information Criterion	TVM+G+I	GTR+G+I	GTR+G+I	HKY+G+I	GTR+G+I	GTR+G+I

Table S3. An overview of the results of parsimony and Modeltest 3.06 analyses

- *Maximum parsimony*

MP analyses were performed using PAUP* 4.0b10 (S4). Heuristic maximum parsimony (MP) searches were performed with 10,000 replicates each with a random addition starting tree (all characters unordered and equally weighted). Clade support under MP was calculated using nonparametric bootstrapping (S5) in 10,000 replicates (Fig S1).

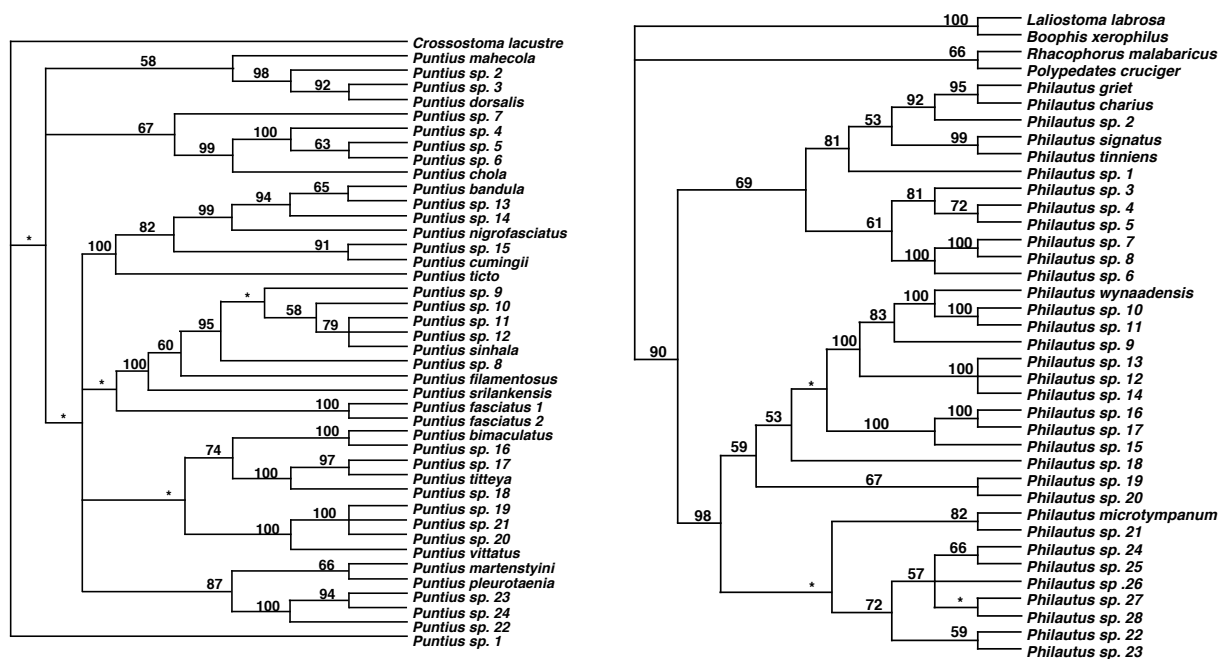


Fig. S1. - Strict consensus of equally parsimonious trees for each of the six groups. The numbers on the branches indicate MP bootstrap values for 10,000 replicates.

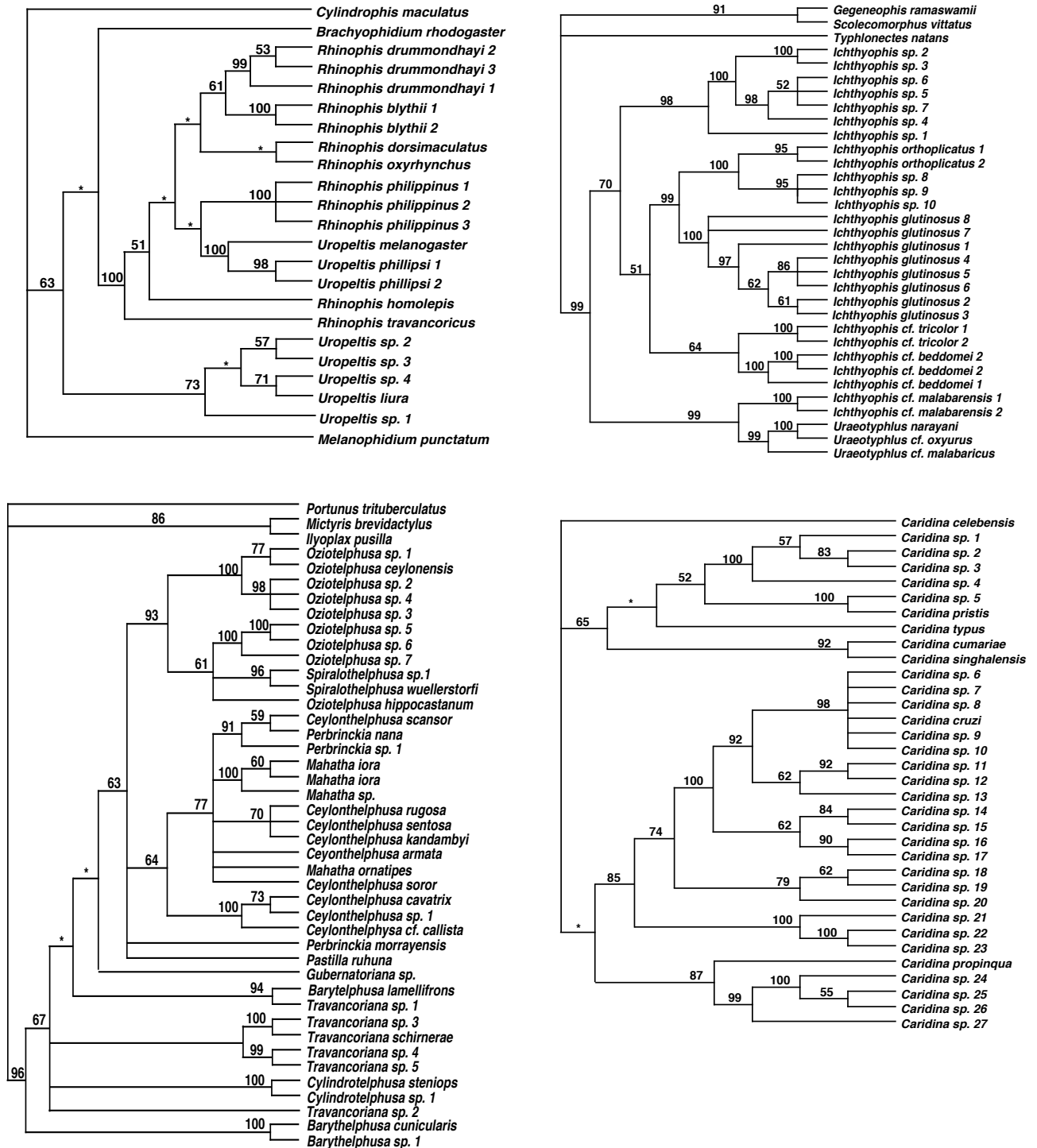


Fig. S1. (Continued) - Strict consensus of equally parsimonious trees for each of the six groups.

The numbers on the branches indicate MP bootstrap values for 10,000 replicates.

- *Maximum Likelihood*

We conducted 250 replicated metaGA searches using MetaPIGA 1.0.2b (S6), each with strict consensus pruning among four populations, using the HKY+G+I model (the model in MetaPIGA that best approximates the model proposed by Modeltest under the AIC criterion) with the Ti/Tv ratio optimized every 200 generations. The 1,000 resulting trees were used to compute metaGa branch support values and thus estimate posterior probabilities of branches (Fig. 2).

- *Bayesian analyses*

Bayesian analyses were performed using MrBayes v.3.0b4 (S7) under the models that best approximate the model proposed by Modeltest 3.06 under the AIC criterion. Four chains were run simultaneously for 2,000,000 generations and trees were sampled every 200 cycles. We discarded the first 2,000 trees as the "burn in". Hence Bayesian posterior probabilities were estimated as the 50% majority-rule consensus tree of the 8,000 remaining trees (Fig. S2). Repeated runs confirmed the successful convergence to the posterior parameter distribution.

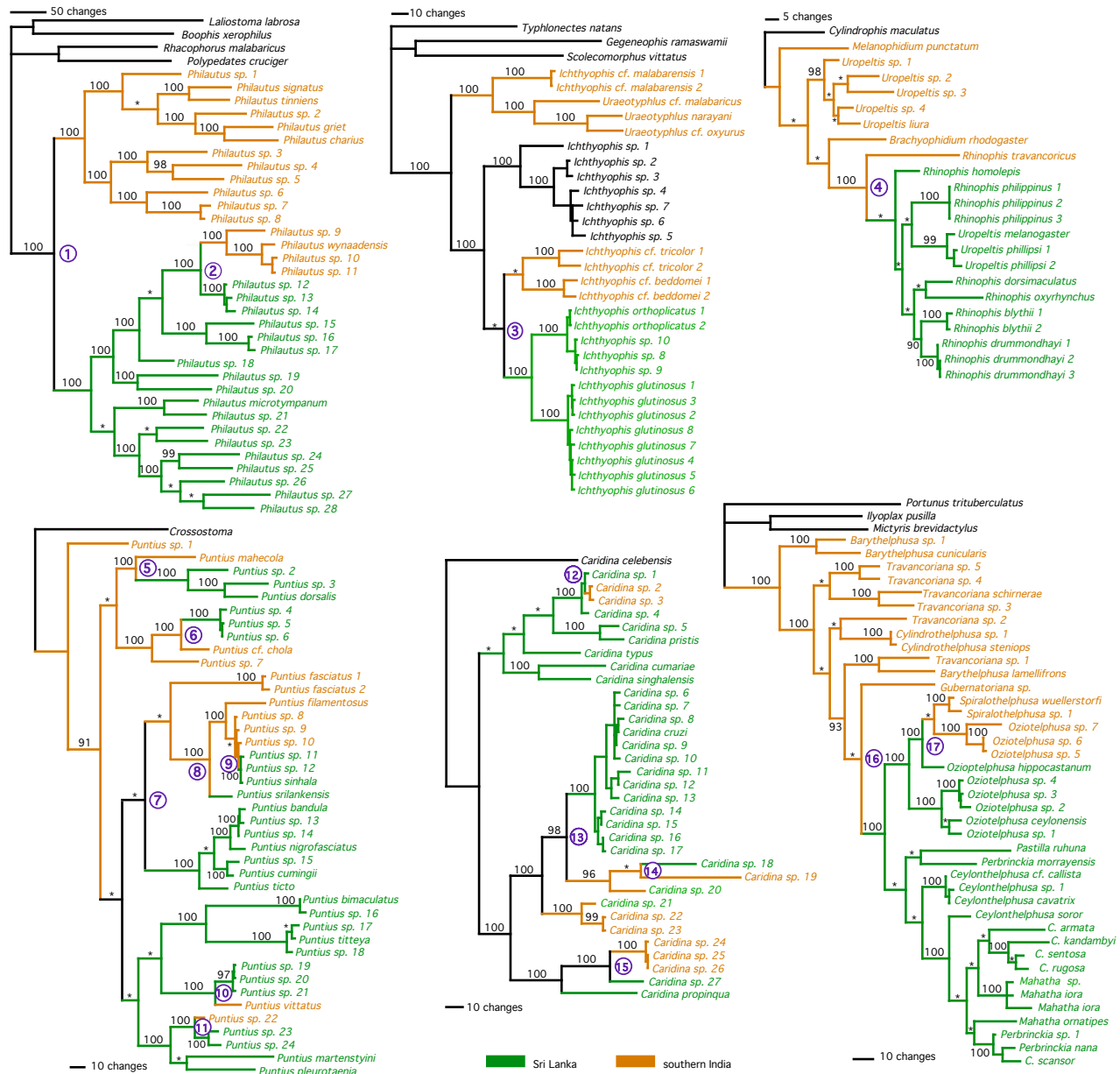


Fig. S2. - Phylogenetic relationships among Indian (orange) and Sri Lankan (green) species. Numbers on branches and asterisks indicate bayesian posterior probability values $\geq 90\%$ and $< 90\%$, respectively. Numbers in purple are biotic exchange events between India and Sri Lanka, cross-referenced in Table S4.

4. Time estimation

To evaluate whether biotic exchange between southern India and Sri Lanka occurred during late Pleistocene sea-level lowstands, we calculated interval estimates for dates of divergence at every node that represents a split between Indian and Sri Lankan lineages (Table S4). As reliable calibration points were not available, we determined the median (and minimum and maximum) of all pairwise divergences between taxa on either side of each corresponding node. Because rates are unknown for most of our specific taxa, we based our divergence time estimates on a range of published mtDNA clock rates in each taxonomic group separately. Brachyuran rates reported for rDNA are fairly comparable, ranging from 0,65-0,88% (S8) to 0,9% (S9). The same range was used for shrimps (S10). We applied a broad range of divergence rates, between 0.65% per Myr (S11) and 1,25-1,32% per Myr reported for freshwater fishes of the genus *Barbus* in *cytb* (S12), to estimate divergences in *Puntius*. In amphibians, a range of divergence rates has been published: 0,38% per Myr for rDNA and 0,77% per Myr for *cytb* in newts (S13), 0,69% per Myr in the ND1-ND2 region of Bufonidae (S14) and 1% in 16S rDNA of Ranidae (S15). For snakes, we used a rate interval of 0.47 to 1.32% per Myr (S16).

Two of the nodes in our trees are backed by published estimates: first, the estimated divergence of 21 - 43 mya between *Philautus charius* and (*P. microtypanum*, *P. wynaadensis*) in (S17) corresponds to node 1 in our Fig. S2. Second, ref. (S18) estimated a minimum of 10-15 million years divergence between Sri Lankan and Indian uropeltids, which corresponds to node 4 in Fig. S2.

	Node	Sequence divergence (%)			Range for mtDNA clock rate [Ref.]	Estimated time (Myr)		Minimum age (Myr)	Score
		Median	Min.	Max.		Calculated	Published		
Treefrogs	1	0.201	0.177	0.230	0.38 - 1.00 [S13, S14, S15]	20.1 - 52.9	21-43	17.74	**
	2	0.096	0.091	0.122	0.38 - 1.00 [S13, S14, S15]	9.6 - 25.3	-	9.11	**
Caecilians	3	0.099	0.093	0.105	0.38 - 1.00 [S13, S14, S15]	9.9 - 26.0	-	9.25	**
Snakes	4	0.078	0.071	0.086	0.47 - 1.32 [S16]	5.9 - 16.7	10-15	5.42	**
Fishes	5	0.107	0.101	0.108	0.65 - 1.32 [S11, S12]	8.1 - 8.6	-	7.68	**
	6	0.048	0.047	0.050	0.65 - 1.32 [S11, S12]	3.6 - 3.8	-	3.56	*
	7	0.098	0.086	0.126	0.65 - 1.32 [S11, S12]	7.4 - 7.8	-	6.54	**
	8	0.035	0.031	0.058	0.65 - 1.32 [S11, S12]	2.6 - 2.8	-	2.35	*
	9	0.005	0.004	0.005	0.65 - 1.32 [S11, S12]	0.4 - 0.4	-	0.28	#
	10	0.030	0.030	0.032	0.65 - 1.32 [S11, S12]	2.3 - 2.4	-	2.28	*
	11	0.024	0.023	0.024	0.65 - 1.32 [S11, S12]	1.8 - 1.9	-	1.71	*
Shrimps	12	0.008	0.007	0.009	0.65 - 0.90 [S8, S9, S10]	0.9 - 1.2	-	0.81	#
	13	0.094	0.080	0.128	0.65 - 0.90 [S8, S9, S10]	10.4 - 14.4	-	8.88	**
	14	0.113	0.113	0.113	0.65 - 0.90 [S8, S9, S10]	12.5 - 17.3	-	12.51	**
	15	0.052	0.052	0.052	0.65 - 0.90 [S8, S9, S10]	5.8 - 8.0	-	5.78	**
Crabs	16	0.107	0.092	0.120	0.65 - 0.90 [S8, S9, S10]	11.9 - 16.5	-	10.18	**
	17	0.055	0.029	0.066	0.65 - 0.90 [S8, S9, S10]	6.1 - 8.4	-	3.20	*

Table S4. - Percent sequence divergences and time estimates. The range of nodal ages reflects the median divided by the max. and min. % divergence, *resp.*, for biotic exchange events indicated by purple numbers in Fig. S2. We also calculated a conservative minimum age (*i.e.*, the minimum sequence divergence divided by the maximum rate). Based on the latter calculation, 10 out of the 17 estimated times predate the sea-level lowstands of the past 500,000 years by an order of magnitude (*i.e.*, > 10 times, indicated by **), and five more by threefold (indicated by *). Only two exchange events are estimated younger than 1 million year (indicated by #).

We calculated a conservative minimum age of divergence (Table S4) as the minimum sequence divergence for a split in our data divided by the maximum published rate. Our estimates of nodal times corresponding to biotic exchange events pre-date the border of 500,000 years by an order of magnitude (*i.e.*, 10-fold) in 10 nodes and by three-fold in 5 nodes. These approximations should be viewed with caution, given that they are likely subject to several problems discussed in the literature (S19). Additionally, some calculated splits may not represent the actual biotic exchange event between the mainland and the island Sri Lanka, because we can not rule out closer relationships of Asian taxa with Indian or Sri Lankan taxa in some groups (*cf.* remark 16 in References and Notes).

Nevertheless, our estimates suggest that the late Pleistocene sea-level lowstands had little influence on the dispersal of several of Sri Lanka's prominent faunal groups.

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