

Table S1. Sequences produced in this study. BINS with * represent new public BINS to BOLD.

Identification	Sample ID	Process ID	BIN
<i>Artibeus (Dermanura) anderseni</i>	JFD_01228	MACAU043-19	BOLD:ADZ9406*
<i>Artibeus (Dermanura) anderseni</i>	JFD_01247	MACAU044-19	BOLD:ADZ9406*
<i>Artibeus (Dermanura) anderseni</i>	JFD_01276	MACAU045-19	BOLD:ADZ9406*
<i>Artibeus (Dermanura) anderseni</i>	JFD_01284	MACAU046-19	BOLD:ADZ9406*
<i>Artibeus (Dermanura) anderseni</i>	JFD_01303	MACAU047-19	BOLD:ADZ9406*
<i>Artibeus lituratus</i>	JFD_01279	MACAU055-19	BOLD:AAA0874
<i>Artibeus lituratus</i>	JFD_01280	MACAU056-19	BOLD:AAA0874
<i>Artibeus planirostris</i>	JFD_01246	MACAU048-19	BOLD:ABZ9500
<i>Artibeus planirostris</i>	JFD_01252	MACAU049-19	BOLD:ABZ9500
<i>Artibeus planirostris</i>	JFD_01254	MACAU050-19	BOLD:ABZ9500
<i>Artibeus planirostris</i>	JFD_01255	MACAU051-19	BOLD:ABZ9500
<i>Artibeus planirostris</i>	JFD_01266	MACAU052-19	BOLD:ABZ9500
<i>Artibeus planirostris</i>	JFD_01272	MACAU053-19	BOLD:ABZ9500
<i>Artibeus planirostris</i>	JFD_01273	MACAU054-19	BOLD:ABZ9500
<i>Caluromys lanatus</i>	JFD_01290	MACAU001-19	BOLD:ABY0655
<i>Carollia castanea</i>	JFD_01281	MACAU063-19	
<i>Carollia castanea</i>	JFD_01300	MACAU064-19	
<i>Carollia castanea</i>	JFD_01301	MACAU067-19	
<i>Carollia perspicillata</i>	JFD_01224	MACAU057-19	BOLD:AAA0002
<i>Carollia perspicillata</i>	JFD_01229	MACAU058-19	BOLD:AAA0002
<i>Carollia perspicillata</i>	JFD_01234	MACAU059-19	BOLD:AAA0002
<i>Carollia perspicillata</i>	JFD_01250	MACAU060-19	BOLD:AAA0002
<i>Carollia perspicillata</i>	JFD_01275	MACAU061-19	BOLD:AAA0002
<i>Carollia perspicillata</i>	JFD_01319	MACAU062-19	BOLD:AAA0002
<i>Carollia perspicillata</i>	JFD_01274	MACAU065-19	
<i>Carollia perspicillata</i>	JFD_01221	MACAU066-19	
<i>Chiroderma</i> sp.	JFD_01230	MACAU010-19	BOLD:ADZ8446*
<i>Chiroderma</i> sp.	JFD_01267	MACAU022-19	

<i>Chiroderma villosum</i>	JFD_01245	MACAU015-19	BOLD:AAA4283
<i>Chiroderma villosum</i>	JFD_01248	MACAU016-19	BOLD:AAA4283
<i>Chiroderma villosum</i>	JFD_01256	MACAU017-19	BOLD:AAA4283
<i>Chiroderma villosum</i>	JFD_01257	MACAU018-19	BOLD:AAA4283
<i>Chiroderma villosum</i>	JFD_01264	MACAU021-19	BOLD:AAA4283
<i>Desmodus rotundus</i>	JFD_01288	MACAU027-19	BOLD:AEA2946*
<i>Desmodus rotundus</i>	JFD_01289	MACAU028-19	BOLD:AEA2946*
<i>Desmodus rotundus</i>	JFD_01304	MACAU036-19	BOLD:AEA2946*
<i>Didelphis marsupialis</i>	JFD_01318	MACAU042-19	BOLD:AAA7109
<i>Gardnerycteris crenulatum</i>	JFD_01298	MACAU033-19	BOLD:AEA3129*
<i>Lophostoma occidentale</i>	JFD_01286	MACAU026-19	BOLD:ADR4528*
<i>Lophostoma occidentale</i>	JFD_01291	MACAU029-19	BOLD:ADR4528*
<i>Lophostoma occidentale</i>	JFD_01299	MACAU034-19	
<i>Marmosa (Exulomarmosa) isthmica</i>	JFD_01237	MACAU012-19	BOLD:ADK5609*
<i>Marmosa (Exulomarmosa) isthmica</i>	JFD_01262	MACAU019-19	BOLD:ADK5609*
<i>Marmosa (Exulomarmosa) isthmica</i>	JFD_01263	MACAU020-19	BOLD:ADK5609*
<i>Marmosa (Exulomarmosa) isthmica</i>	JFD_01293	MACAU030-19	BOLD:ADK5609*
<i>Marmosa (Exulomarmosa) isthmica</i>	JFD_01294	MACAU031-19	BOLD:ADK5609*
<i>Marmosa (Exulomarmosa) isthmica</i>	JFD_01296	MACAU032-19	BOLD:ADK5609*
<i>Micronycteris megalotis</i>	JFD_01311	MACAU037-19	BOLD:AAA6107
<i>Molossops temminckii</i>	JFD_01220	MACAU005-19	BOLD:AEA3427*
<i>Molossus molossus</i>	JFD_01217	MACAU002-19	BOLD:AAA2454
<i>Molossus rufus</i>	JFD_01225	MACAU007-19	BOLD:ADK2184
<i>Molossus rufus</i>	JFD_01227	MACAU009-19	BOLD:ADK2184
<i>Molossus rufus</i>	JFD_01231	MACAU011-19	BOLD:ADK2184
<i>Molossus rufus</i>	JFD_01315	MACAU039-19	BOLD:ADK2184
<i>Molossus rufus</i>	JFD_01317	MACAU041-19	BOLD:ADK2184
<i>Molossus</i> sp.	JFD_01226	MACAU008-19	BOLD:AAA2454
<i>Molossus</i> sp.	JFD_01314	MACAU038-19	BOLD:AAA2454
<i>Molossus</i> sp.	JFD_01316	MACAU040-19	BOLD:AAA2454
<i>Myotis</i> sp.	JFD_01308	MACAU070-19	BOLD:AEA0898*

<i>Myotis</i> sp.	JFD_01309	MACAU071-19	BOLD:AEA0898*
<i>Myotis</i> sp.	JFD_01310	MACAU072-19	BOLD:AEA0898*
<i>Myotis</i> sp.	JFD_01312	MACAU073-19	BOLD:AEA0898*
<i>Notosciurus granatensis</i>	JFD_01307	MACAU081-19	BOLD:ADZ8687*
<i>Phyllostomus hastatus</i>	JFD_01222	MACAU006-19	
<i>Platyrrhinus helleri</i>	JFD_01218	MACAU003-19	BOLD:AAA2242
<i>Platyrrhinus helleri</i>	JFD_01243	MACAU014-19	BOLD:AAA2242
<i>Platyrrhinus helleri</i>	JFD_01268	MACAU023-19	BOLD:AAA2242
<i>Platyrrhinus helleri</i>	JFD_01278	MACAU024-19	BOLD:AAA2242
<i>Proechimys semispinosus</i>	JFD_01235	MACAU074-19	BOLD:ADR6889*
<i>Proechimys semispinosus</i>	JFD_01236	MACAU075-19	BOLD:ADR6889*
<i>Proechimys semispinosus</i>	JFD_01271	MACAU076-19	BOLD:ADR6889*
<i>Proechimys semispinosus</i>	JFD_01297	MACAU077-19	BOLD:ADR6889*
<i>Proechimys semispinosus</i>	JFD_01306	MACAU078-19	BOLD:ADR6889*
<i>Proechimys semispinosus</i>	JFD_01320	MACAU079-19	BOLD:ADR6889*
<i>Proechimys semispinosus</i>	JFD_01321	MACAU080-19	BOLD:ADR6889*
<i>Uroderma convexum</i>	JFD_01219	MACAU004-19	BOLD:AAA2524
<i>Uroderma convexum</i>	JFD_01240	MACAU013-19	BOLD:AAA2524
<i>Uroderma convexum</i>	JFD_01285	MACAU025-19	BOLD:AAA2524
<i>Uroderma convexum</i>	JFD_01302	MACAU035-19	BOLD:AAA2524
<i>Vampyressa thuyone</i>	JFD_01287	MACAU068-19	BOLD:AAA6871
<i>Vampyressa thuyone</i>	JFD_01292	MACAU069-19	BOLD:AAA6871

Table S2. PCR protocol and reagents.

Gene:taxa	Reagents concentrations	Thermocycler profile
COI	MgCl ₂ : 2mM, Buffer PCR 10x with KCl: 1X, Primers: 0.14 (each cocktail), dNTP: 0.2 mM, Taq: 1U, DNA template: 100 ng/ul	95°C - 2min 28 cycles of 95°C - 30s 52°C - 40s 72°C - 1min Final extension:

		72°C - 10min
CYTB:Chiroptera	MgCl ₂ : 1.4mM, Buffer PCR 10x with KCl: 1X, Primers: 0.06, dNTP: 0.14 mM, Taq: 2U, DNA template: 100 ng/ul	95°C - 2min 5 cycles of 95°C - 30s 54°C - 40s 72°C - 1min 5 cycles of 95°C - 30s 59°C - 40s 72°C - 1min 25 cycles of 95°C - 30s 61°C - 40s 72°C - 1min Final extension: 72°C - 10min
CYTB:Didelphidae	MgCl ₂ : 1.78mM, Buffer PCR 10x with KCl: 0.5X, Primers: 0.03, dNTP: 0.05 mM, Taq: 1.5U, DNA template: 100 ng/ul	94°C - 2min 32 cycles of 94°C - 15s 48°C - 20s 72°C - 1min Final extension: 72°C - 10min
CYTB:Rodentia	MgCl ₂ : 1.78mM, Buffer PCR 10x with KCl: 0.57X, Primers: 0.03, dNTP: 0.05 mM, Taq: 1.5U, DNA template: 100 ng/ul	95°C - 2min 32 cycles of 95°C - 30s 50°C - 30s 72°C - 1min Final extension: 72°C - 10min

Table S3. Scientific papers published for Colombia using DNA barcoding by taxa studied.

Class	Reference
Actinopterygii	(Machado et al. 2017)
Actinopterygii	(Mesa-S et al. 2018)
Actinopterygii	(Salinas et al. 2014)
Amphibia	(García-R et al. 2012)
Amphibia	(Guarnizo et al. 2015)
Amphibia	(Márquez et al. 2012)
Amphibia	(Pinto-Sánchez et al. 2012)
Aves	(Mendoza et al. 2016)
Blastocystae	(Ramírez et al. 2014)
Eurotiomycetes	(Yilmaz et al. 2016)
Gastropoda	(Correa et al. 2011)
Insecta	(Ahumada et al. 2016)
Insecta	(Brehm 2018)
Insecta	(Buenaventura et al. 2018)
Insecta	(Carrero-Sarmiento and Hoyos-López 2018)
Insecta	(Davis and Wagner 2011)
Insecta	(Decaëns and Rougerie 2008)
Insecta	(Diaz et al. 2015)
Insecta	(Giraldo and Uribe 2012)
Insecta	(Gómez et al. 2013)
Insecta	(González et al. 2018)
Insecta	(González et al. 2010)
Insecta	(Gunawardana et al. 2017)
Insecta	(Gutiérrez et al. 2014)
Insecta	(Hoyos-L. et al. 2012)
Insecta	(Hoyos-López et al. 2015)
Insecta	(López-Rubio et al. 2016)
Insecta	(Mengual and Thompson 2008)
Insecta	(Naranjo-Díaz et al. 2014)
Insecta	(Prieto et al. 2016)
Insecta	(Pyrz et al. 2016)
Insecta	(Romero-Ricardo et al. 2016)
Insecta	(Rosero et al. 2012)
Insecta	(Rozo-Lopez and Mengual 2015)
Insecta	(Ruiz et al. 2010)

Insecta	(Ruiz-Lopez et al. 2012)
Insecta	(Ruiz-Lopez et al. 2013)
Insecta	(Sánchez Herrera et al. 2010)
Insecta	(Solano et al. 2013)
Insecta	(Velasco-Cuervo et al. 2016)
Insecta	(Yusseff-Vanegas and Agnarsson 2017)
Insecta	(Zamora-Delgado et al. 2015)
Lecanoromycetes	(Moncada et al. 2014)
Reptilia	(Daza-Criado and Hernández-Fernández 2014)
Saccharomycetes	(Parra-Giraldo et al. 2018)
Sordariomycetes	(López-Quintero et al. 2013)
Symphyla	(Salazar-Moncada et al. 2015)

Table S3. List of COI sequences used as in-groups and out-groups in alignments and Maximum Likelihood trees.

See attachment *Table_S3_COI.csv*

Table S4. List of CYTB sequences used as in-groups and out-groups in alignments and Maximum Likelihood trees.

See attachment *Table_S4_CYTB.csv*

References.

- Ahumada ML, Orjuela LI, Pareja PX, Conde M, Cabarcas DM, Cubillos EFG, Lopez JA, Beier JC, Herrera S, Quiñones ML (2016) Spatial distributions of Anopheles species in relation to malaria incidence at 70 localities in the highly endemic Northwest and South Pacific coast regions of Colombia. *Malaria Journal* 15. <https://doi.org/10.1186/s12936-016-1421-4>
- Brehm G (2018) Revision of the genus *Callipia* Guenée, 1858 (Lepidoptera, Geometridae), with the description of 15 new taxa. *European Journal of Taxonomy* 404: 1–54. <https://doi.org/10.5852/ejt.2018.404>
- Buenaventura E, Valverde-Castro C, Wolff M, Triana-Chavez O, Gómez-Palacio A (2018) DNA barcoding for identifying synanthropic flesh flies (Diptera, Sarcophagidae) of Colombia. *Acta Tropica* 182: 291–297. <https://doi.org/10.1016/j.actatropica.2018.01.020>

- Carrero-Sarmiento D, Hoyos-López R (2018) Molecular identification and genetic diversity of *Lutzomyia gomezi* (Diptera : Psychodidae) using DNA-barcodes in Cordoba, Colombia. *Tropical biomedicine* 35: 100–110.
- Correa AC, Escobar JS, Noya O, Velásquez LE, González-Ramírez C, Hurtrez-Boussès S, Pointier J-P (2011) Morphological and molecular characterization of Neotropic Lymnaeidae (Gastropoda: Lymnaeoidea), vectors of fasciolosis. *Infection, Genetics and Evolution* 11: 1978–1988.
<https://doi.org/10.1016/j.meegid.2011.09.003>
- Davis D, Wagner D (2011) Biology and systematics of the New World Phyllocnistis Zeller leafminers of the avocado genus *Persea* (Lepidoptera, Gracillariidae). *ZooKeys* 97: 39–73. <https://doi.org/10.3897/zookeys.97.753>
- Daza-Criado L, Hernández-Fernández J (2014) Molecular identification and first report of mitochondrial COI gene haplotypes in the hawksbill turtle *Eretmochelys imbricata* (Testudines: Cheloniidae) in the Colombian Caribbean nesting colonies. *Genetics and molecular research: GMR* 13: 7123–7132.
<https://doi.org/10.4238/2014.February.21.14>
- Decaëns T, Rougerie R (2008) Descriptions of two new species of Hemileucinae (Lepidoptera: Saturniidae) from the region of Muzo in Colombia—evidence from morphology and DNA barcodes. *Zootaxa* 1944: 34–52.
- Diaz SA, Moncada LI, Murcia CH, Lotta IA, Matta NE, Adler PH (2015) Integrated taxonomy of a new species of black fly in the subgenus *Trichodagmia* (Diptera: Simuliidae) from the Páramo Region of Colombia. *Zootaxa* 3914: 541–557.
<https://doi.org/10.11646/zootaxa.3914.5.3>
- García-R JC, Crawford AJ, Mendoza ÁM, Ospina O, Cardenas H, Castro F (2012) Comparative Phylogeography of Direct-Developing Frogs (Anura: Craugastoridae: *Pristimantis*) in the Southern Andes of Colombia. *PLOS ONE* 7: e46077. <https://doi.org/10.1371/journal.pone.0046077>
- Giraldo CE, Uribe SI (2012) Taxonomy of *Mechanitis* (f.) (Lepidoptera: Nymphalidae) from the west Colombian Andes: an integrative approach. *Neotropical Entomology* 41: 472–484. <https://doi.org/10.1007/s13744-012-0071-7>
- Gómez G, Jaramillo L, Correa MM (2013) Wing geometric morphometrics and molecular assessment of members in the *Albitarsis* Complex from Colombia. *Molecular Ecology Resources* 13: 1082–1092. <https://doi.org/10.1111/1755-0998.12126>
- González C, León C, Paz A, López M, Molina G, Toro D, Ortiz M, Cordovez JM, Atencia MC, Aguilera G, Tovar C (2018) Diversity patterns, *Leishmania* DNA detection, and bloodmeal identification of Phlebotominae sand flies in villages in northern Colombia. *PLOS ONE* 13: e0190686.
<https://doi.org/10.1371/journal.pone.0190686>

- González R, Carrejo N, Wilkerson RC, Alarcon J, Alarcon-Ormasa J, Ruiz F, Bhatia R, Loaiza J, Linton Y-M (2010) Confirmation of *Anopheles* (*Anopheles*) *calderoni* Wilkerson, 1991 (Diptera: Culicidae) in Colombia and Ecuador through molecular and morphological correlation with topotypic material. *Memorias Do Instituto Oswaldo Cruz* 105: 1001–1009. <https://doi.org/10.1590/s0074-02762010000800009>
- Guarnizo CE, Paz A, Muñoz-Ortiz A, Flechas SV, Méndez-Narváez J, Crawford AJ (2015) DNA Barcoding Survey of Anurans across the Eastern Cordillera of Colombia and the Impact of the Andes on Cryptic Diversity. Maldonado JE (Ed). *PLOS ONE* 10: e0127312. <https://doi.org/10.1371/journal.pone.0127312>
- Gunawardana DN, Li D, Masumoto M, Mound LA, O'donnell CA, Skarlinsky TL (2017) Resolving the confused identity of *Frankliniella panamensis* (Thysanoptera: Thripidae). *Zootaxa* 4323: 125–131. <https://doi.org/10.11646/zootaxa.4323.1.10>
- Gutiérrez MAC, Vivero RJ, Vélez ID, Porter CH, Uribe S (2014) DNA Barcoding for the Identification of Sand Fly Species (Diptera, Psychodidae, Phlebotominae) in Colombia. *PLOS ONE* 9: e85496. <https://doi.org/10.1371/journal.pone.0085496>
- Hoyos-L. R, Uribe S. S, Vélez I (2012) Tipificación de especímenes colombianos de *Lutzomyia longipalpis* (Diptera: Psychodidae) mediante “Código de Barras.” *Revista Colombiana de Entomología* 38: 134–140.
- Hoyos-López R, Roman Pardo S, Castaño JC, Gallego-Gómez JC (2015) Código de barras para la tipificación de culícidos inmaduros de Armenia y Circasia (Quindío, Colombia). *Revista Colombiana de Entomología* 41: 218–227.
- López-Quintero CA, Atanasova L, Franco-Molano AE, Gams W, Komon-Zelazowska M, Theelen B, Müller WH, Boekhout T, Druzhinina I (2013) DNA barcoding survey of *Trichoderma* diversity in soil and litter of the Colombian lowland Amazonian rainforest reveals *Trichoderma strigosellum* sp. nov. and other species. *Antonie van Leeuwenhoek* 104: 657–674. <https://doi.org/10.1007/s10482-013-9975-4>
- López-Rubio A, Suaza-Vasco J, Marcet PL, Ruíz-Molina N, Cáceres L, Porter C, Uribe S (2016) Use of DNA barcoding to distinguish the malaria vector *Anopheles neivai* in Colombia. *Zootaxa* 4175: 377–389. <https://doi.org/10.11646/zootaxa.4175.4.7>
- Machado CDB, Ishizuka TK, Freitas PDD, Valiati VH, Jr PMG (2017) DNA barcoding reveals taxonomic uncertainty in *Salminus* (Characiformes). *Systematics and Biodiversity* 15: 372–382. <https://doi.org/10.1080/14772000.2016.1254390>
- Márquez R, Corredor GLR, Galvis CEP, Góez D, Amézquita A (2012) Range extension of the critically endangered true poison-dart frog, *Phyllobates terribilis* (Anura: Dendrobatidae), in western Colombia. *Acta Herpetologica* 7: 341–345.

- Mendoza ÁM, Torres MF, Paz A, Trujillo-Arias N, López-Alvarez D, Sierra S, Forero F, Gonzalez MA (2016) Cryptic diversity revealed by DNA barcoding in Colombian illegally traded bird species. *Molecular Ecology Resources* 16: 862–873. <https://doi.org/10.1111/1755-0998.12515>
- Mengual X, Thompson FC (2008) A taxonomic review of the *Palpada ruficeps* species group, with the description of a new flower fly from Colombia (Diptera: Syrphidae). *Zootaxa* 1741: 31–36. <https://doi.org/10.11646/zootaxa.1741.1.3>
- Mesa-S LM, Lasso CA, Ochoa LE, DoNascimento C (2018) *Trichomycterus rosablanca* (Siluriformes, Trichomycteridae) una especie nueva de bagre hipogeo de los Andes colombianos. *Biota Colombiana* 19: 95–116. <https://doi.org/10.21068/c2018.v19s1a09>
- Moncada B, Lücking R, Suárez A (2014) Molecular phylogeny of the genus *Sticta* (lichenized Ascomycota: Lobariaceae) in Colombia. *Fungal Diversity* 64: 205–231. <https://doi.org/10.1007/s13225-013-0230-0>
- Naranjo-Díaz N, Altamiranda M, Luckhart S, Conn JE, Correa MM (2014) Malaria Vectors in Ecologically Heterogeneous Localities of the Colombian Pacific Region. *PLOS ONE* 9: e103769. <https://doi.org/10.1371/journal.pone.0103769>
- Parra-Giraldo CM, Valderrama SL, Cortes-Fraile G, Garzón JR, Ariza BE, Morio F, Linares-Linares MY, Ceballos-Garzón A, de la Hoz A, Hernandez C, Alvarez-Moreno C, Le Pape P (2018) First report of sporadic cases of *Candida auris* in Colombia. *International journal of infectious diseases* 69: 63–67. <https://doi.org/10.1016/j.ijid.2018.01.034>
- Pinto-Sánchez NR, Ibáñez R, Madriñán S, Sanjur OI, Bermingham E, Crawford AJ (2012) The Great American Biotic Interchange in frogs: Multiple and early colonization of Central America by the South American genus *Pristimantis* (Anura: Craugastoridae). *Molecular Phylogenetics and Evolution* 62: 954–972. <https://doi.org/10.1016/j.ympev.2011.11.022>
- Prieto C, Grishin NV, Hausmann A, Lorenc-brudecka J (2016) The *Penaincisalia amatista* species-group (Lepidoptera: Lycaenidae, Eumaeini) in Colombia, insights from mtDNA barcodes and the description of a new species. *Systematics and Biodiversity* 14: 171–183. <https://doi.org/10.1080/14772000.2015.1112314>
- Pyrz TW, Clavijo A, Uribe S, Marin MA, Alvarez CF, Zubek A (2016) Páramo de Belmira as an important centre of endemism in the northern Colombian Andes: new evidence from *Pronophilina* butterflies (Lepidoptera: Nymphalidae, Satyrinae, Satyrini). *Zootaxa* 4179: 77–102. <https://doi.org/10.11646/zootaxa.4179.1.3>
- Ramírez JD, Sánchez LV, Bautista DC, Corredor AF, Flórez AC, Stensvold CR (2014) *Blastocystis* subtypes detected in humans and animals from Colombia. *Infection*,

Genetics and Evolution 22: 223–228.
<https://doi.org/10.1016/j.meegid.2013.07.020>

- Romero-Ricardo L, Lastre-Meza N, Pérez-Doria A, Bejarano EE (2016) DNA barcoding to identify species of phlebotomine sand fly (Diptera: Psychodidae) in the mixed leishmaniasis focus of the Colombian Caribbean. *Acta Tropica* 159: 125–131. <https://doi.org/10.1016/j.actatropica.2016.03.017>
- Rosero DA, Jaramillo LM, Gutiérrez LA, Conn JE, Correa MM (2012) Genetic Diversity of *Anopheles triannulatus* s.l. (Diptera: Culicidae) from Northwestern and Southeastern Colombia. *The American Journal of Tropical Medicine and Hygiene* 87: 910–920. <https://doi.org/10.4269/ajtmh.2012.12-0285>
- Rozo-Lopez P, Mengual X (2015) Mosquito species (Diptera, Culicidae) in three ecosystems from the Colombian Andes: identification through DNA barcoding and adult morphology. *ZooKeys* 513: 39–64. <https://doi.org/10.3897/zookeys.513.9561>
- Ruiz F, Linton Y-M, Ponsonby DJ, Conn JE, Herrera M, Quiñones ML, Vélez ID, Wilkerson RC (2010) Molecular comparison of topotypic specimens confirms *Anopheles* (*Nyssorhynchus*) *dunhami* Causey (Diptera: Culicidae) in the Colombian Amazon. *Memorias Do Instituto Oswaldo Cruz* 105: 899–903. <https://doi.org/10.1590/s0074-02762010000700010>
- Ruiz-Lopez F, Wilkerson RC, Conn JE, McKeon SN, Levin DM, Quiñones ML, Póvoa MM, Linton Y-M (2012) DNA barcoding reveals both known and novel taxa in the *Albitarsis* Group (*Anopheles*: *Nyssorhynchus*) of Neotropical malaria vectors. *Parasites & Vectors* 5: 1–12. <https://doi.org/10.1186/1756-3305-5-44>
- Ruiz-Lopez F, Wilkerson RC, Ponsonby DJ, Herrera M, Sallum MAM, Velez ID, Quiñones ML, Flores-Mendoza C, Chadee DD, Alarcon J, Alarcon-Ormasa J, Linton Y-M (2013) Systematics of the Oswaldoi Complex (*Anopheles*, *Nyssorhynchus*) in South America. *Parasites & Vectors* 6: 324. <https://doi.org/10.1186/1756-3305-6-324>
- Salazar-Moncada DA, Calle-Osorno J, Ruiz-Lopez F (2015) Morphological and molecular study of *Symphyla* from Colombia. *ZooKeys* 484: 121–130. <https://doi.org/10.3897/zookeys.484.8363>
- Salinas C, Cubillos JC, Gómez R, Trujillo F, Caballero S (2014) “Pig in a poke (gato por liebre)”: the “mota” (*Calophysus macropterus*) fishery, molecular evidence of commercialization in Colombia and toxicological analyses. *EcoHealth* 11: 197–206. <https://doi.org/10.1007/s10393-013-0893-8>
- Sánchez Herrera M, Realpe E, Salazar C (2010) A neotropical polymorphic damselfly shows poor congruence between genetic and traditional morphological characters in Odonata. *Molecular Phylogenetics and Evolution* 57: 912–917. <https://doi.org/10.1016/j.ympev.2010.08.016>

- Solano JJ, Wolff M, Castro LR (2013) Identificación molecular de califóridos (Diptera: Calliphoridae) de importancia forense en Colombia. *Revista Colombiana de Entomología* 39: 281–290.
- Velasco-Cuervo SM, Espinosa LL, Duque-Gamboa DN, Castillo-Cárdenas MF, Hernández LM, Guzmán YC, Manzano MR, Toro-Perea N (2016) Barcoding, population structure, and demographic history of *Prodiptosis longifila* associated with the Andes. *Entomologia Experimentalis et Applicata* 158: 217–227. <https://doi.org/10.1111/eea.12397>
- Yilmaz N, López-Quintero CA, Vasco-Palacios AM, Frisvad JC, Theelen B, Boekhout T, Samson RA, Houbraken J (2016) Four novel *Talaromyces* species isolated from leaf litter from Colombian Amazon rain forests. *Mycological Progress* 15: 1041–1056. <https://doi.org/10.1007/s11557-016-1227-3>
- Yusseff-Vanegas SZ, Agnarsson I (2017) DNA-barcoding of forensically important blow flies (Diptera: Calliphoridae) in the Caribbean Region. *PeerJ* 5: e3516. <https://doi.org/10.7717/peerj.3516>
- Zamora-Delgado J, Castaño JC, Hoyos-López R (2015) DNA barcode sequences used to identify *Aedes* (*Stegomyia*) *albopictus* (Diptera: Culicidae) in La Tebaida (Quindío, Colombia). *Revista Colombiana de Entomología* 41: 212–217.

Figure S1A. Maximum likelihood topology of CYTB sequences of the genus *Caluromys*. Red terminals are sequences generated in this report.

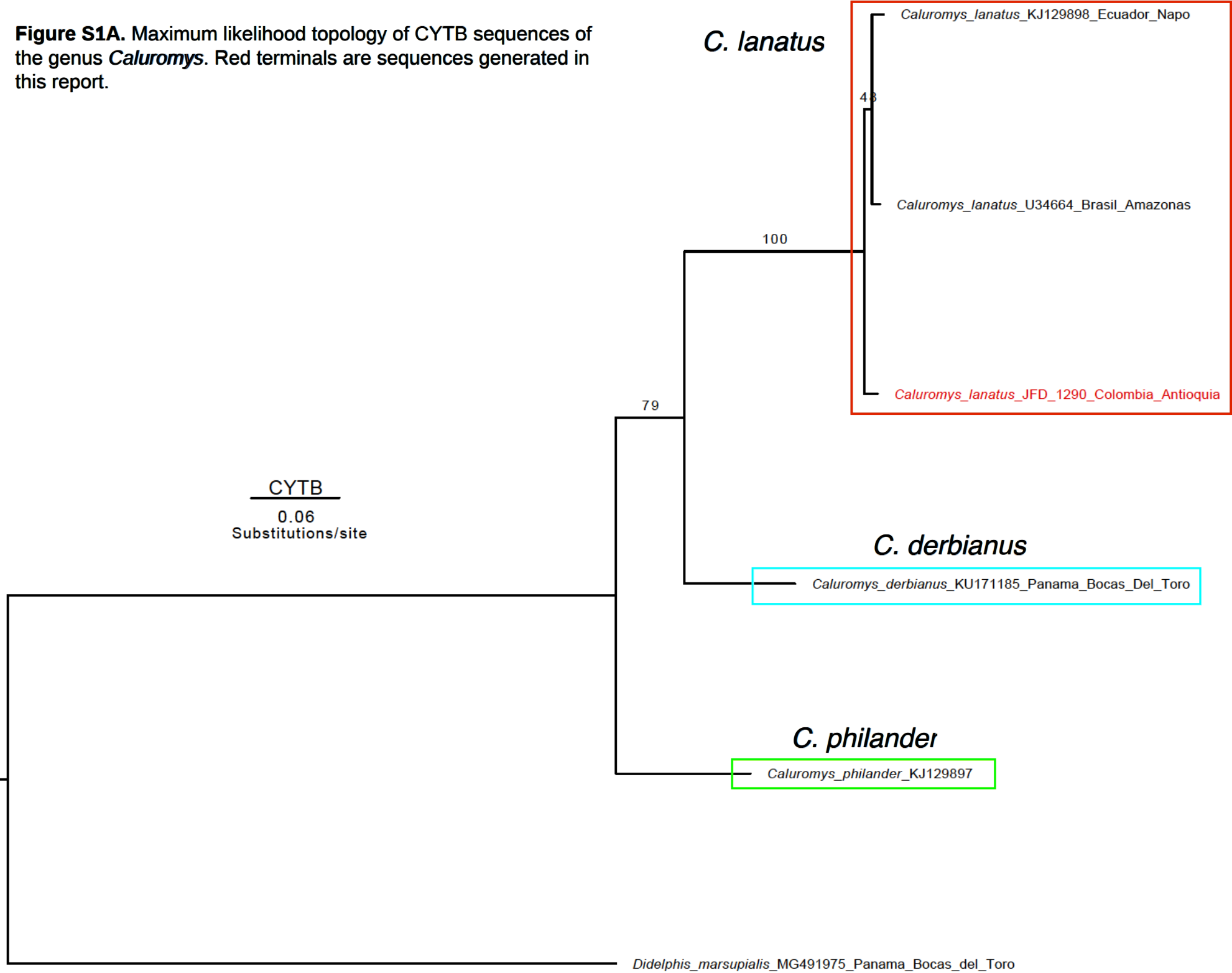


Figure S1B. Maximum likelihood topology of COI sequences of the genus *Caluromys*. Red terminals are sequences generated in this report.

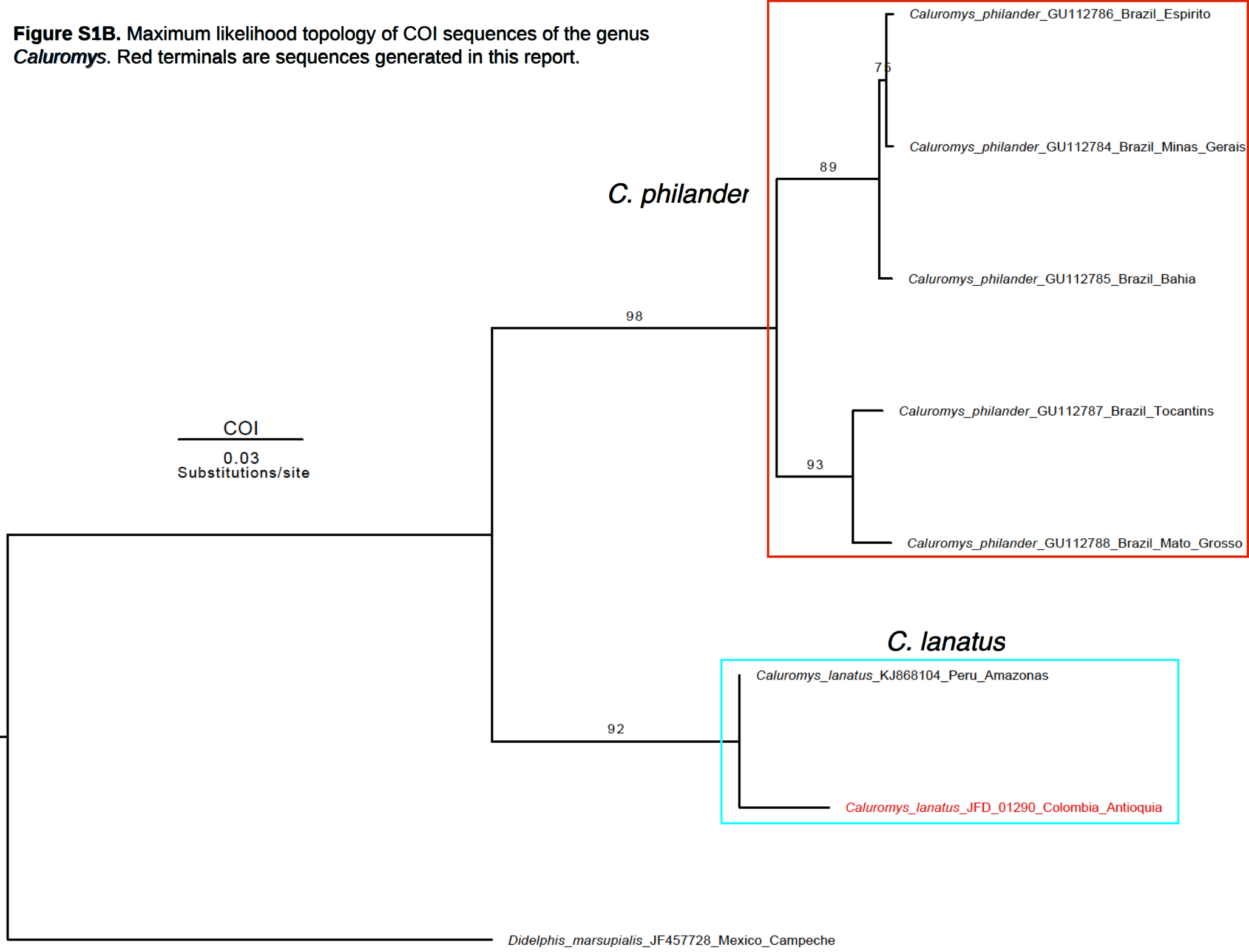


Figure S2A. Maximum likelihood topology of COI sequences of the genus *Didelphis*. Red terminals are sequences generated in this report.

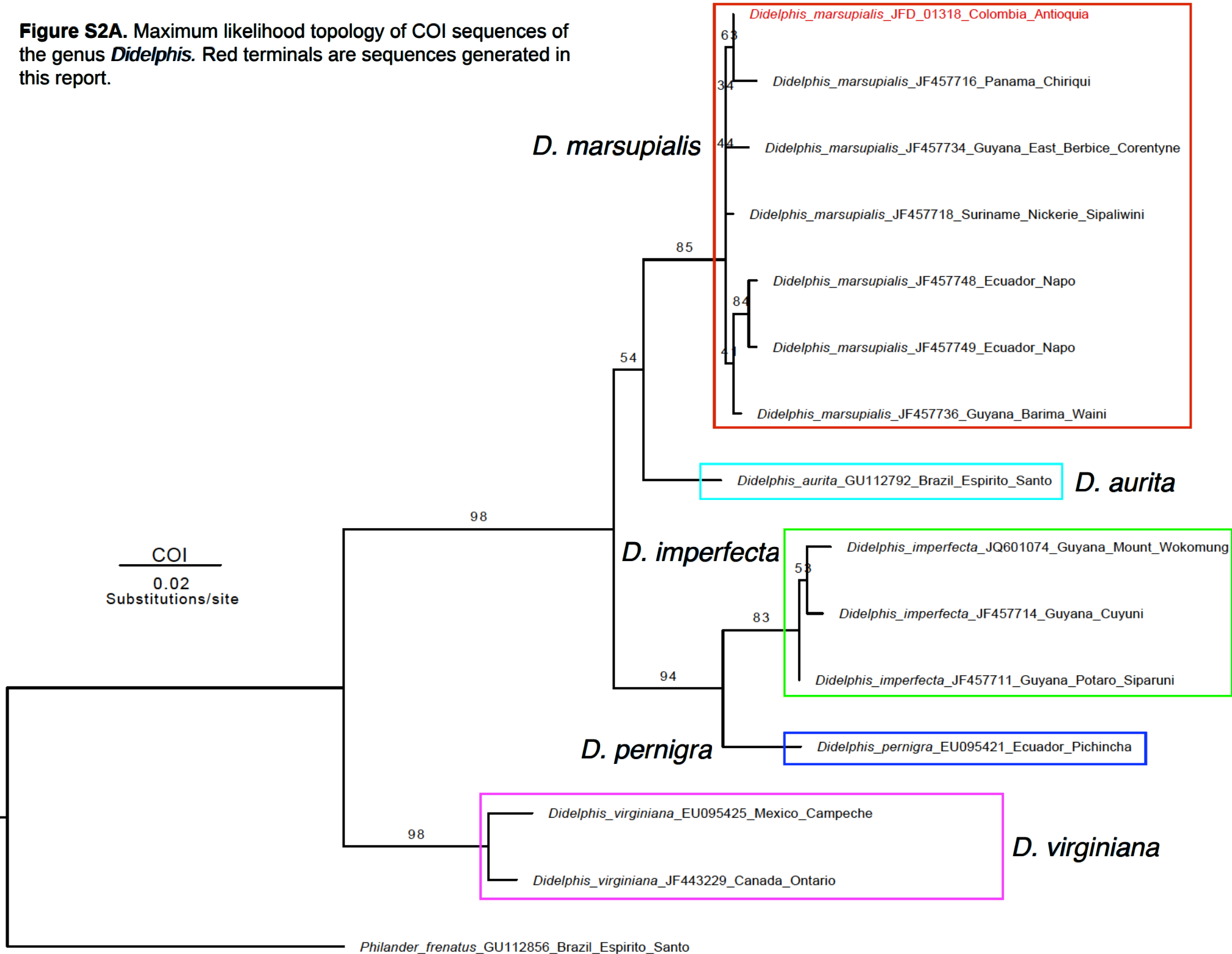


Figure S3A. Maximum likelihood topology of CYTB sequences of the genus *Marmosa*. Red terminals are sequences generated in this report.

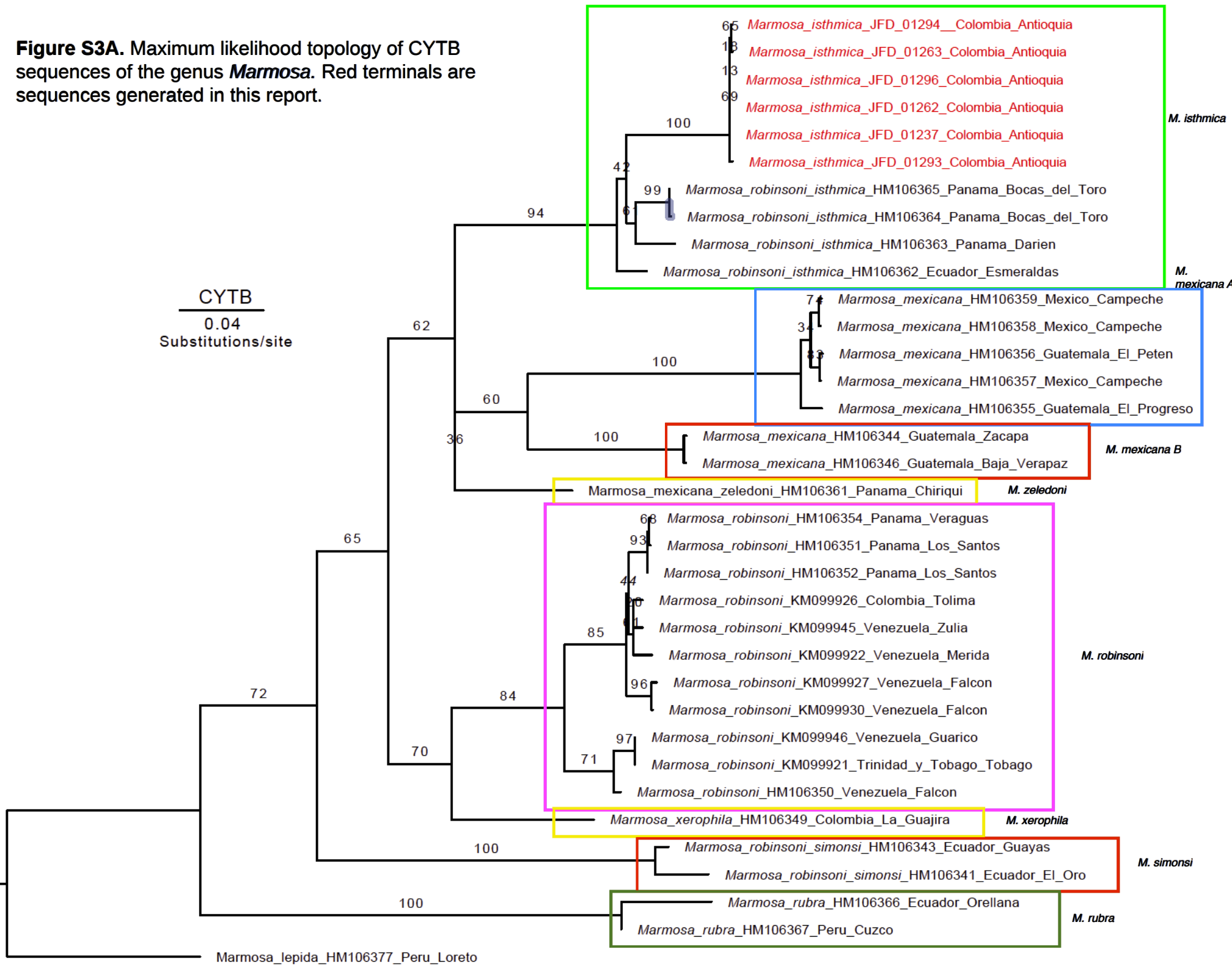


Figure S3B. Maximum likelihood topology of COI sequences of the genus *Marmosa*. Red terminals are sequences generated in this report.

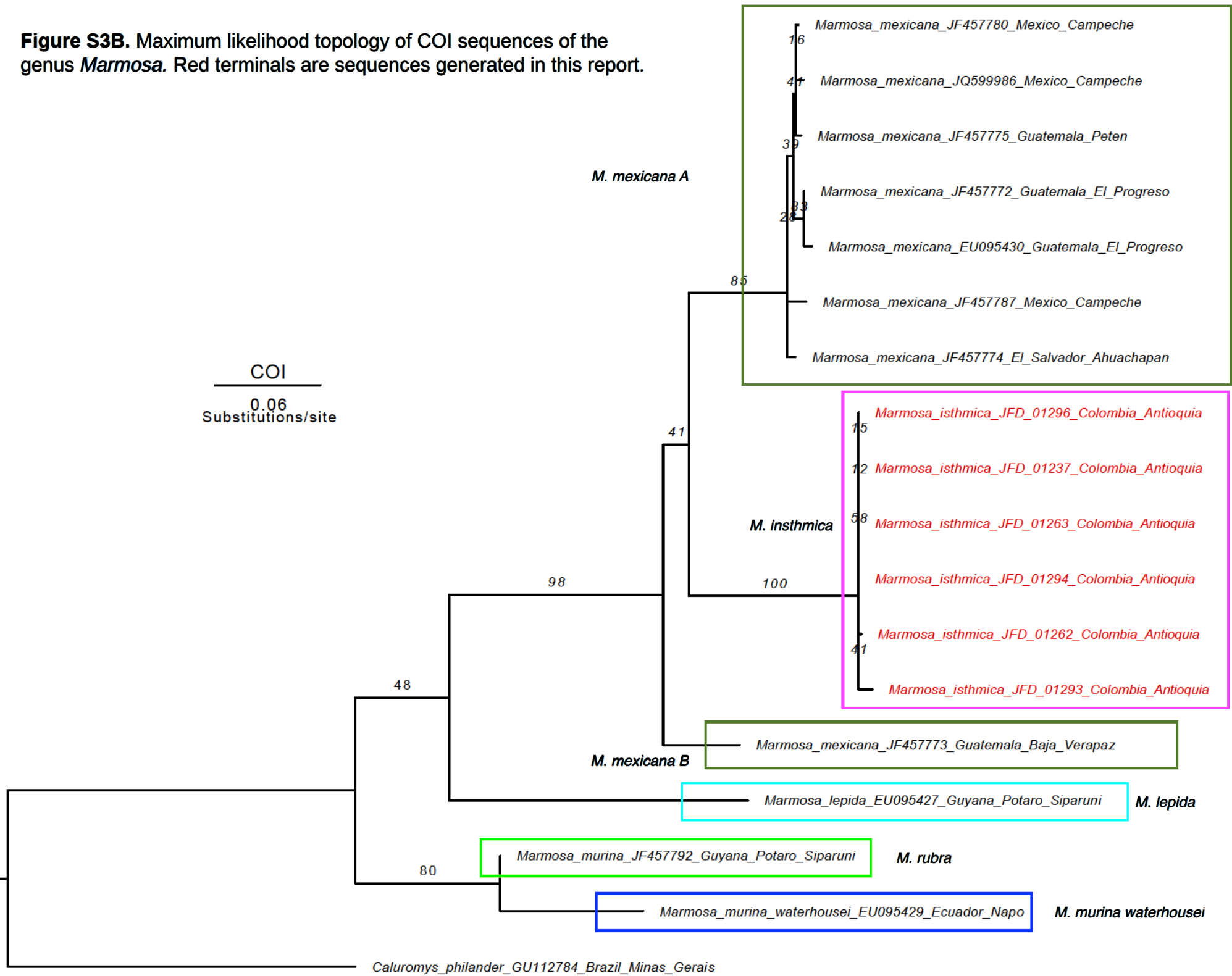


Figure S4A. Maximum likelihood topology of CYTB sequences of the genus *Molossops*. Red terminals are sequences generated in this report.

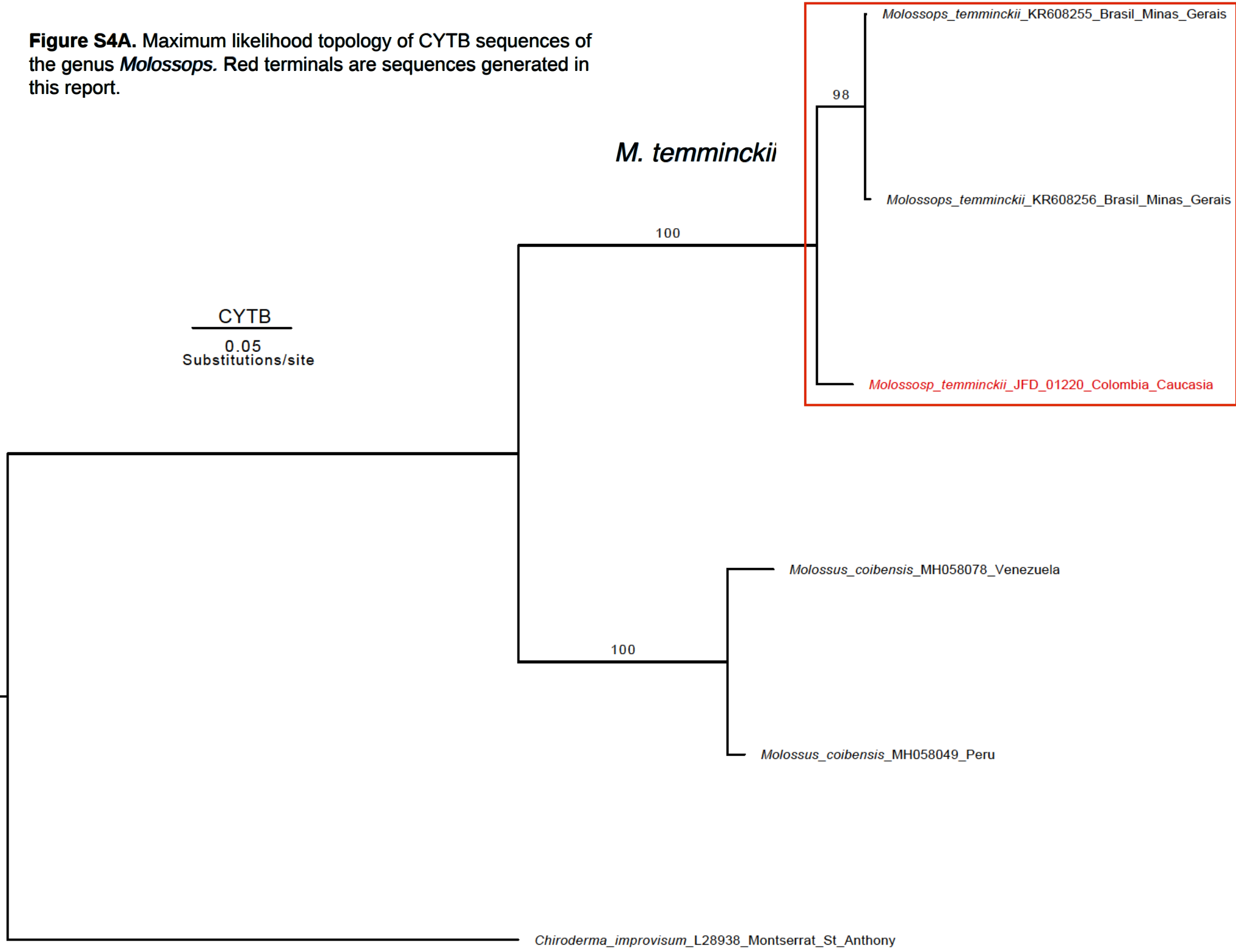


Figure S4B. Maximum likelihood topology of COI sequences of the genus *Molossops*. Red terminals are sequences generated in this report.

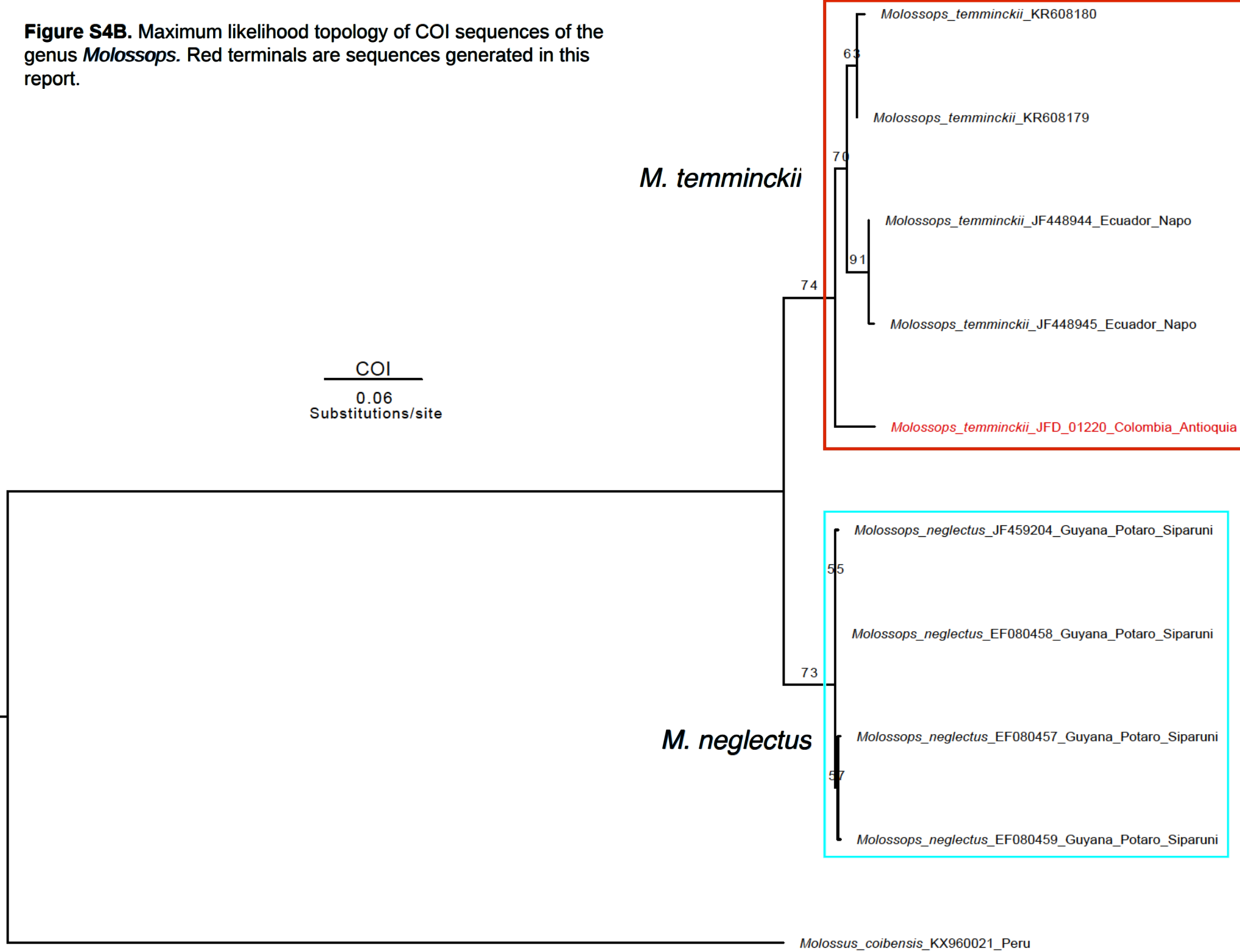


Figure S5A. Maximum likelihood topology of CYTB sequences of the genus *Molossus*. Red terminals are sequences generated in this report.

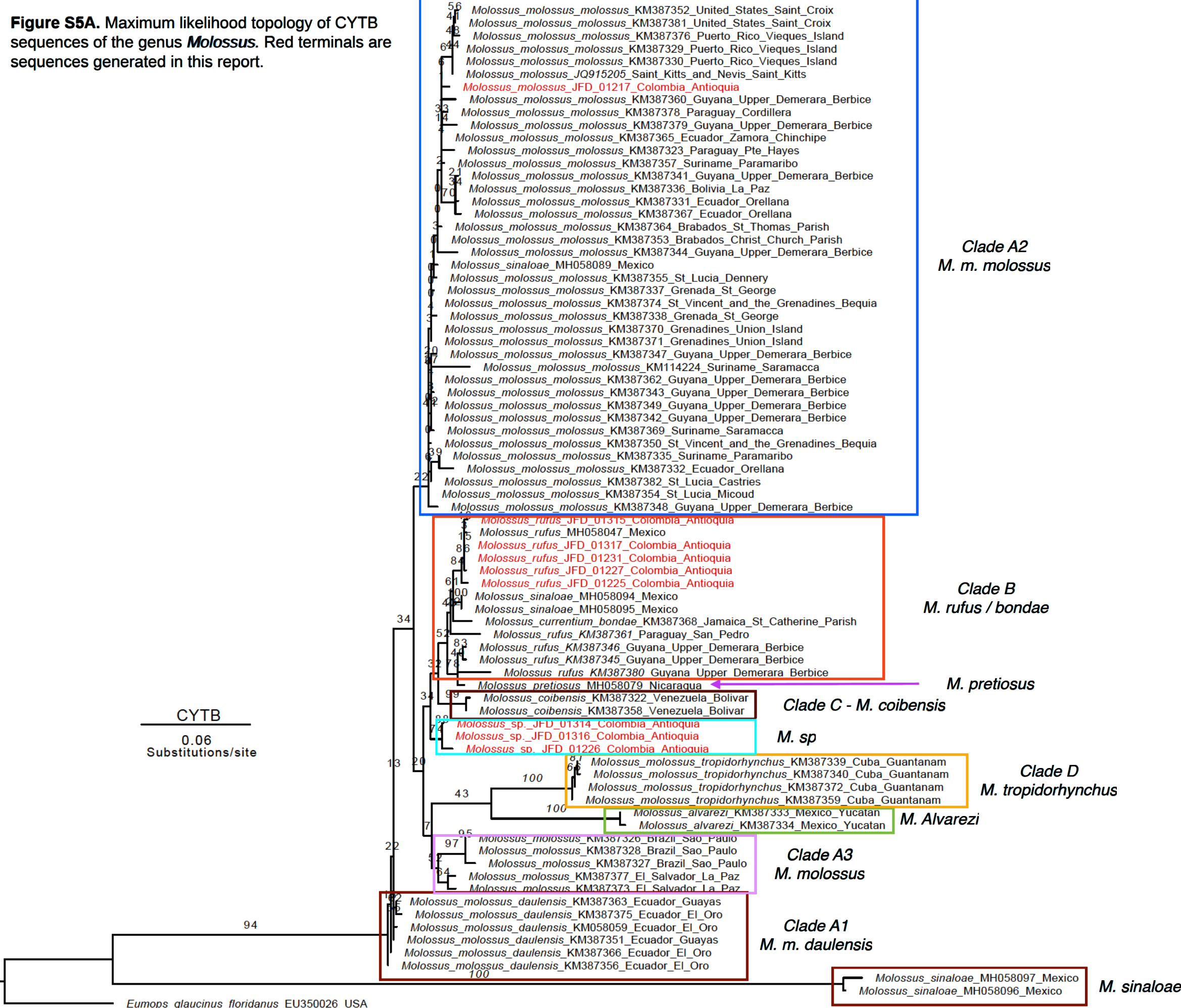


Figure S6. Maximum likelihood topology of COI sequences of the genus *Desmodus*. Red terminals are sequences generated in this report.

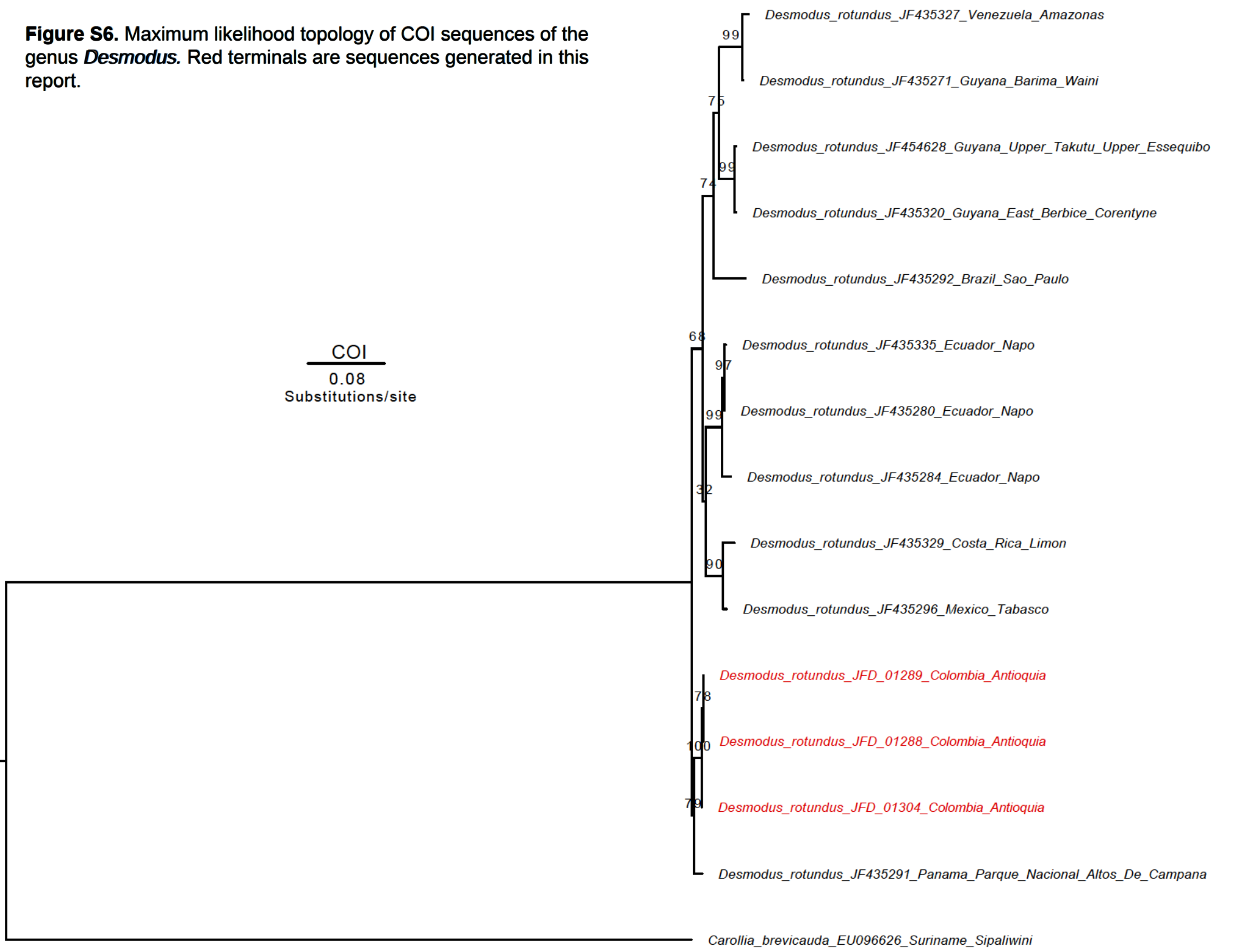


Figure S7A. Maximum likelihood topology of CYTB sequences of the genus *Chiroderma*. Red terminals are sequences generated in this report.

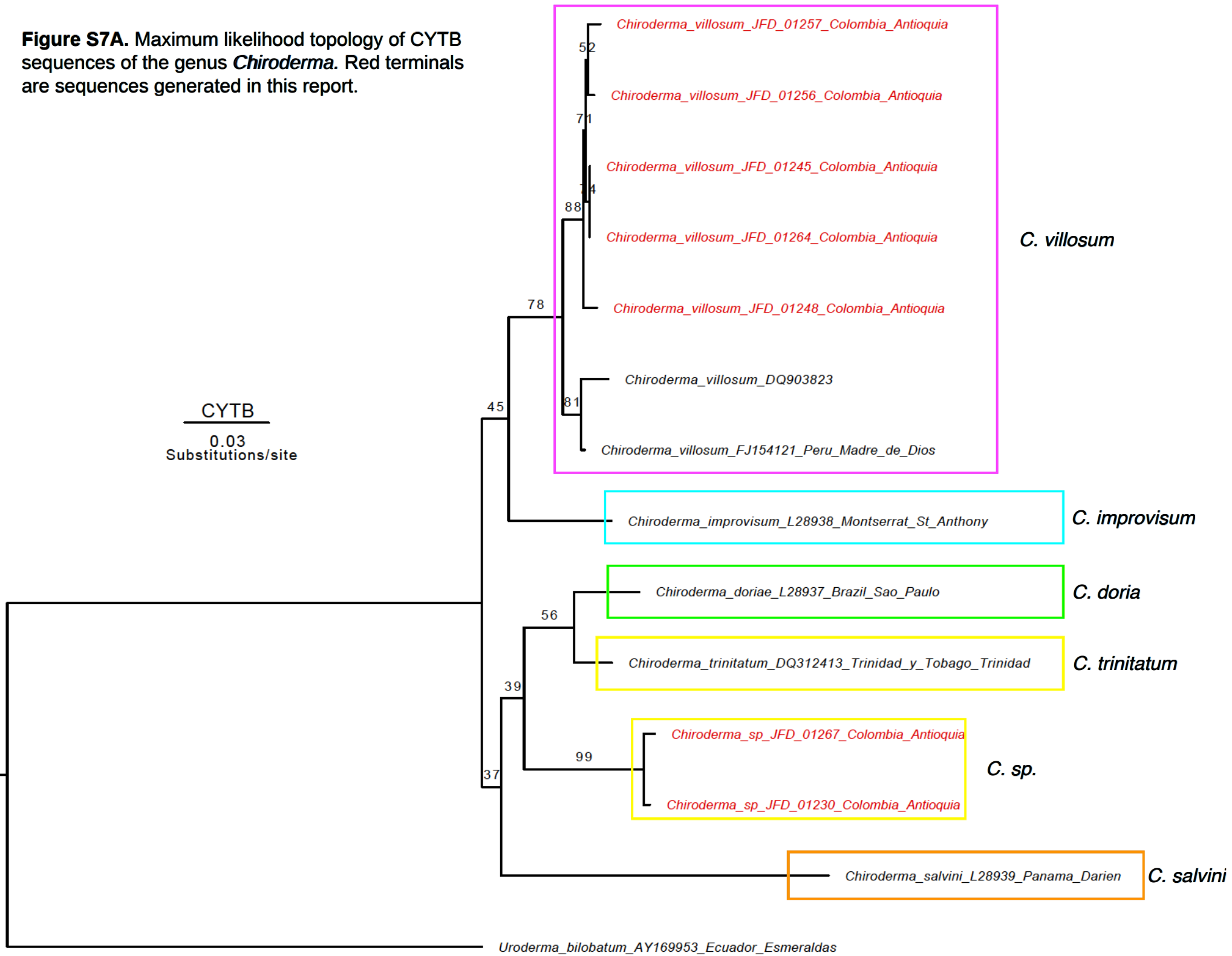


Figure S7B. Maximum likelihood topology of COI sequences of the genus *Chiroderma*. Red terminals are sequences generated in this report.

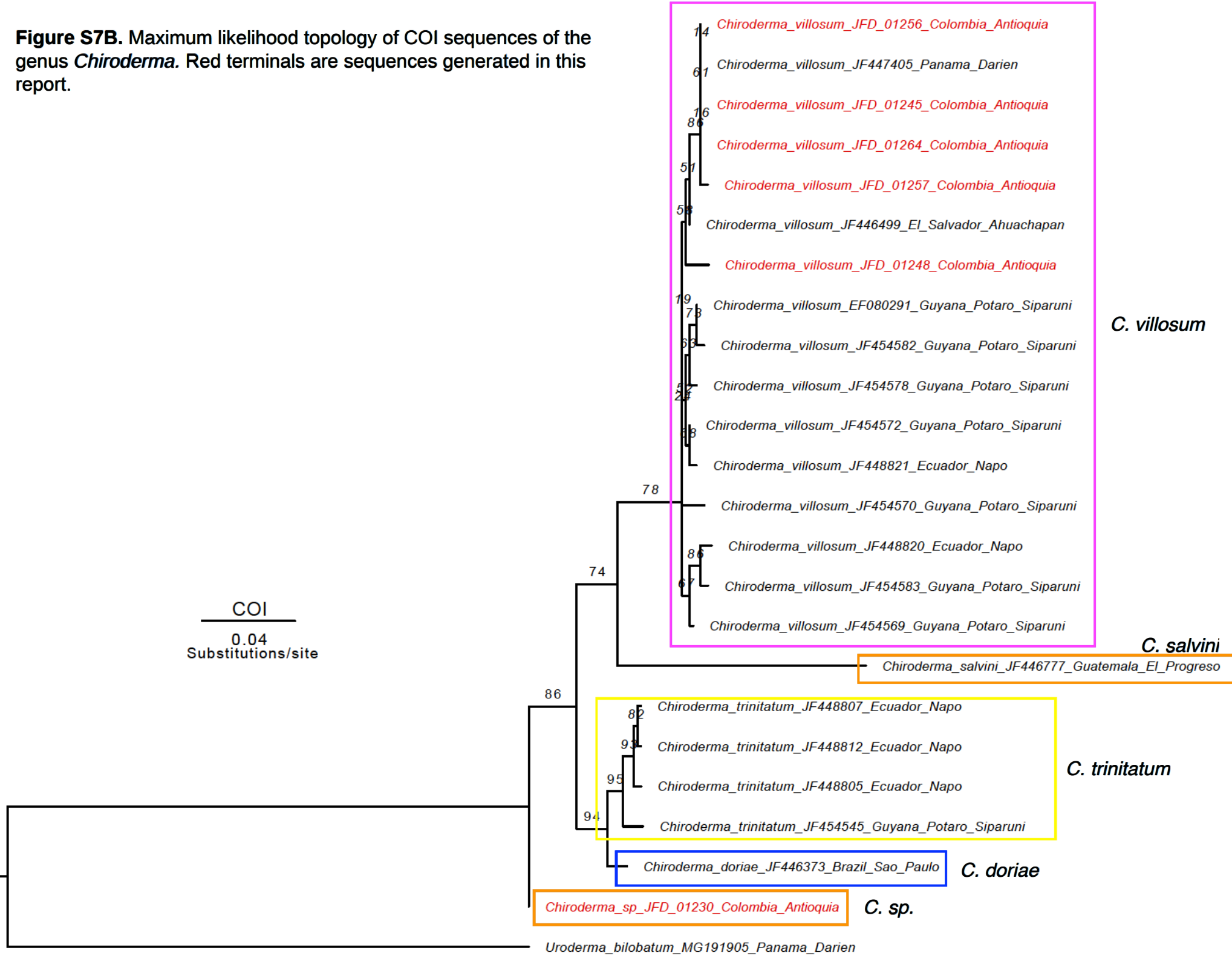


Figure S8A. Maximum likelihood topology of CYTB sequences of the genus *Micronycteris*. Red terminals are sequences generated in this report.

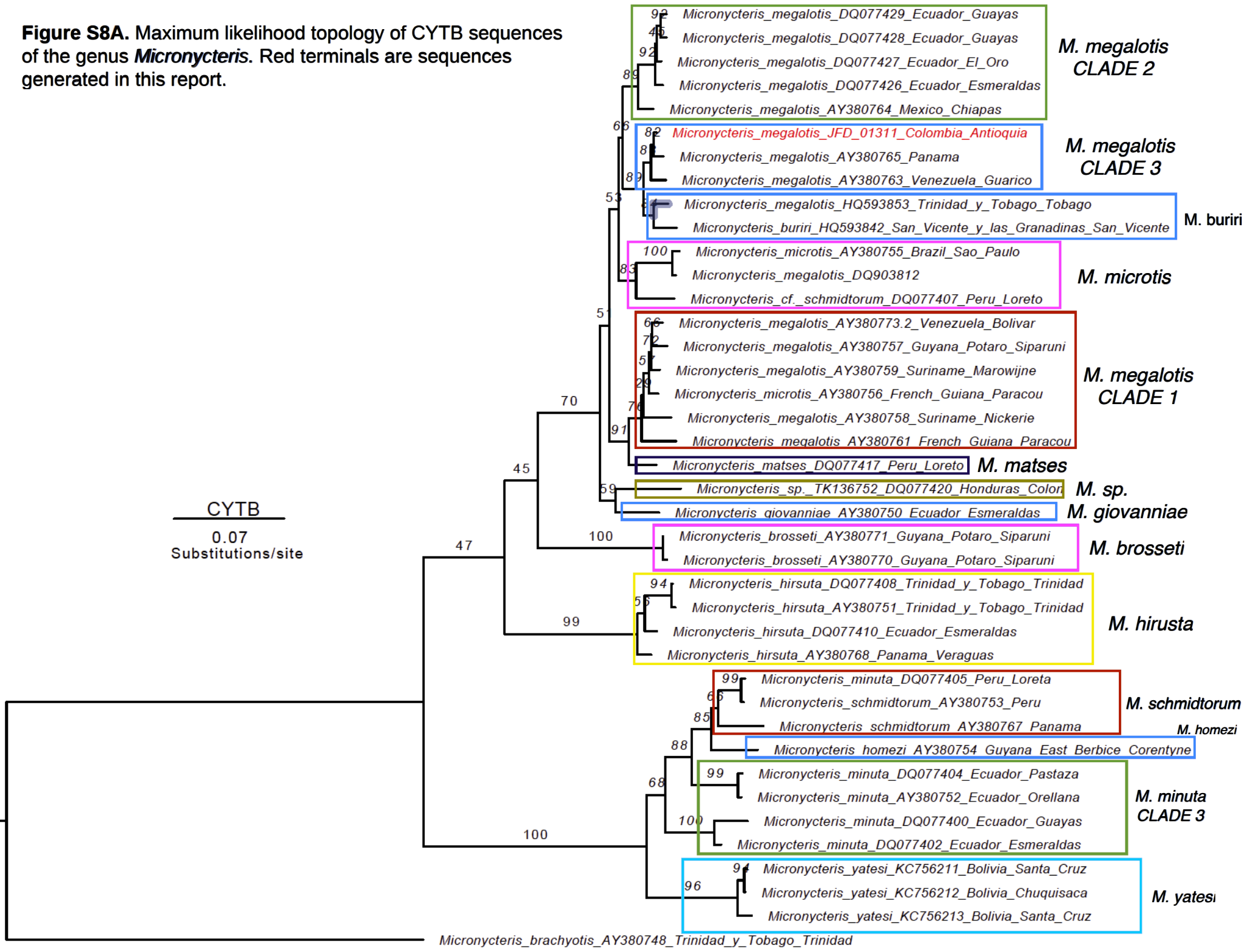


Figure S8B. Maximum likelihood topology of COI sequences of the genus *Micronycteris*. Red terminals are sequences generated in this report.

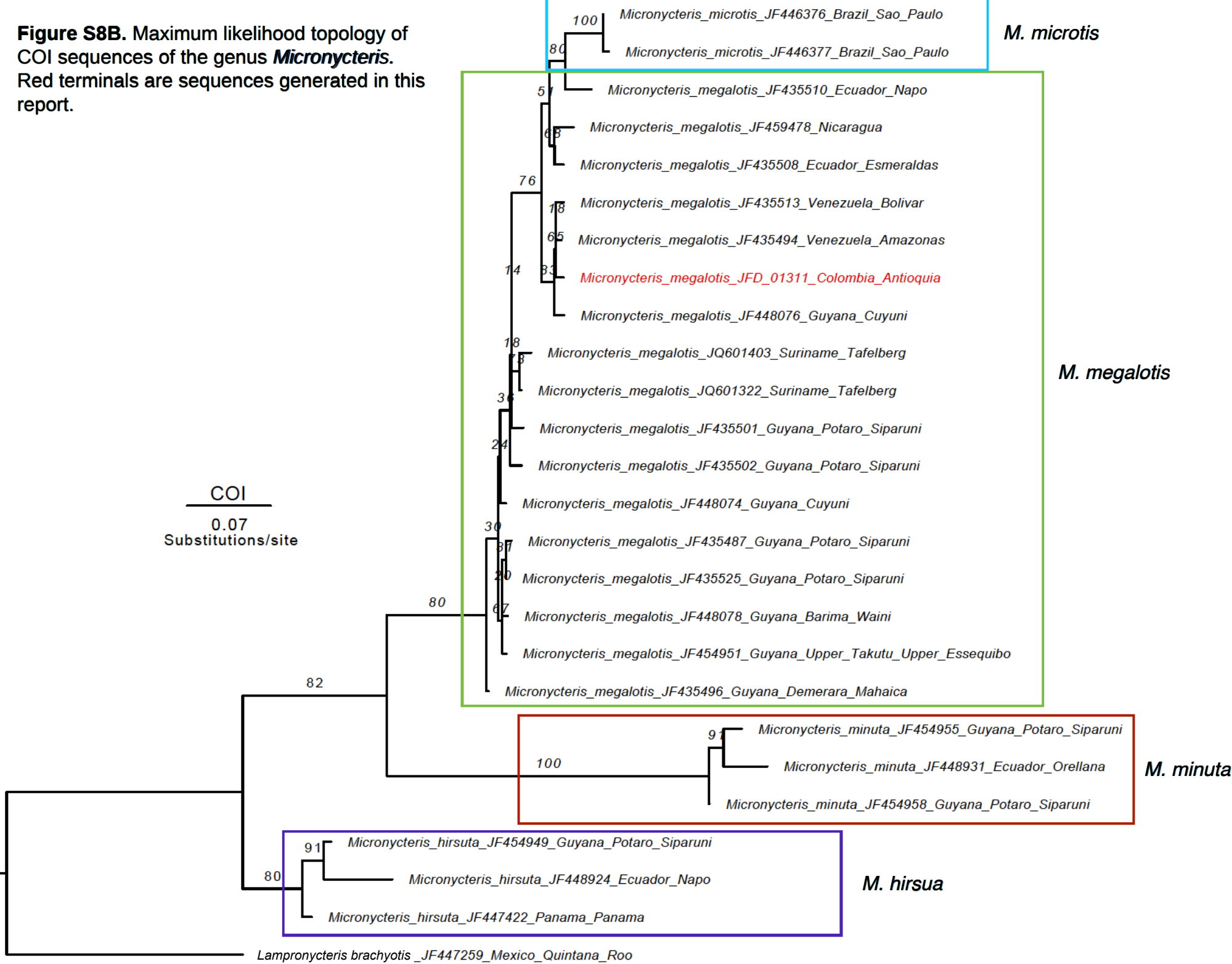


Figure S9. Maximum likelihood topology of CYTB sequences of the genus *Phyllostomus*. Red terminals are sequences generated in this report.

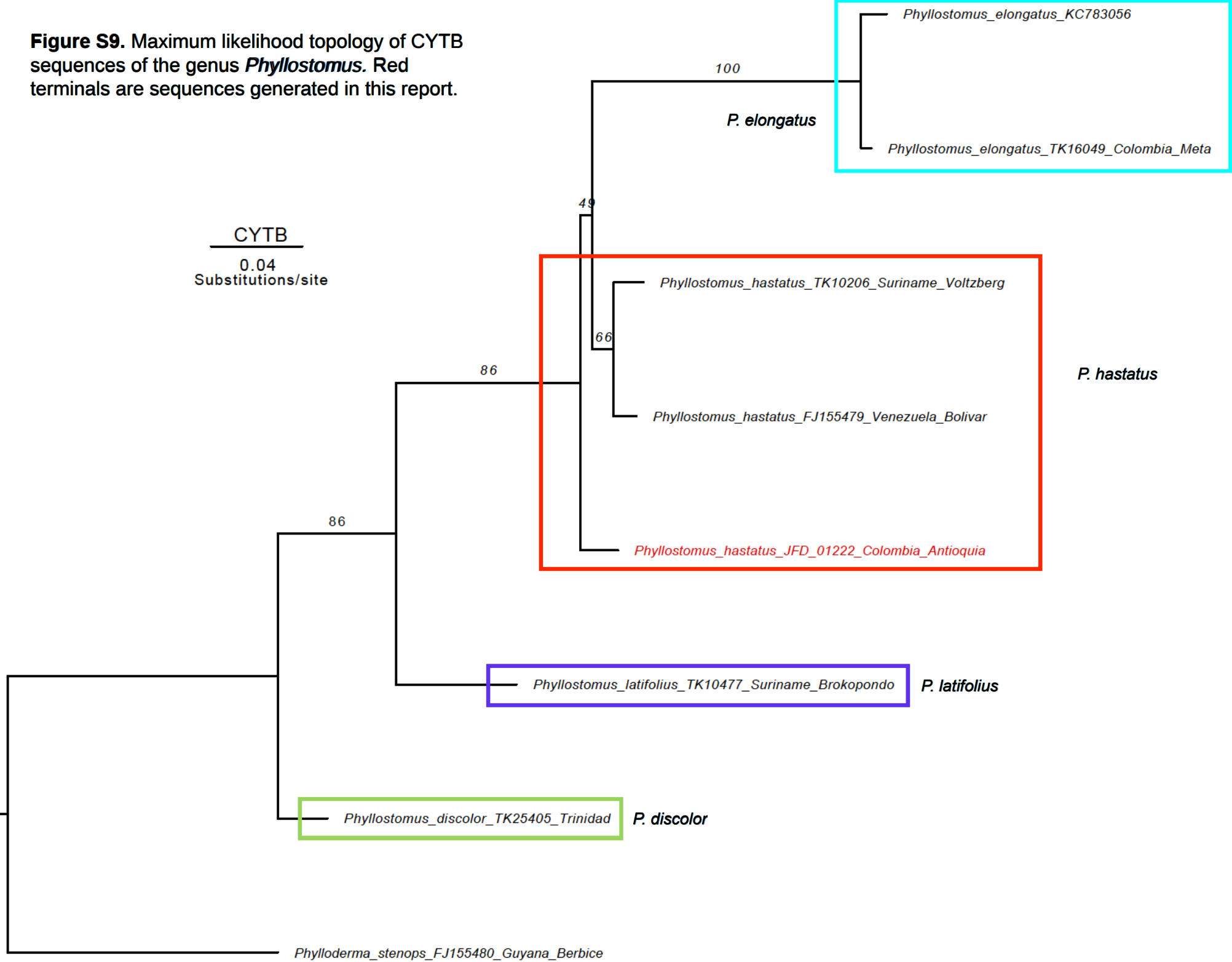


Figure S10A. Maximum likelihood topology of CYTB sequences of the genus *Gardnerycteris*. Red terminals are sequences generated in this report.

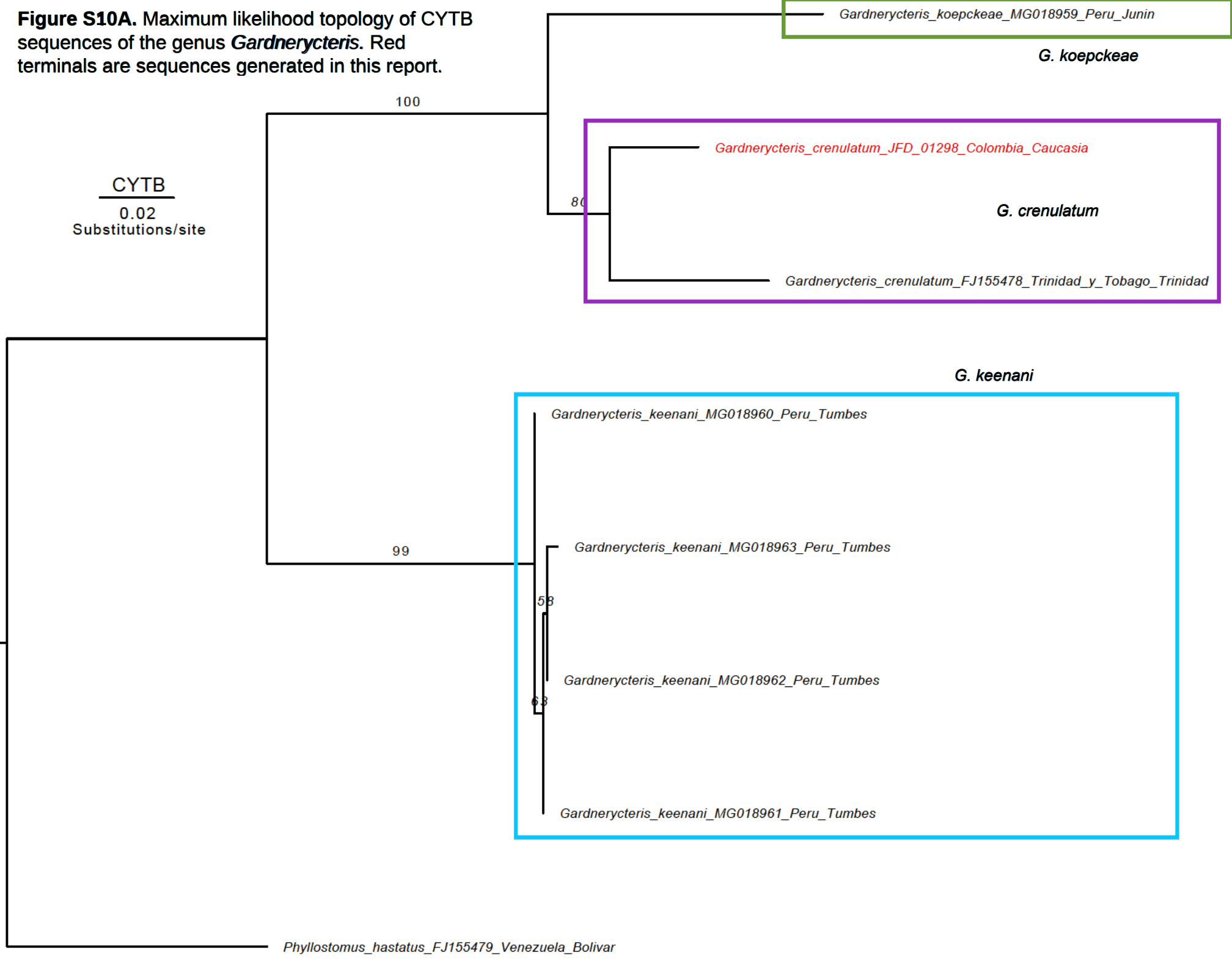


Figure S10B. Maximum likelihood topology of COI sequences of the genus *Gardnerycteris*. Red terminals are sequences generated in this report.

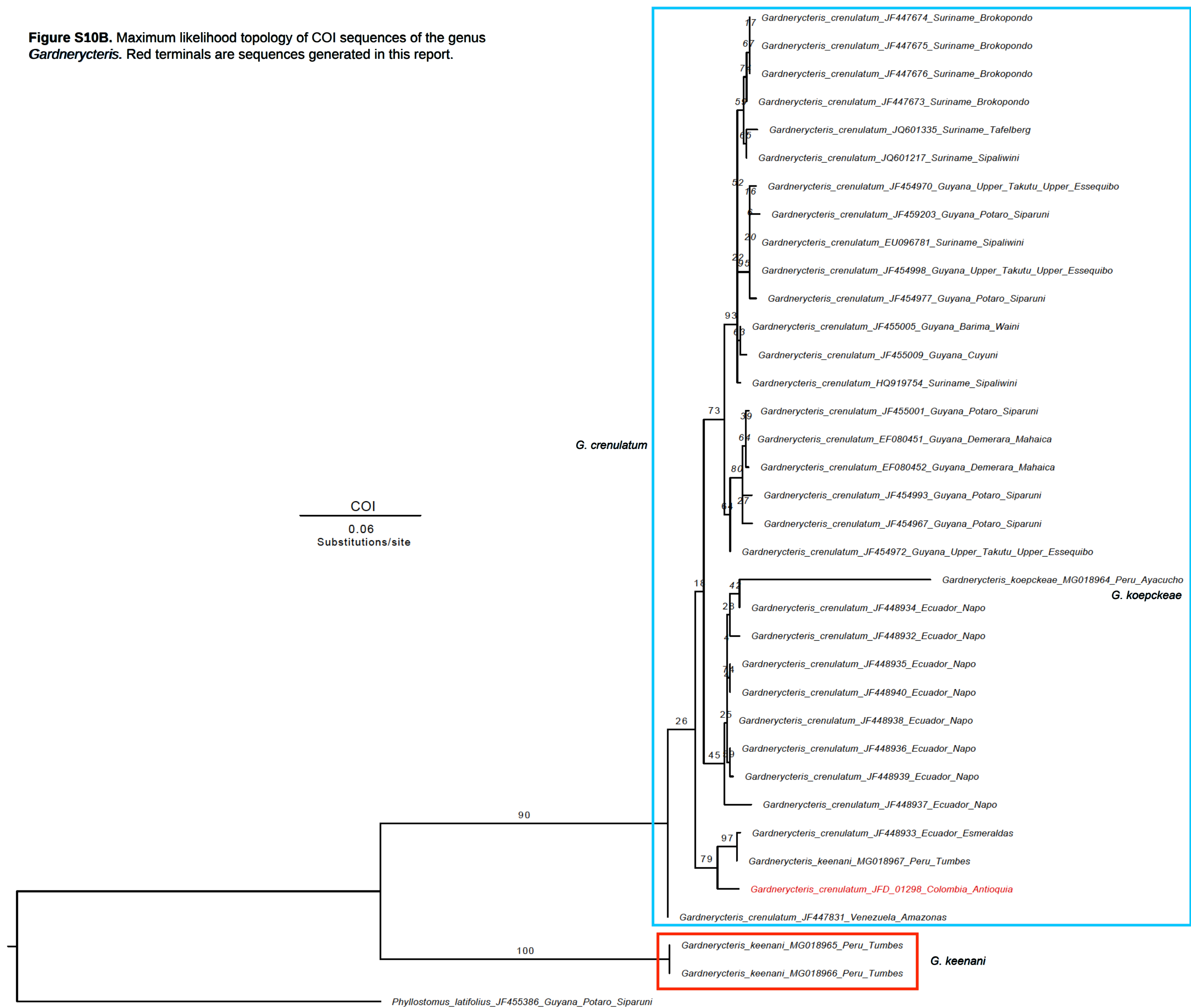


Figure S11A. Maximum likelihood topology of CYTB sequences of the genus *Lophostoma*. Red terminals are sequences generated in this report.

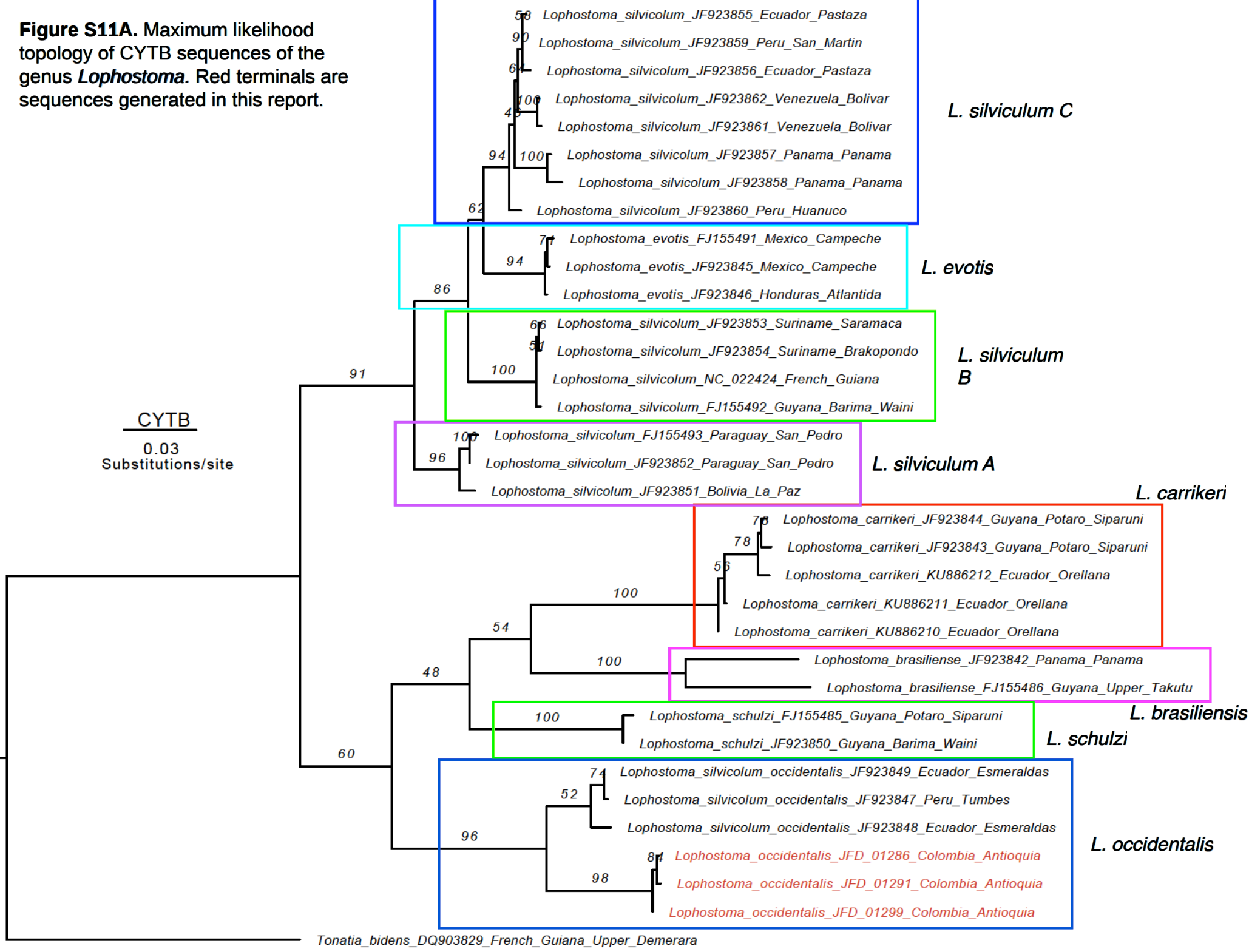


Figure S11B. Maximum likelihood topology of COI sequences of the genus *Lophostoma*. Red terminals are sequences generated in this report.

COI
0.07
Substitutions/site

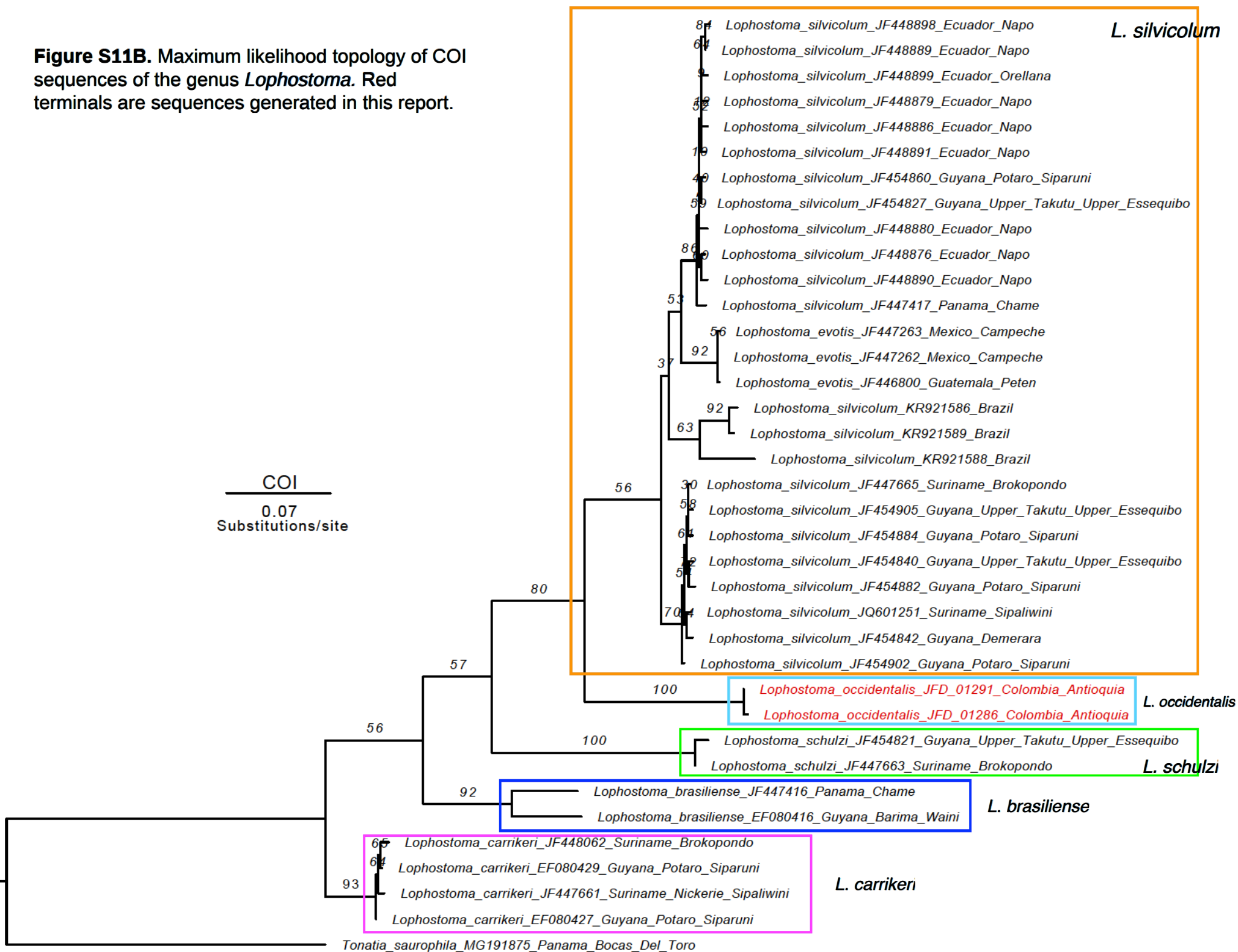


Figure S12A. Maximum likelihood topology of CYTB sequences of the genus *Uroderma*. Red terminals are sequences generated in this report.

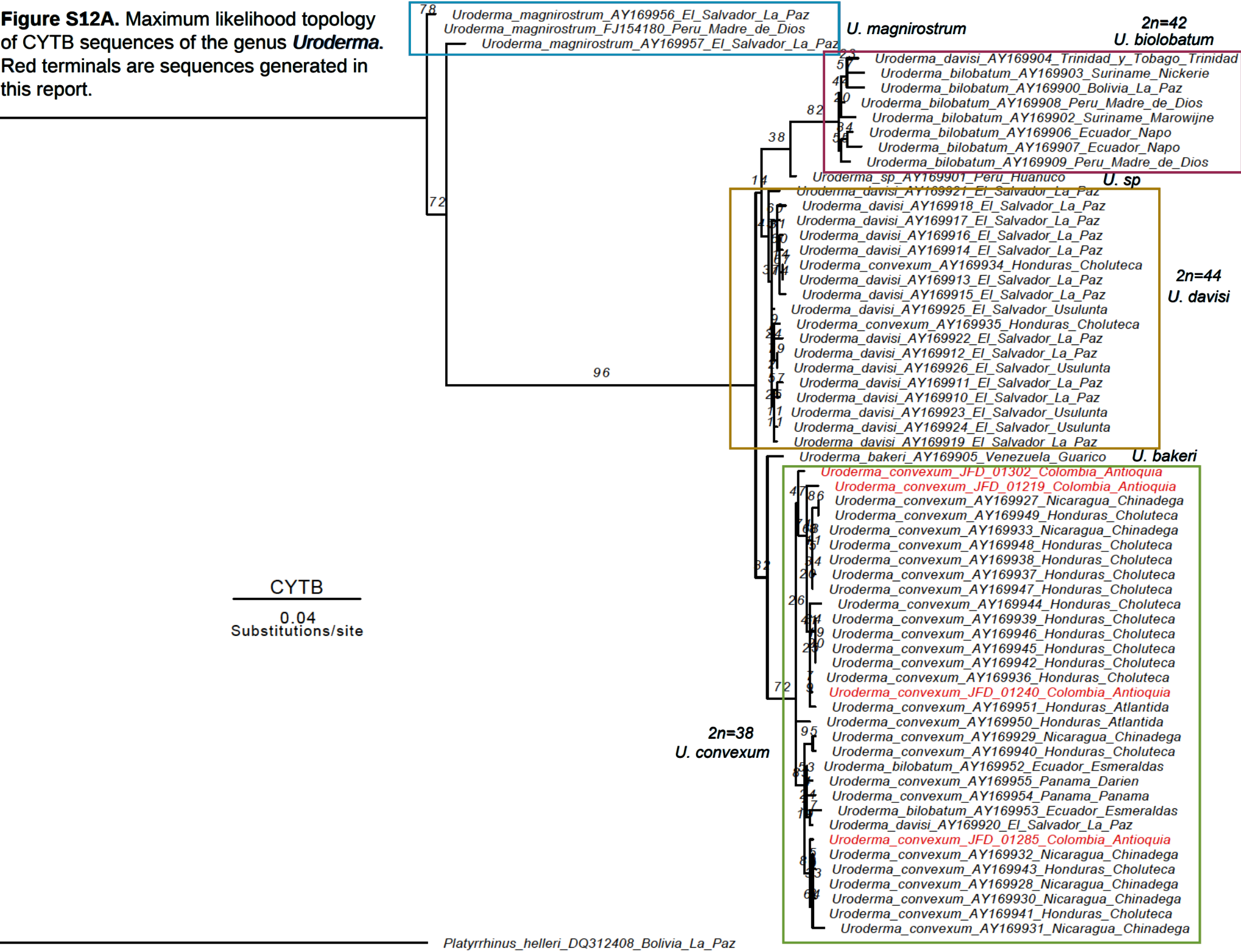


Figure S12B. Maximum likelihood topology of COI sequences of the genus *Uroderma*. Red terminals are sequences generated in this report.

COI
0.03
Substitutions/site

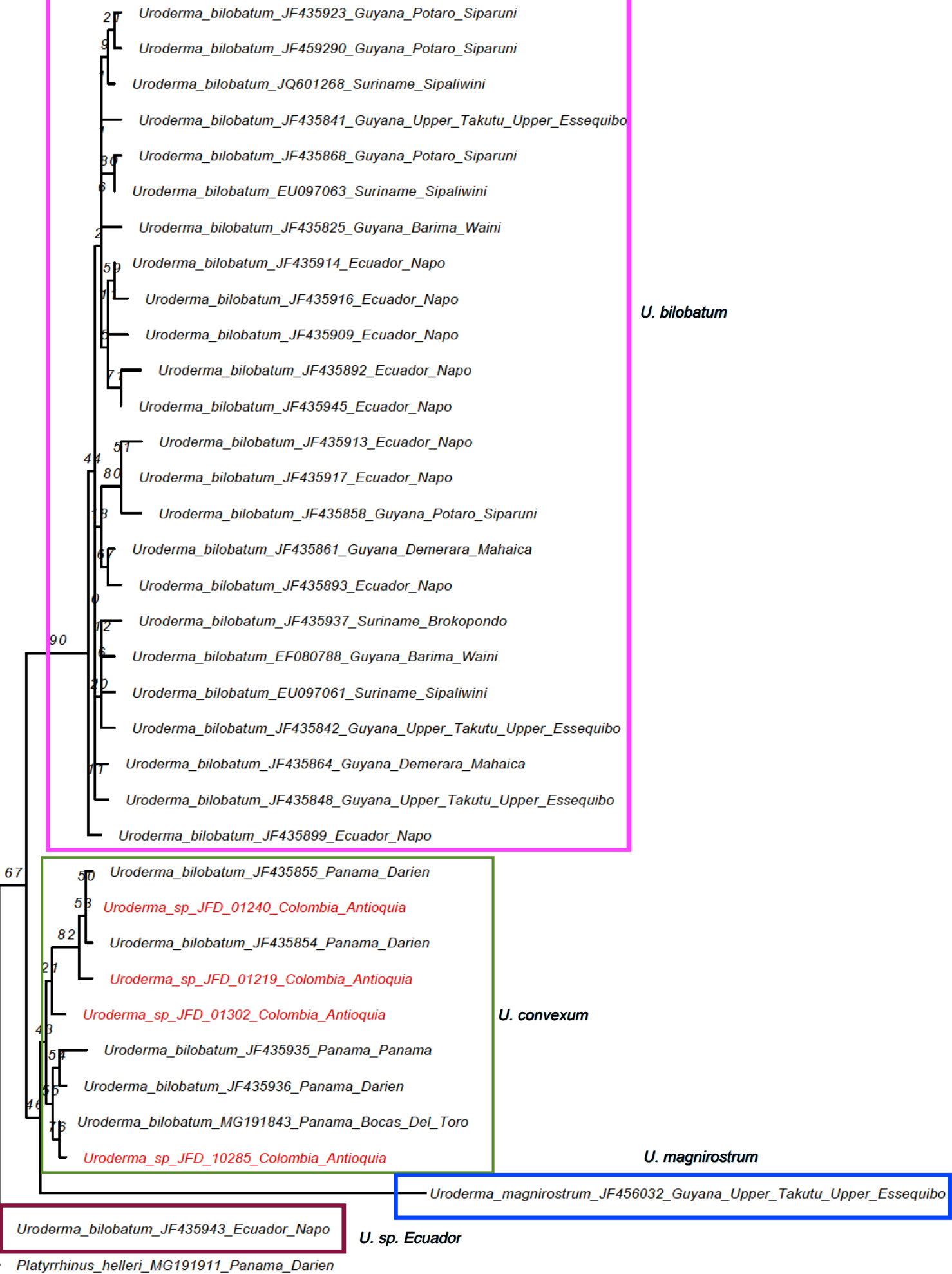


Figure S13B. Maximum likelihood topology of COI sequences of the genus *Platyrhinus*. Red terminals are sequences generated in this report.

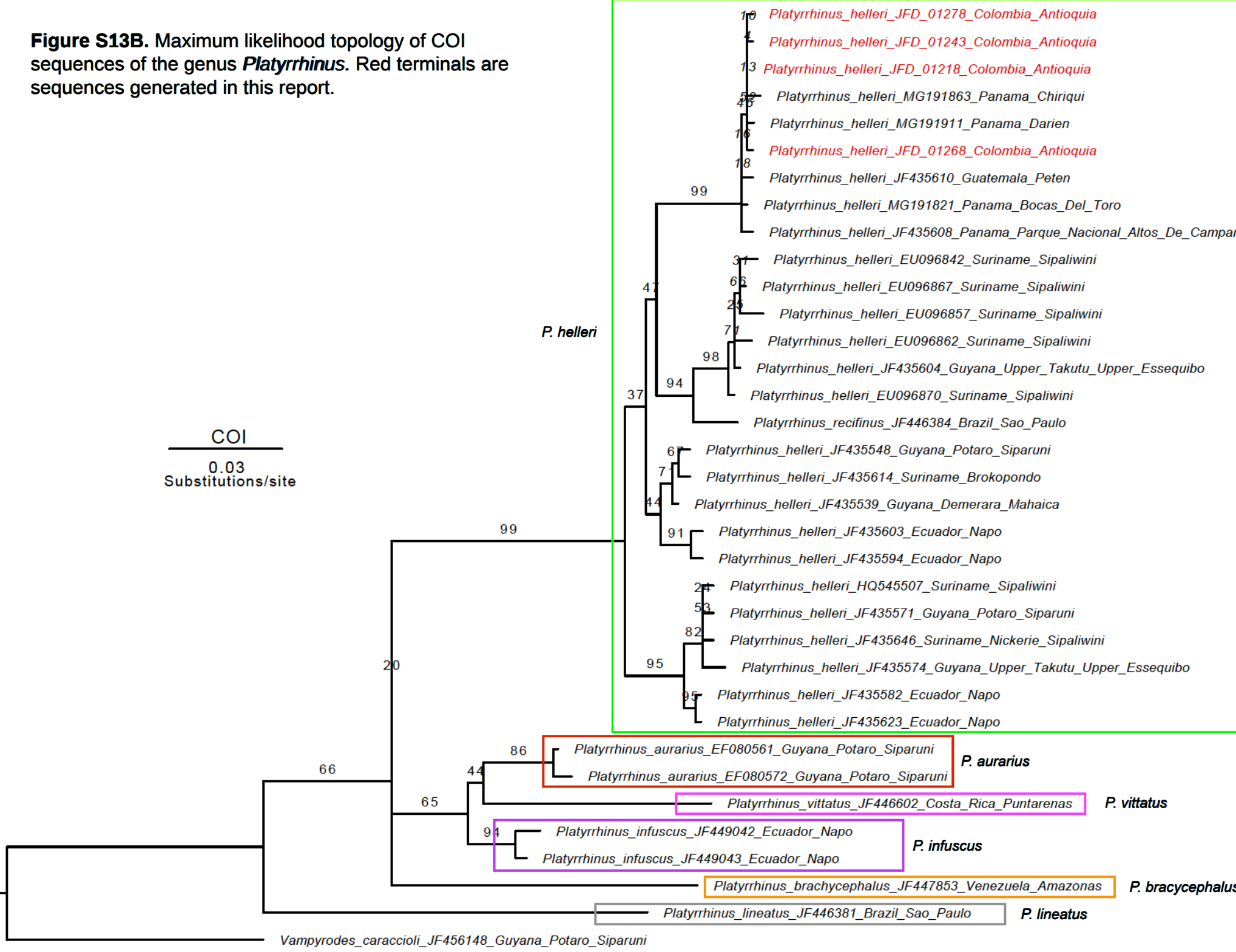


Figure S14A. Maximum likelihood topology of CYTB sequences of the genus *Vampyressa*. Red terminals are sequences generated in this report.

CYTB
0.03
Substitutions/site

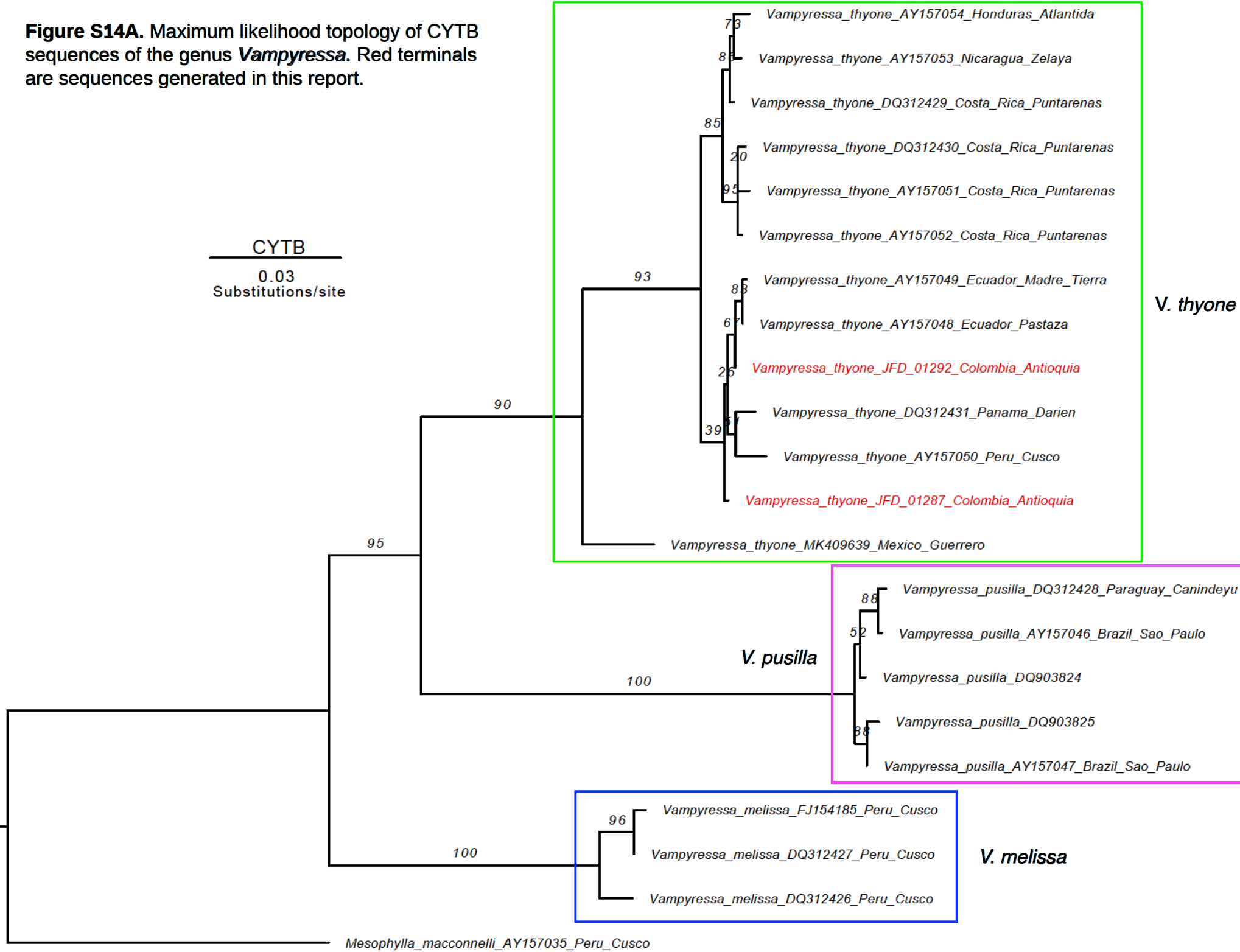


Figure S14B. Maximum likelihood topology of COI sequences of the genus *Vampyressa*. Red terminals are sequences generated in this report.

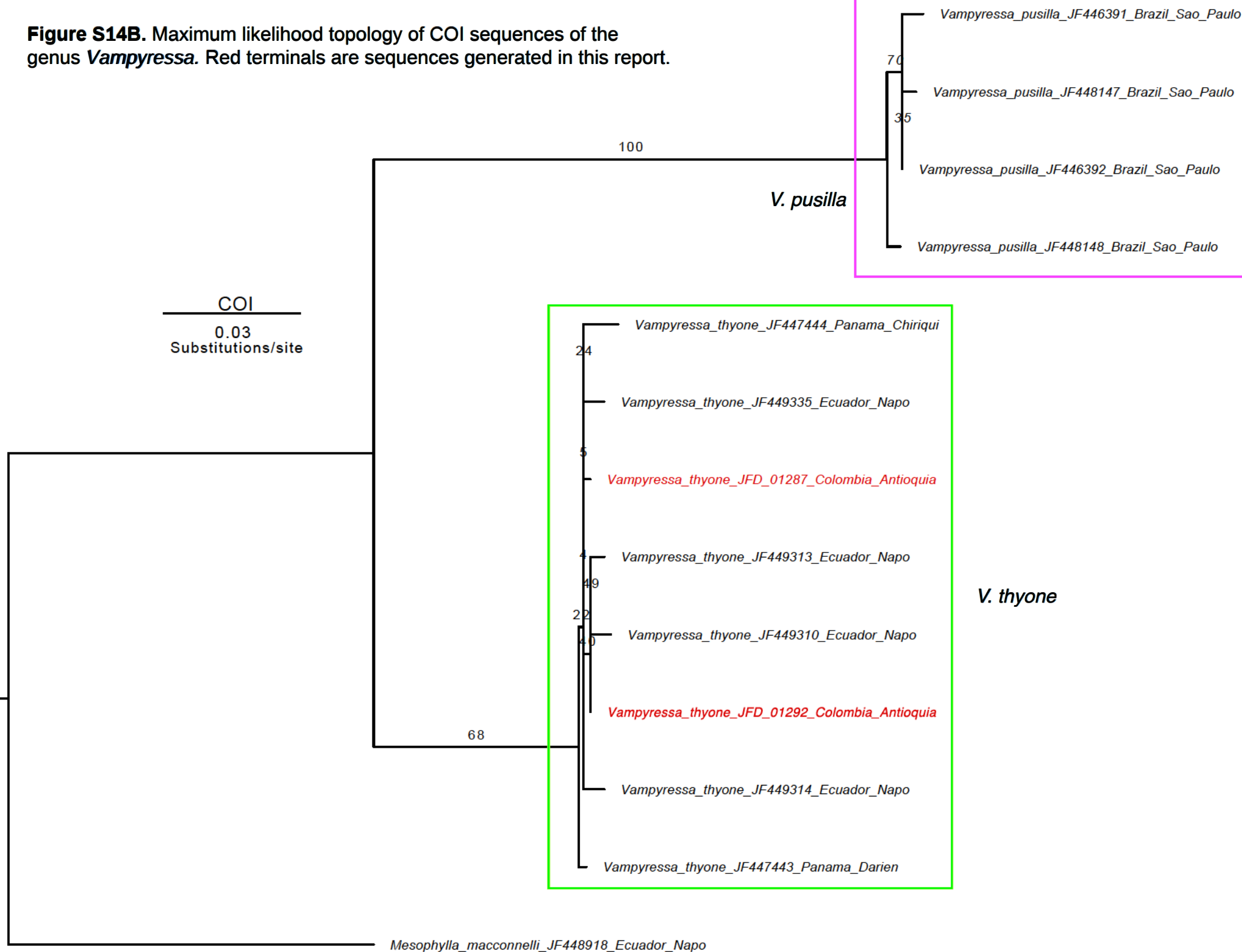


Figure S15. Maximum likelihood topology of CYTB sequences of the genus *Carollia*. Red terminals are sequences generated in this report.

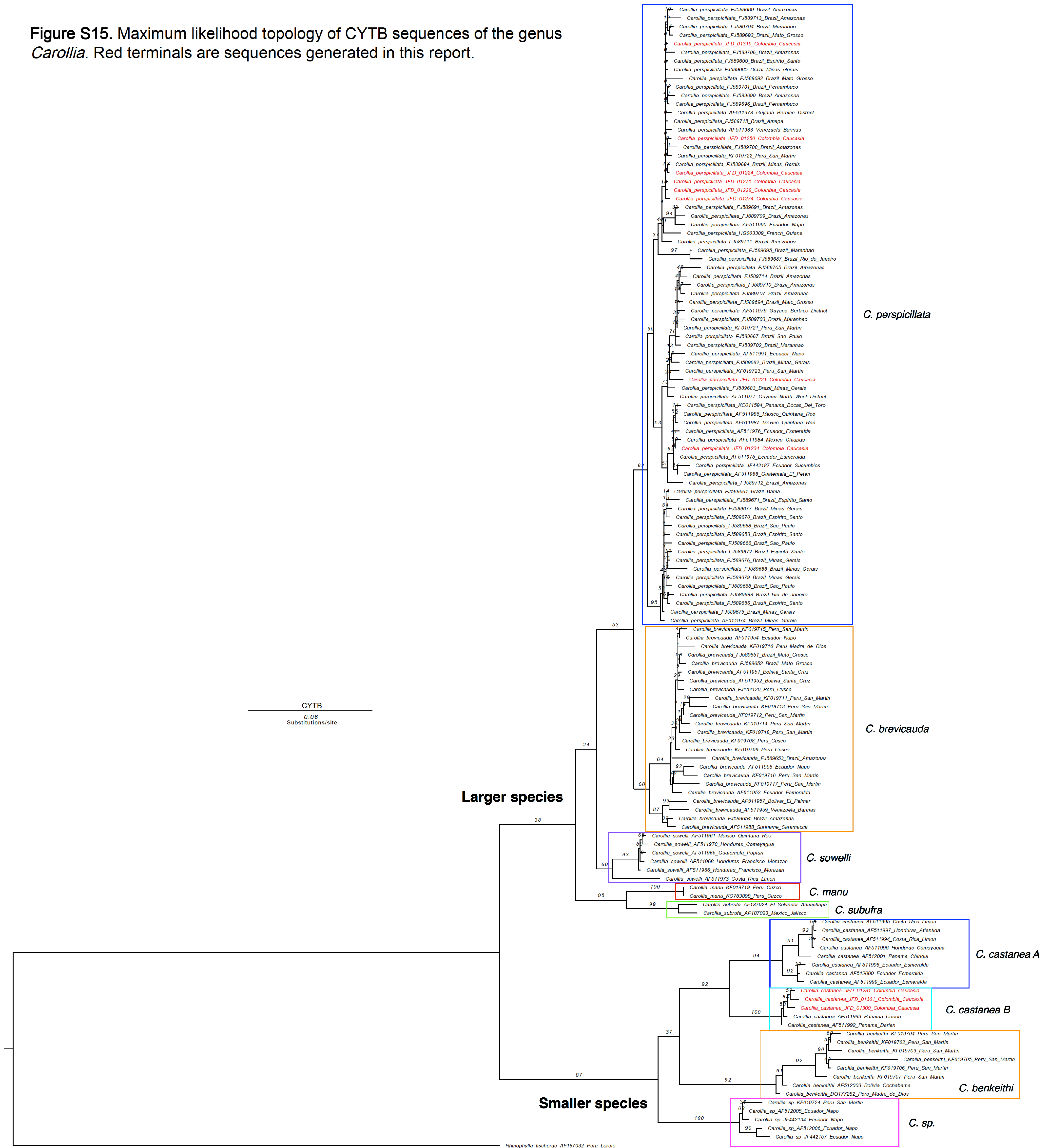


Figure S16A. Maximum likelihood topology of CYTB sequences of the genus *Artibeus*. Red terminals are sequences generated in this report.

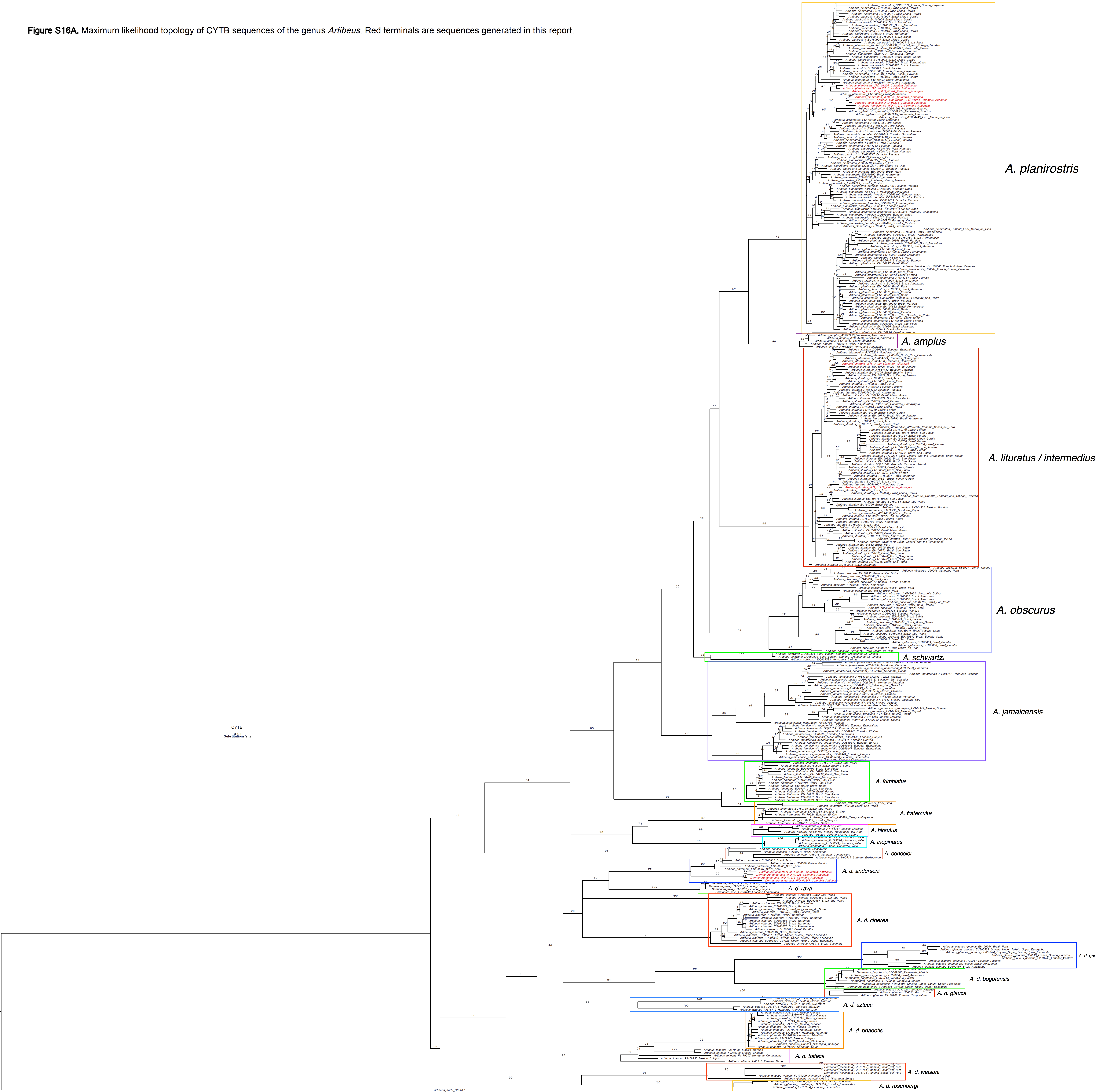
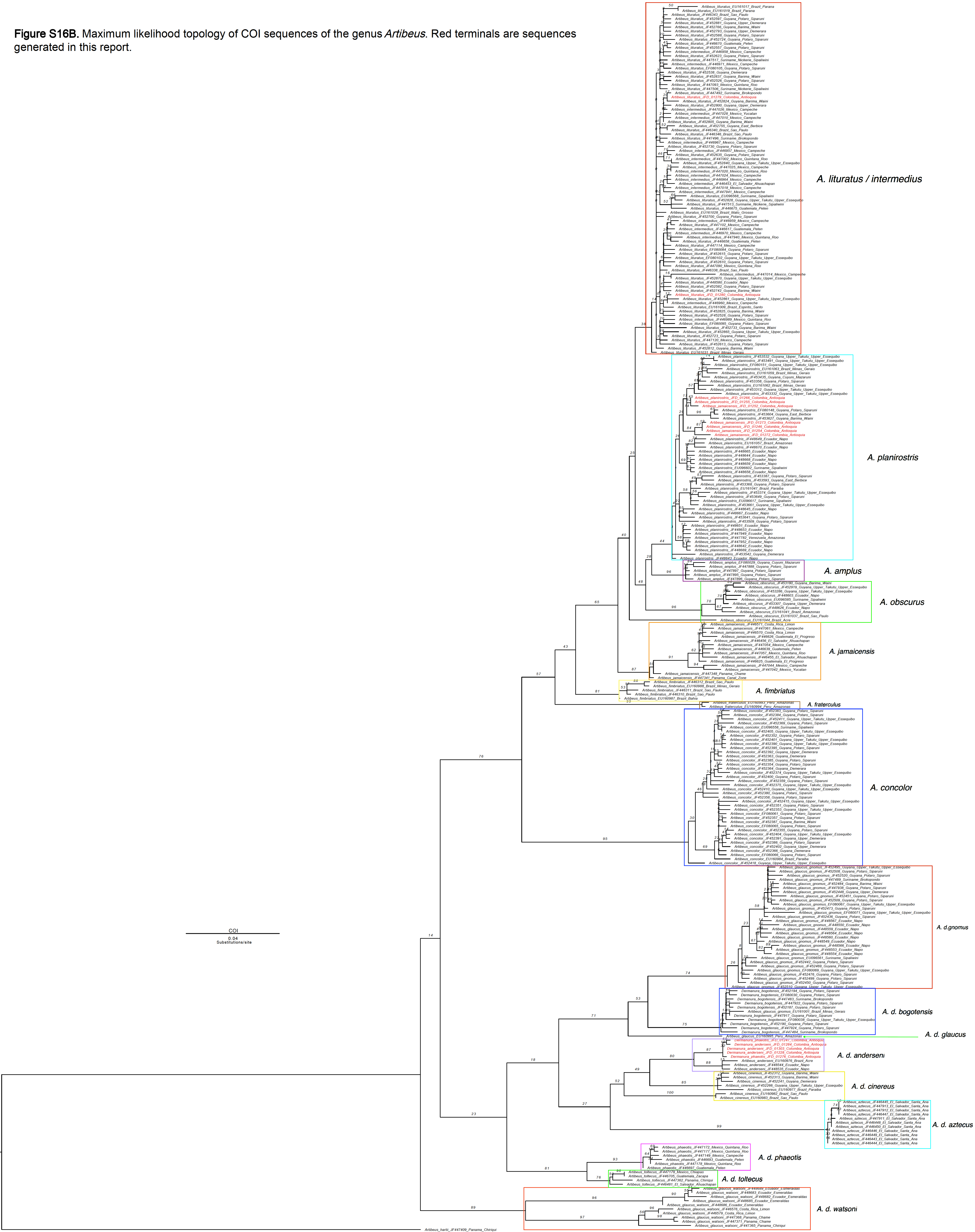


Figure S16B. Maximum likelihood topology of COI sequences of the genus *Artibeus*. Red terminals are sequences generated in this report.



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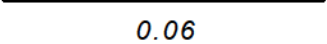


Figure S17B. Maximum likelihood topology of COI sequences of the genus *Myotis*. Red terminals are sequences generated in this report.

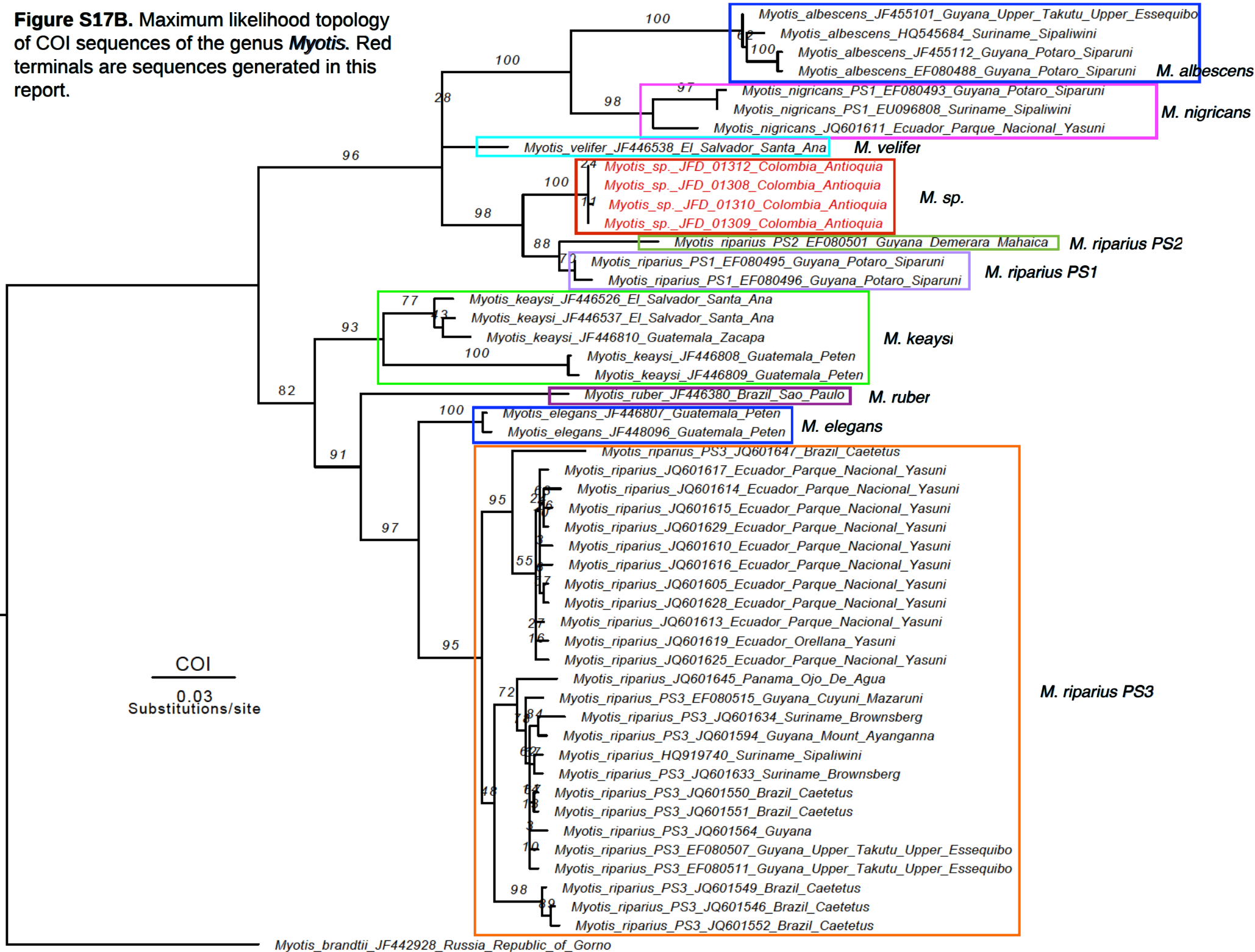


Figure S18A. Maximum likelihood topology of CYTB sequences of the genus *Proechimys*. Red terminals are sequences generated in this report.

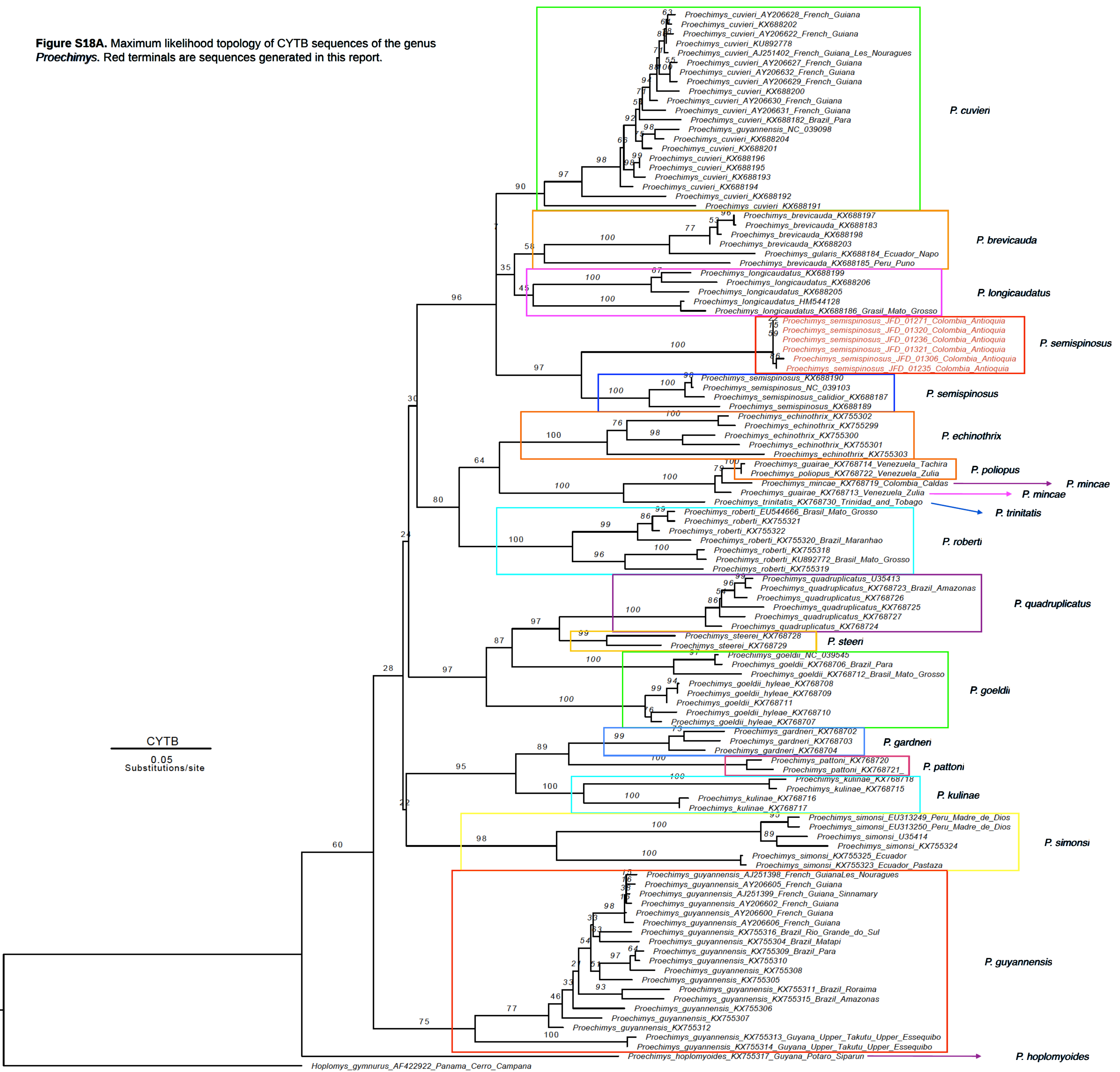


Figure S18B. Maximum likelihood topology of COI sequences of the genus *Proechimys*. Red terminals are sequences generated in this report.

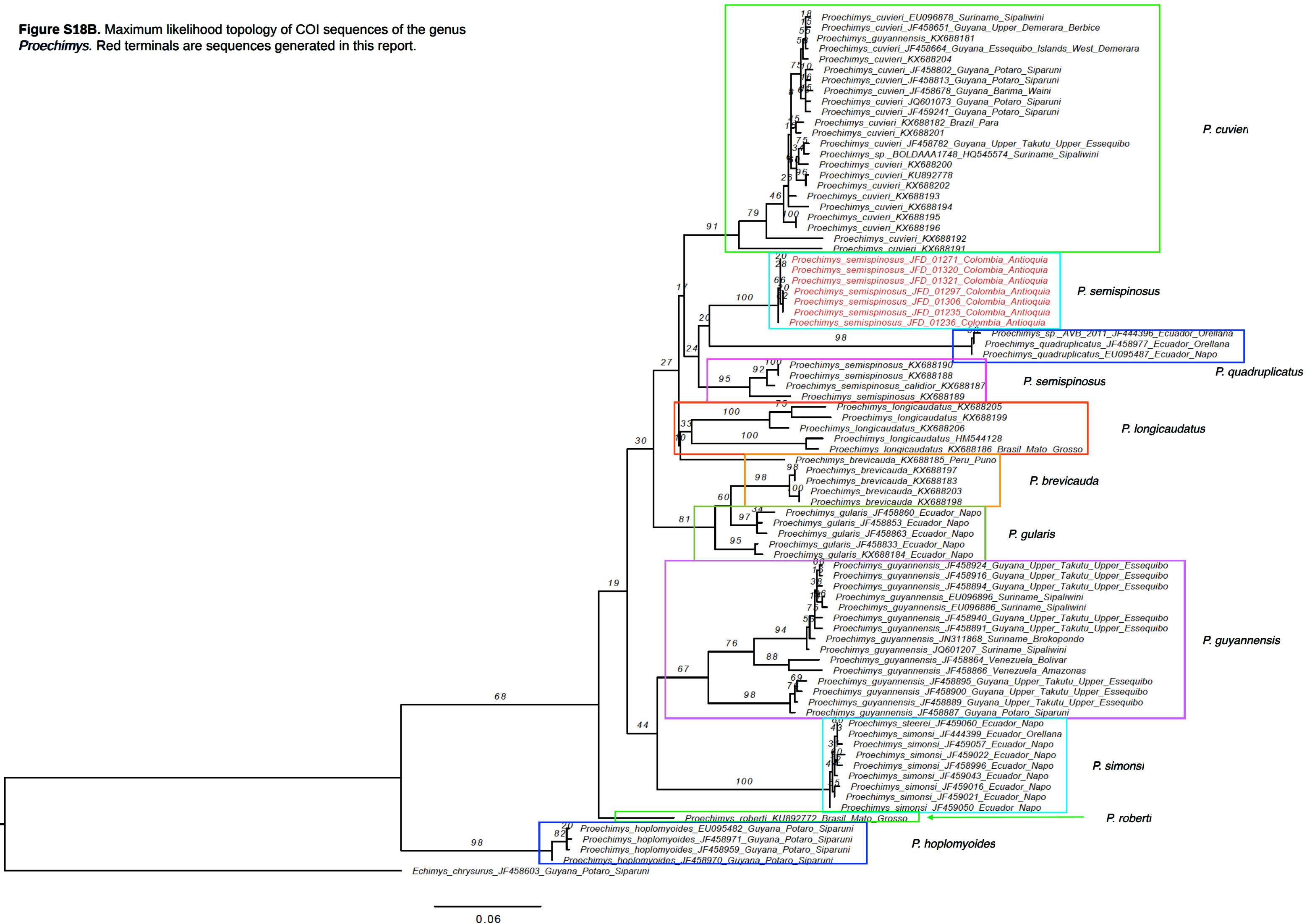


Figure S19A. Maximum likelihood topology of CYTB sequences of the genus *Notosciurus*. Red terminals are sequences generated in this report.

