

Supplementary Table S1. Specimens included in our analysis with their localities and identification (ID) numbers in scientific collections and the GenBank accession numbers of the nucleotide sequences, with respective bibliographic citations. Abbreviations are: ZUEC = Museum of Zoology “Professor Adão José Cardoso” of the University of Campinas; SMRP = Shirlei Maria Recco-Pimentel cell and tissue collection; CFBH-T = Célio F.B. Haddad tissue collection; MZUSP = Museu de Zoologia da Universidade de São Paulo; MCP = Museu de Ciências e Tecnologia, Pontifícia Universidade Católica do Rio Grande do Sul; TLFT = Luís Felipe Toledo tissue collection; MACN = Museo Argentino de Ciencias Naturales “Bernardino Rivadavia”, Buenos Aires, Argentina; IZUA = Instituto de Zoología, Universidad Austral de Chile, Valdivia, Chile; MLPA = Museo de la Plata, Buenos Aires, Argentina.

Species	Family	Locality	ID number	H1 fragment (GenBank)	RAG1 fragment (GenBank)	Reference
<i>Phantasmarana apuana</i>	Hylodidae	Parque Nacional do Caparaó, Alto Caparaó, MG, Brazil	SMRP 526.4	MT409024	MZ043786	present study
<i>Phantasmarana apuana</i>	Hylodidae	Parque Nacional do Caparaó, Alto Caparaó, MG, Brazil	TLFT 1981	MT409023	MZ043787	present study
<i>Phantasmarana apuana</i>	Hylodidae	Parque Nacional do Caparaó, Alto Caparaó, MG, Brazil	TLFT 1911	MT409025	MZ043788	present study
<i>Phantasmarana jordanensis</i> (= <i>Phantasmarana</i> sp.)	Hylodidae	Fazenda Votorantin Celulose, Pindamonhangaba, SP, Brazil	SMRP 81.8	MT409028	MZ043790	present study
<i>Phantasmarana jordanensis</i> (= <i>Phantasmarana</i> sp.)	Hylodidae	Fazenda Votorantin Celulose, Pindamonhangaba, SP, Brazil	SMRP 81.6	MT409026	MZ043789	present study
<i>Phantasmarana jordanensis</i> (= <i>Phantasmarana</i> sp.)	Hylodidae	Fazenda Votorantin Celulose, Pindamonhangaba, SP, Brazil	SMRP 81.3	MT409027	MZ043791	present study
<i>Phantasmarana jordanensis</i>	Hylodidae	Campos do Jordão, SP, Brazil	CFBH 28578	MT409029	–	present study
<i>Phantasmarana jordanensis</i>	Hylodidae	Córrego do Convento, próximo a Fazenda Nova Gokula, Pindamonhangaba, SP, Brazil	MCP 11575	MF624238	–	GRANT et al. (2017)
<i>Phantasmarana massarti</i>	Hylodidae	Paranapiacaba, SP, Brazil	ZUEC 11395 SMRP 27.7	MT409030	MZ043792	present study
<i>Phantasmarana massarti</i>	Hylodidae	Paranapiacaba, SP, Brazil	ZUEC 11553 SMRP 27.8	MT409031	MZ043793	present study
<i>Phantasmarana boticariana</i>	Hylodidae	Parque da Gruta Funda, Atibaia, SP, Brazil	SMRP 109.1	MT409032	MZ043794	present study
<i>Phantasmarana boticariana</i>	Hylodidae	Parque da Gruta Funda, Atibaia, SP, Brazil	SMRP 109.2	MT409033	MZ043795	present study
<i>Phantasmarana boticariana</i>	Hylodidae	São Francisco Xavier, São José dos Campos, SP, Brazil	ZUEC 24587	MT409034	MZ043796	present study
<i>Phantasmarana boticariana</i>	Hylodidae	Caçapava, SP, Brazil	CFBH 00425	KJ961586	–	DE SÁ et al. (2015)
<i>Phantasmarana lutzae</i>	Hylodidae	Parque Nacional do Itatiaia, Itatiaia, RJ, Brazil	SMRP 555.1	MZ043810	MZ043781	present study
<i>Phantasmarana lutzae</i>	Hylodidae	Parque Nacional do Itatiaia, Itatiaia, RJ, Brazil	SMRP 555.2	MZ043811	MZ043782	present study
<i>Phantasmarana lutzae</i>	Hylodidae	Parque Nacional do Itatiaia, Itatiaia, RJ, Brazil	SMRP 555.3	MZ043812	MZ043783	present study
<i>Phantasmarana lutzae</i>	Hylodidae	Parque Nacional do Itatiaia, Itatiaia, RJ, Brazil	SMRP 555.4	MZ043813	MZ043784	present study
<i>Phantasmarana lutzae</i>	Hylodidae	Parque Nacional do Itatiaia, Itatiaia, RJ, Brazil	SMRP 555.5	MZ043814	MZ043785	present study
<i>Megaelosia goeldii</i>	Hylodidae	Parque Nacional da Serra dos Órgãos, Teresópolis, RJ, Brazil	SMRP 527.2	MT409020	MZ043797	present study
<i>Megaelosia goeldii</i>	Hylodidae	Parque Nacional da Serra dos Órgãos, Teresópolis, RJ, Brazil	SMRP 527.3	MT409022	MZ043798	present study
<i>Megaelosia goeldii</i>	Hylodidae	Parque Nacional da Serra dos Órgãos, Teresópolis, RJ, Brazil	SMRP 527.4	MT409021	MZ043799	present study
<i>Megaelosia goeldii</i>	Hylodidae	Parque Nacional da Serra dos Órgãos, Teresópolis, RJ, Brazil	MZUSP 95879	DQ283072	DQ503346	FROST et al. (2006) and GRANT et al. (2006)
<i>Hylodes japi</i>	Hylodidae	Serra do Japi, Jundiá, SP, Brazil	ZUEC 24642 SMRP 540.1	MT409035	MZ043800	present study

Online Supplementary data – STENIO EDER VITTORAZZI et al.: Paraphyly in the giant torrent-frogs (Anura: Hylodidae: *Megaelosia*) and the description of a new genus. – *Salamandra*, 57: 274–284

Species	Family	Locality	ID number	H1 fragment (GenBank)	RAG1 fragment (GenBank)	Reference
<i>Hylodes japi</i>	Hylodidae	Serra do Japi, Jundiá, SP, Brazil	ZUEC 24643 SMRP 540.2	MT409036	MZ043801	present study
<i>Hylodes meridionalis</i>	Hylodidae	Arroio Humaito, São Francisco de Paulo, RS, Brazil	–	KT221614	–	MACHADO et al. (2016)
<i>Hylodes meridionalis</i>	Hylodidae	Arroio Humaito, São Francisco de Paulo, RS, Brazil	MCP 11547	MF624225	MF614360	GRANT et al. (2017)
<i>Hylodes heyeri</i>	Hylodidae	Morretes, PR, Brazil	ZUEC 24650 SMRP 544.1	MT409040	MZ043802	present study
<i>Hylodes phyllodes</i>	Hylodidae	Paranapiacaba, SP, Brazil	ZUEC 11554 SMRP 28.20	MT409037	–	present study
<i>Hylodes phyllodes</i>	Hylodidae	Paranapiacaba, SP, Brazil	SMRP 28.10	–	MZ043805	present study
<i>Hylodes phyllodes</i>	Hylodidae	Brazil – no additional date	MCL00015	DQ502171	DQ503367	GRANT et al. (2006)
<i>Hylodes phyllodes</i>	Hylodidae	Picinguaba, Ubatuba, SP, Brazil	CFBH 249	DQ283096	–	FROST et al. (2006)
<i>Hylodes asper</i>	Hylodidae	Paranapiacaba, SP, Brazil	ZUEC 11441 SMRP 26.9	MT409038	MZ043803	present study
<i>Hylodes asper</i>	Hylodidae	Paranapiacaba, SP, Brazil	ZUEC 11555 SMRP 26.10	MT409039	MZ043804	present study
<i>Hylodes caete</i>	Hylodidae	PESM Curucutu, São Paulo, SP, Brazil	CFBH 40527	KY627909	–	MALAGOLI et al. (2017)
<i>Hylodes caete</i>	Hylodidae	PESM Curucutu, São Paulo, SP, Brazil	CFBH 40526	KY627908	–	MALAGOLI et al. (2017)
<i>Hylodes sazimai</i>	Hylodidae	Serra das Cabras, Campinas, SP, Brazil	CFBH 14630	KJ961585	–	DE SÁ et al. (2015)
<i>Hylodes sazimai</i>	Hylodidae	Serra das Cabras, Campinas, SP, Brazil	CFBH 29586	KJ961584	–	DE SÁ et al. (2015)
<i>Hylodes perere</i>	Hylodidae	Santa Barbara do Monte Verde, MG, Brazil	CFBH 31106	KJ961581	–	DE SÁ et al. (2015)
<i>Hylodes perere</i>	Hylodidae	Santa Rita do Jacutinga, MG, Brazil	CFBH 12651	KJ961580	–	DE SÁ et al. (2015)
<i>Hylodes ornatus</i>	Hylodidae	Parque Nacional do Itatiaia, Itamonte, MG, Brazil	CFBH 34905	KJ961578	–	DE SÁ et al. (2015)
<i>Hylodes amnicola</i>	Hylodidae	Parque Ibitipoca, Lima Duarte, MG, Brazil	CFBH 15290	KJ961576	–	DE SÁ et al. (2015)
<i>Hylodes amnicola</i>	Hylodidae	Parque Ibitipoca, Lima Duarte, MG, Brazil	CFBH 30971	KJ961575	–	DE SÁ et al. (2015)
<i>Hylodes lateristrigatus</i>	Hylodidae	Reserva Ecológica de Guapiaçu, Cachoeiras de Macacu, RJ, Brazil	5826	KM390794	–	AMARAL et al. (2019)
<i>Crossodactylus gaudichaudii</i>	Hylodidae	Parque Lage, Rio de Janeiro, RJ, Brazil	ZUEC 17569 SMRP 186.4	MT893617	–	present study and VIT-TORAZZI et al. (2021)
<i>Crossodactylus gaudichaudii</i>	Hylodidae	Parque Lage, Rio de Janeiro, RJ, Brazil	ZUEC 17570 SMRP 186.5	MT893618	MZ043808	present study and VIT-TORAZZI et al. (2021)
<i>Crossodactylus gaudichaudii</i>	Hylodidae	Rio de Janeiro, RJ, Brazil	ZUEC 13552	–	MZ043806	present study
<i>Crossodactylus schmidti</i>	Hylodidae	Aristobulo del Valle, Misiones, Argentina	MLPA 1414	AY843579	DQ503298	FAIVOVICH et al. (2005) and GRANT et al. (2006)
<i>Crossodactylus caramaschii</i>	Hylodidae	Itanhaem, SP, Brazil	CFBH 06917	KJ961569	–	DE SÁ et al. (2015)
<i>Crossodactylus wernerii</i>	Hylodidae	Serra das Cabras, Joaquim Egídio, Campinas, SP, Brazil	AA1320	KU215900	–	VIDIGAL et al. (2018)
<i>Crossodactylus wernerii</i>	Hylodidae	Serra das Cabras, Joaquim Egídio, Campinas, SP, Brazil	AA1569	KU215901	–	VIDIGAL et al. (2018)

Online Supplementary data – STENIO EDER VITTORAZZI et al.: Paraphyly in the giant torrent-frogs (Anura: Hylodidae: *Megaelasia*) and the description of a new genus. – *Salamandra*, 57: 274–284

Species	Family	Locality	ID number	H1 fragment (GenBank)	RAG1 fragment (GenBank)	Reference
<i>Eupsophus roseus</i> (outgroup)	Alsodidae	Huiliches, Neuquen, Argentina	MACN 39081	JX204217	–	BLOTTO et al. (2012)
<i>Eupsophus emiliopugini</i> (outgroup)	Alsodidae	La Picada, Chile	IZUA 3586	JX204205	–	BLOTTO et al. (2012)
<i>Eupsophus septentrionlis</i> (outgroup)	Alsodidae	Los Queules, Chile	IZUA 3600	JX204218	–	BLOTTO et al. (2012)
<i>Eupsophus vertebralis</i> (outgroup)	Alsodidae	Los Queules, Chile	IZUA 3604	JX204220	–	BLOTTO et al. (2012)
<i>Eupsophus calcaratus</i> (outgroup)	Alsodidae	Chiloe, Chile	IZUA 3582	JX204200	–	BLOTTO et al. (2012)
<i>Eupsophus calcaratus</i> (outgroup)	Alsodidae	South America	TNHC–GDC 31199	–	KX208675	FENG et al. (2017)
<i>Eupsophus migueli</i> (outgroup)	Alsodidae	Mehuín, Chile	IZUA 3591	JX204209	–	BLOTTO et al. (2012)
<i>Eupsophus insularis</i> (outgroup)	Alsodidae	Isla Mocha, Chile	IZUA 3588	JX204207	–	BLOTTO et al. (2012)
<i>Eupsophus nahuelbutensis</i> (outgroup)	Alsodidae	Piedra del Aguila, Chile	IZUA 3595	JX204212	–	BLOTTO et al. (2012)
<i>Eupsophus nahuelbutensis</i> (outgroup)	Alsodidae	Rucapehuen, Chile	IZUA 3596	–	JX204087	BLOTTO et al. (2012)
<i>Alsodes vanzolinii</i> (outgroup)	Alsodidae	Ramadillas, Chile	IZUA 3570	JX204189	JX204084	BLOTTO et al. (2012)
<i>Alsodes verrucosus</i> (outgroup)	Alsodidae	Puyehue, Chile	IZUA 3577	JX204192	JX204086	BLOTTO et al. (2012)
<i>Alsodes neuquensis</i> (outgroup)	Alsodidae	Alumine, Neuquen, Argentina	MACN 38973	JX204173	JX204073	BLOTTO et al. (2012)
<i>Alsodes valdiviensis</i> (outgroup)	Alsodidae	Cordillera Pelada, Chile	IZUA 3568	JX204187	JX204082	BLOTTO et al. (2012)
<i>Alsodes nodosus</i> (outgroup)	Alsodidae	Valparaiso, Petorca, Zapallar, Chile	IZUA 3558	JX204174	–	BLOTTO et al. (2012)
<i>Alsodes pehuenche</i> (outgroup)	Alsodidae	Mendoza, Valle Pehuenche, Argentina	IZUA 3560	JX204177	JX204076	BLOTTO et al. (2012)
<i>Alsodes tumutuosus</i> (outgroup)	Alsodidae	Region Metropolitana, Santiago, La Parva, Chile	IZUA 3566	JX204185	JX204081	BLOTTO et al. (2012)
<i>Alsodes barrioi</i> (outgroup)	Alsodidae	Rucapehuen, Chile	IZUA 3550	JX204154	JX204063	BLOTTO et al. (2012)
<i>Alsodes gargola</i> (outgroup)	Alsodidae	Futaleufu, Chile	IZUA 3575	JX204165	JX204069	BLOTTO et al. (2012)

References

- AMARAL, C. R. L., A. C. S. CHAVES, V. N. T. BORGES JÚNIOR, F. PEREIRA, B. M. SILVA, D. A. SILVA, A. AMORIM, E. F. CARVALHO & C. F. D. ROCHA (2020): Amphibians on the hotspot: Molecular biology and conservation in the South American Atlantic Rainforest. – *PLOS ONE*, 15(1): e0227329.
- BLOTTO, B. L., J. J. NUÑEZ, N. G. BASSO, C. A. ÚBEDA, W. C. WHEELER & J. FAIVOVICH (2012): Phylogenetic relationships of a Patagonian frog radiation, the *Alsodes* + *Eupsophus* clade (Anura: Alsodidae), with comments on the supposed paraphyly of *Eupsophus*. – *Cladistics*, 29: 113–131.
- DE SÁ, F. P., C. CANEDO, M. L. LYRA & C. F. L. HADDAD (2015): A new species of *Hylodes* (Anura, Hylodidae) and its secretive underwater breeding behavior. – *Herpetologica*, 71(1): 58–71.
- FAIVOVICH, J., C. F. B. HADDAD, P. C. A. GARCIA, D. R. FROST, J. R. CAMPBELL & W. C. WHEELER (2005): Systematic review of the frog family Hylidae, with special reference to Hylinae: phylogenetic analysis and taxonomic revision. – *Bulletin of the American Museum of Natural History*, 294: 1–240.
- FENG Y. J., D. C. BLACKBURN, D. LIANG, D. M. HILLIS, D. B. WAKE, D. C. CANNATELLA & P. ZHANG (2017): Phylogenomics reveals rapid, simultaneous diversification of three major clades of Gondwanan frogs at the Cretaceous-Paleogene boundary. – *Proceedings of the National Academy of Sciences* Jul 2017, 114(29): E5864-E5870.
- FROST, D. R., T. GRANT, J. FAIVOVICH, R. H. BAIN, A. HAAS, C. F. B. HADDAD, R. O. DE SÁ, A. CHANNING, M. WILKINSON, S. C. DONNELLAN, C. J. RAXWORTHY, J. A. CAMPBELL, B. L. BLOTTO, P. MOLER, R. C. DREWES, R. A. NUSSBAUM, J. D. LYNCH, D. M. GREEN & W. C. WHEELER (2006): The Amphibian tree of life. – *Bulletin of the American Museum of Natural History*, 297: 1–370.
- GRANT, T., D. R. FROST, J. P. CALDWELL, R. GAGLIARDO, C. F. B. HADDAD, P. J. R. KOK, D. B. MEANS, B. P. NOONAN, W. E. SCHARGEL & W. C. WHEELER (2006): Phylogenetic systematics of dart-poison frogs and their relatives (Anura: Athesphatanura: Dendrobatidae). – *Bulletin of the American Museum of Natural History*, 299: 1–262.
- GRANT, T., M. RADA, M. ANGANOY-CRIOLLO, A. BATISTA, P. H. DIAS, A. M. JECKEL, D. J. MACHADO & J. V. RUEDA-ALMONACID (2017): Phylogenetic systematics of dart-poison frogs and their relatives revisited (Anura: Dendrobatoidea). – *South American Journal of Herpetology*, 12(s1): S1–S90.
- MACHADO, D. J., LYRA M. L. & T. GRANT (2016): Mitogenome assembly from genomic multiplex libraries: comparison of strategies and novel mitogenomes for five species of frogs. – *Molecular Ecology Resources*, 16(3): 686–693.
- MALAGOLI, L. R., F. P. DE SÁ, C. CANEDO & C. F. B. HADDAD (2017): A new species of *Hylodes* (Anura, Hylodidae) from Serra do Mar, southeastern Brazil: the fourth with nuptial thumb tubercles. – *Herpetologica*, 73(2): 136–147.
- VÍDIGAL, I., T. R. CARVALHO, R. B. G. CLEMENTE-CARVALHO & A. A. GIARETTA (2018): Vocalizations, tadpole, and natural history of *Crossodactylus weneri* Pimenta, Cruz & Caramaschi, 2014 (Anura: Hylodidae), with comments on distribution and intraspecific variation. – *Zootaxa*, 4388(1): 61–75.
- VITTORAZZI S. E., L. B. LOURENÇO, M. L. ZATTERA, L. N. WEBER, S. M. RECCO-PIMENTEL & D. P. BRUSCHI (2021): Cytogenetic and genetic data support *Crossodactylus aeneus* Müller, 1924 as a new junior synonym of *C. gaudichaudii* Duméril and Bibron, 1841 (Amphibia, Anura). – *Genetics and Molecular Biology*, 44(2): e20200301.

Supplementary Table S2. Measurements of analyzed individuals, including information available on literature. Abbreviations: SVL = snout-vent length; TL = total length; HW = head width; HL = head length; FDW = finger discs width.

Species	Voucher	Type	Locality	Stage / sex	SVL	TL	HW	HL	FDW	SVL/FDW	Reference
<i>M. goeldii</i>	ZUEC 4093	–	Teresópolis, RJ	Adult	85.9	–	34.6	39.4	3.08	27.91	present study
<i>M. goeldii</i>	–	–	Teresópolis, RJ	Adult male	82.2	–	31.6	31.3	–	–	GIARETTA et al. 1993
<i>M. goeldii</i>	–	–	Teresópolis, RJ	Adult male	95.0	–	34	35.3	–	–	GIARETTA et al. 1993
<i>M. goeldii</i>	UNIRIO 2224	–	Teresópolis, RJ	Adult male	86.3	–	34.41	28.6	3.35	25.77	present study
<i>M. goeldii</i>	UNIRIO 5469	–	Teresópolis, RJ	–	83.6	–	30.7	28.2	3.53	23.68	present study
<i>M. goeldii</i>	UNIRIO 5998	–	Teresópolis, RJ	Adult male	91.4	–	34.6	30.2	3.71	24.63	present study
<i>M. goeldii</i>	UNIRIO 6208	–	Teresópolis, RJ	Adult female	92.1	–	33.3	30.4	3.04	30.30	present study
<i>M. goeldii</i>	ZUEC 233191	–	Teresópolis, RJ	Tadpole	–	93.9	–	–	–	–	present study
<i>M. goeldii</i>	ZUEC 22564	–	Teresópolis, RJ	Tadpole	–	111.1	–	–	–	–	present study
<i>P. apuana</i>	ZUEC 23497	–	Alto Caparaó, MG	Adult male	66.3	–	23.4	24.9	1.71	38.78	present study
<i>P. apuana</i>	MNRJ 26057	holotype	Domingos Martins, ES	Adult female	92.2	–	38.6	40.0	–	–	POMBAL JR. et al. 2003
<i>P. apuana</i>	CFBH 03568	paratype	Domingos Martins, ES	Adult female	94.6	–	40.1	41.2	–	–	SANTOS et al. 2011
<i>P. apuana</i>	UFMG 5740	–	Simonésia, MG	Adult female	94.0	–	38.1	41.8	–	–	SANTOS et al. 2011
<i>P. apuana</i>	UFMG 5741	–	Simonésia, MG	Adult female	95.5	–	37.0	37.3	–	–	SANTOS et al. 2011
<i>P. apuana</i>	MNRJ 26058	paratype	Domingos Martins, ES	Adult male	78.0	–	32.1	34.0	–	–	SANTOS et al. 2011
<i>P. apuana</i>	MNRJ 26059	paratype	Domingos Martins, ES	Adult male	97.2	–	43.3	43.0	–	–	SANTOS et al. 2011
<i>P. apuana</i>	UFMG 5737	–	Simonésia, MG	Adult male	94.8	–	35.8	39.9	–	–	SANTOS et al. 2011
<i>P. apuana</i>	UFMG 5739	–	Simonésia, MG	Adult male	78.9	–	32.3	34.8	–	–	SANTOS et al. 2011
<i>P. apuana</i>	ZUEC 22566 (1)	–	Alto Caparaó, MG	Tadpole	–	89.5	–	–	–	–	present study
<i>P. apuana</i>	ZUEC 22566 (2)	–	Alto Caparaó, MG	Tadpole	–	101.5	–	–	–	–	present study
<i>P. apuana</i>	ZUEC 23392 (1)	–	Alto Caparaó, MG	Tadpole	–	96.1	–	–	–	–	present study
<i>P. apuana</i>	ZUEC 23392 (2)	–	Alto Caparaó, MG	Tadpole	–	100.8	–	–	–	–	present study
<i>P. apuana</i>	ZUEC 23392 (3)	–	Alto Caparaó, MG	Tadpole	–	111.0	–	–	–	–	present study
<i>P. apuana</i>	–	–	Domingos Martins, ES	Tadpole	–	105.7	–	–	–	–	POMBAL JR. et al. 2003
<i>P. apuana</i>	–	–	Domingos Martins, ES	Tadpole	–	107.3	–	–	–	–	POMBAL JR. et al. 2003
<i>P. apuana</i>	–	–	Domingos Martins, ES	Tadpole	–	104.5	–	–	–	–	POMBAL JR. et al. 2003
<i>P. apuana</i>	–	–	Domingos Martins, ES	Tadpole	–	100.8	–	–	–	–	POMBAL JR. et al. 2003
<i>P. apuana</i>	–	–	Domingos Martins, ES	Tadpole	–	110.0	–	–	–	–	POMBAL JR. et al. 2003
<i>P. apuana</i>	–	–	Domingos Martins, ES	Tadpole	–	121.9	–	–	–	–	POMBAL JR. et al. 2003
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	118.4	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	106.7	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	107.4	–	–	–	–	present study

Online Supplementary data – STENIO EDER VITTORAZZI et al.: Paraphyly in the giant torrent-frogs (Anura: Hylodidae: *Megaelosia*) and the description of a new genus. – *Salamandra*, 57: 274–284

Species	Voucher	Type	Locality	Stage / sex	SVL	TL	HW	HL	FDW	SVL/FDW	Reference
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	77.8	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	117.0	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	117.1	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	102.2	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	120.3	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	119.1	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	115.8	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	87.5	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	91.9	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	92.1	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	90.2	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	120.3	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	111.6	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	99.5	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	95.8	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	87.1	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	122.6	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	115.0	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	132.7	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	126.3	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	89.1	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	83.3	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	96.3	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	117.1	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	117.1	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	79.2	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	98.2	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	108.1	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	107.6	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	86.5	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	108.4	–	–	–	–	present study
<i>P. apuana</i>	Unvouchered	–	Alto Caparaó, MG	Tadpole	–	109.7	–	–	–	–	present study
<i>P. bocainensis</i>	MNRJ 15900	holotype	São José do Barreiro, SP	juvenile female	66.7	–	27.0	24.7	–	–	GIARETTA et al. 1993
<i>P. boticariana</i>	ZUEC 9561	holotype	Atibaia, SP	Adult female	72.4	–	33.6	33.8	1.75	41.38	present study
<i>P. boticariana</i>	ZUEC 9562	paratype	Atibaia, SP	Adult female	76.1	–	32.6	32.9	1.87	40.68	present study

Online Supplementary data – STENIO EDER VITTORAZZI et al.: Paraphyly in the giant torrent-frogs (Anura: Hylodidae: *Megaelasia*) and the description of a new genus. – *Salamandra*, 57: 274–284

Species	Voucher	Type	Locality	Stage / sex	SVL	TL	HW	HL	FDW	SVL/FDW	Reference
<i>P. boticariana</i>	ZUEC 11843	topotype	Atibaia, SP	Adult male	97.5	–	41.6	39.1	2.13	45.76	present study
<i>P. boticariana</i>	ZUEC 9564	–	Atibaia, SP	Tadpole	–	98.8	–	–	–	–	present study
<i>P. jordanensis</i>	MZUSP 4522	holotype	Campos do Jordão, SP	Adult female	47.0	–	20.6	20.5	–	–	HEYER 1983
<i>P. lutzae</i>	MNJR 4181	paratype	Resende, SP	Adult female	90.0	–	–	–	–	–	IZECKSOHN & GOUVEA 1985
<i>P. lutzae</i>	ZUEC 14612 (1)	–	Itatiaia, RJ	Tadpole	–	70.9	–	–	–	–	present study
<i>P. lutzae</i>	ZUEC 14612 (2)	–	Itatiaia, RJ	Tadpole	–	89.9	–	–	–	–	present study
<i>P. lutzae</i>	ZUEC 14612 (3)	–	Itatiaia, RJ	Tadpole	–	99.7	–	–	–	–	present study
<i>P. lutzae</i>	–	–	Resende, SP	Tadpole	–	130.0	–	–	–	–	GIARETTA et al. 1993
<i>P. massarti</i>	ZUEC 8516	–	Santo André, SP	Adult	109.8	–	45.9	43.5	3.24	33.88	present study
<i>P. massarti</i>	ZUEC 11553	–	Santo André, SP	Adult male	114.9	–	49.6	50.4	3.73	30.82	present study
<i>P. massarti</i>	ZUEC 8849	–	Santo André, SP	Adult	79.8	–	33.7	34.4	2.12	37.65	present study
<i>P. massarti</i>	ZUEC 11397	–	Santo André, SP	Adult male	110.2	–	44.8	48.0	2.58	42.70	present study
<i>P. massarti</i>	ZUEC 11395	–	Santo André, SP	Adult female	114.4	–	47.3	46.2	2.81	40.73	present study
<i>P. massarti</i>	ZUEC 9176	–	Santo André, SP	Adult male	111.5	–	47.6	47.8	3.06	36.44	present study
<i>P. massarti</i>	–	–	Santo André, SP	Tadpole	–	128.0	–	–	–	–	GIARETTA et al. 1993
<i>P. massarti</i>	MNRJ 5306	–	Campos do Jordão, SP	Tadpole	–	111.2	–	–	–	–	NOGUEIRA-COSTA et al. 2012
<i>P. massarti</i>	MNRJ 35086	–	Campos do Jordão, SP	Tadpole	–	123.2	–	–	–	–	NOGUEIRA-COSTA et al. 2012

References

- GIARETTA, A. A., W. C. A. BOKERMAN & HADDAD C.F.B. (1993): A review of the genus *Megaelosia* (Anura: Leptodactylidae) with a description of a new species. – *Journal of Herpetology*, 27: 276–285.
- HEYER, W. R. (1983): Variation and systematics of frogs of the genus *Cycloramphus* (Amphibia, Leptodactylidae). – *Arquivos de Zoologia*, 30: 235–339.
- IZECKSOHN, E. & E. GOUVÊA (1987 “1985”): Nova espécie de *Megaelosia* de Itatiaia, Estado do Rio de Janeiro. – *Arquivos de Universidade Federal Rural do Rio de Janeiro*, 8: 17–22.
- NOGUEIRA-COSTA, P., P. ALMEIDA-SANTOS, C. A. G. CRUZ & U. CARAMASCHI (2012): The giant tadpoles of *Megaelosia jordanensis* (Heyer, 1983). – *Zootaxa*, 3581(1): 86–88.
- POMBAL, J. P., G. M. PRADO & C. CANEDO (2003): A new species of giant torrent frog, genus *Megaelosia*, from the Atlantic Rain Forest of Espírito Santo, Brazil (Amphibia: Leptodactylidae). – *Journal of Herpetology*, 37: 453–460.
- SANTOS, P. A., E. T. SILVA, B. H. B. FELHBERG, M. T. T. SANTOS & P. C. A. GARCIA (2011): Amphibia, Anura, Hylodidae, *Megaelosia apuana* Pombal, Prado and Canedo, 2003: Distribution extension, new state record and geographic distribution map. – *Check List*, 7(4): 394–396.

Appendix S1. Additional hylodid specimens or recordings examined, to complement the information available in the literature, which are deposited in the following Brazilian collections: CFBH = Célio F. B. Haddad amphibian collection, Unesp, Rio Claro, São Paulo; UNIRIO = amphibian collections of Universidade Federal do Estado do Rio de Janeiro; ZUEC = Museu de Zoologia “prof. Adão José Cardoso”, Unicamp, Campinas, São Paulo.

Crossodactylus weneri: Valinhos, SP: ZUEC-VID 776-780.

Megaelosia goeldii: Teresópolis, RJ: CFBH 23794, 23797, 23799, 23801; ZUEC 4093; Friburgo, RJ: CFBH 23796. Teresópolis, RJ: ZUEC 22564 (tadpoles) and 23391 (tadpoles).

Phantasmarana apuana: Alto Caparaó, MG: ZUEC 22566 (tadpoles), 23392 (tadpoles), 23497 (adult); Domingos Martins, ES: CFBH 10811.

Phantasmarana boticariana: Atibaia, SP: CFBH 42845 (juvenile paratype); ZUEC 9561 (holotype), 9562 (paratype), 9564 (tadpoles), 11843 (adult).

Phantasmarana cf. bocainensis: São Luiz do Paraitinga, SP: CFBH 38735; Cunha, SP: CFBH 38976–78.

Phantasmarana jordanensis: Pindamonhangaba, SP: CFBH 5374; ZUEC 14612 (tadpoles).

Phantasmarana massarti: Paranapiacaba, Santo André, SP: CFBH 939, 1001, 2059; Itanhaém: CFBH 17668; ZUEC 8516, 8849, 9176, 11395, 11397, 1155