

Addenda and errata to “Description of a new species of the genus *Adenomera* (Amphibia, Anura, Leptodactylidae) from French Guiana.”

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In the first issue of *Acta Herpetologica*, Boistel et al. (2006) described a new species of *Adenomera* (Amphibia, Anura, Leptodactylidae). Because of an unfortunate set of events, there are several aspects of this paper that have to be corrected, or elaborated on. We address these issues herein.

It is noteworthy to add that since the description of *Adenomera heyeri*, a new article, suggesting a number of taxonomic changes, was published (Frost et al., 2006). In this paper it is recommended that *Adenomera* be reconsidered under the genus *Leptodactylus*. This is consistent with the results of other, independent studies (Angulo, 2004; Kokubum and Giaretta, 2005). Given the currently available evidence, the new species would be best placed under *Leptodactylus*, its name would thus be *Leptodactylus heyeri* (Boistel, et al., 2006), and all other members of *Adenomera* would now be considered *Leptodactylus*. However, in order to facilitate the fluent reading of this note with reference to the original description and minimize confusion, we will refer to the nomenclature used in the original paper.

The points that have to be incorporated into the paper or followed up on are as follows:

- In page 2, paragraph 3, we mention that the advertisement calls of five nominal species of the genus *Adenomera* have been previously described; yet, only four are mentioned (*A. hylaedactyla*, *A. andreae*, *A. araucaria* and *A. marmorata*). The missing species is *Adenomera diptyx*, whose call was originally published in Márquez et al. (1995) as that of *Adenomera andreae* (De la Riva et al., 2000). Although it was not cited in the text, this last reference was included in the reference list in the description. It is worth mentioning that since the publication of the description of *A. heyeri*, an additional advertisement call has been described for the group, that of the newly described *Leptodactylus thomei* (Almeida and Angulo, 2006).
- In page 3, line 1, remove the word “of” from the sentence “further analyze of the known vocalizations ...”.
- In page 3, first paragraph under *Morphological Analysis*, add “Additional materials examined for comparative purposes are deposited at the Academy of Natural Sciences

of Philadelphia (ANSP), Philadelphia, U.S.A. ; Museo Noel Kempff Mercado (NKA), Santa Cruz de la Sierra, Bolivia; Museu de Ciências e Tecnologia da PUCRS (MCP), Porto Alegre, Brazil; Museu Nacional do Rio de Janeiro (MNRJ), Rio de Janeiro, Brazil; National Museum of Natural History (USNM), Washington, D.C., U.S.A.; Royal Ontario Museum (ROM), Toronto, Canada; and Zoologische Staatssammlung München (ZSM), München, Germany.”

- Page 3, *Morphological analysis*: Vomerine teeth (VT) are also referred to as vomerine ridges in the species description.
- Page 4, first paragraph under Diagnosis: “The new species is distinguished from all other species by its advertisement call and the following combination of characters: (1) two pairs of dorsolateral folds present; (2) smooth skin on lower surface of foot or with a few small white tubercles; (3) throat and belly of males yellow; (4) tarsal fold present and slightly marked.” Although the new species may share some of these characters with other species (e.g. presence of two pairs of dorsolateral folds, scant small white tubercles on lower surface of foot, or a weakly marked tarsal fold), this paragraph refers to the use of all of these features combined, rather than taken independently.
- Last three lines of the second paragraph, *Diagnosis*: “*Adenomera heyeri* is distinct from *A. hylaedactyla* by having the head as wide as long, its snout is, from above, nearly rounded versus subovoid, pulses are absent and note duration is longer”. Measurements of the holotype of *A. heyeri* indicate that head length is 9.6 mm, whereas head width is 9.2 mm. However, head length is not always greater than width in this species, as can be seen from Table 3. *A. hylaedactyla* also has variable head widths and lengths (see Heyer, 1973 and Angulo et al., 2003). Because of these two points, the comparison of head length and head width would not be a useful diagnostic feature of *A. heyeri* with regards to *A. hylaedactyla*.
- In the *Diagnosis* there is no comparison with *A. diptyx*, which is herein provided: *Adenomera heyeri* differs from *Adenomera diptyx* (Boettger, 1885) in having a different advertisement call. *A. heyeri* also has a distinct tympanum, with a maximum diameter about 2/3 of eye diameter; in *A. diptyx* the tympanum is half the size of the eye (Boettger, 1885).
- Page 4, second line in the *Description of Holotype*: “Snout from above ... head wider than long; ...” should read “Snout from above ... head slightly longer than what it is wide; ...”.
- Page 5, Table 1: “Data for *A. heyeri* originate from the type specimens (MNHN 1999.8331)” should read “Data for *A. heyeri* originate from the type specimen (MNHN 1999.8331)”. Where it reads “Asterisks indicate ...” should read “Asterisk indicates ... two (long distance recordings) specimens.”
Last three lines of page 5: “... inner and outer metacarpal tubercles large, prominent, outer larger than inner, shape of inner oblong, that of outer long; ...” should read “... inner and outer metacarpal tubercles large, prominent, outer larger than inner, shape of inner oblong, that of outer rounded; ...”
Page 6, Table 2: – The number of harmonics in *A. hylaedactyla* reads “2”; it should read “2 to 5”.

- Add note: “to Table 2 the number of harmonics detected will vary as a function of recording distance, as higher frequencies are more readily lost with increased distance.”
Page 7, *Coloration in Life*: In the paragraph “This species can be easily identified by its coloration. The back is ... continues along the back tapering, and disappears around the sacral region” there should be a comma between “back” and “tapering”.
Page 8, *Secondary Sexual Characters*: Remove comma from “Males have a vocal apparatus, consisting of ...”.
Page 9, Figure 4: Removal of the second “of” in the figure legend: “(C) Sonogram with a palette of 12 colors of depicting different intensities”.
- Page 10, *Advertisement call* line 1: – “The call of *A. heyeri* is distinct from that of the other three species in all parameters (see Tables 1 and 2)” should read “The call of *A. heyeri* differs in mean values from that of the other three species examined in all parameters, although there is some overlap in the ranges of certain features (see Tables 1 and 2)”. In addition, the fundamental frequency in *Adenomera araucaria* (1722-3359 Hz) overlaps with that of *A. heyeri*, although they do differ in other important parameters such as $2f_0$ and amplitude modulation (present in *A. araucaria*; Kwet and Angulo, 2002). With regards to *Adenomera diptyx*, the call of this species is much shorter than that of *A. heyeri* (56.6-88.3 ms vs. 136.87-184.5 ms), with a higher f_0 (2180.8-2281.7 Hz) and $2f_0$ (4200-4502.9 Hz; Márquez et al., 1995).
- Page 10, *Advertisement call*, line 7: “The envelope (Fig. 4E) shows one periodical pattern of variation in amplitude with a duration of 13 ms”; where it reads “13 ms” it should be replaced with “12 ms”.
- Page 10, *Advertisement call*, line 8: Where it reads “Table 2” in the sentence “With regard to spectral features (Figs. 4 A, B, C), ...” it should read “Table 1”.
- Page 10, *Advertisement call*, line 11: Where it reads “In all other species of *Adenomera* the dominant frequency is $2f_0$...” the word “examined” should be inserted before the word “species”.
- Page 10, *Advertisement call*, line 14: In “Notes were found to have a series of six distinguishable harmonics (Table 2)”, the words “up to” should be inserted before the word “six”.
- Page 11, Discussion, Fig. 5: – Where it reads “Detail view of T-shaped terminal phalange of third finger”, “Close up” should replace “Detail”. Where it reads “Detail view of T-shaped terminal phalange of fourth toe”, “Close up” should replace “Detail”. Where it reads “Sacral diapophysis ...” it should read “Sacral diapophysis ...”
- Where it reads “Fig. 5. X-ray picture of *Adenomera heyeri*, male paratype MNHN 1998.322, with details about the phalanges ...” the phrase “showing close up of terminal phalanges” should replace “with details about the phalanges”.
- Page 12, Acknowledgements: We would like to express our gratitude to professor Jean-Pierre Gasc (Muséum national d’Histoire naturelle, Paris), who kindly generated the x-ray images; Axel Kwet, Marcos di Bernardo, Ron Heyer, Frank Glaw, Ned Gilmore, Rossy Montaña, Ross MacCulloch and Ulisses Caramaschi kindly allowed for examination of museum specimens.
- Page 14, Appendix 1: – Microphone for *A. hylaedactyla* should read ““Sony ECM-MS907” instead of “Sony ECM 307”.
- SVL for *A. hylaedactyla* should read “23.1” instead of “22.7”.

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APPENDIX 2

Other specimens examined

- Adenomera andreae* type series: Brazil: Peixeboi: ZSM 145/1911/1-4 (four specimens).
- Adenomera araucaria* type series: Brazil: Rio Grande do Sul: São Francisco de Paula: Potreiro Novo: Pró-Mata PUCRS: MCP 2421 (holotype), MCP 1794, MCP 3463, MCP 3672-73, MCP 3677; Brazil: Rio Grande do Sul: Bom Jesus: Encruzilhada das Antas: MCP 3346.