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ON THE *GONATODES* OF THE GALAPAGOS ISLANDS
(SAURIA, GEKKONIDAE)

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Garman (1892) described *Gonatodes collaris* from the island San Cristobal (Chatham), in the Galapagos. There were apparently two specimens, collected by G. Baur in Wreck Bay, on the western side of the island.

The Hopkins-Stanford Galapagos Expedition (1898-99) failed to obtain the species, although San Cristobal was visited (Heller, 1903).

In the years 1905-1906 the California Academy of Sciences sent an exceptionally well-manned expedition to the Galapagos; the herpetologist was the late J. Slevin, assisted by E.S. King. The party had about two and one half days' collecting at Wreck Bay (Slevin, 1931: 44-46) and also failed to collect *Gonatodes*, although, as stated by Van Denburgh (1912: 411), who studied the collections, they "searched carefully for it, and collected a hundred and sixty nine geckos on Chatham Island". This led Van Denburgh, on the same page, to wonder "whether Dr. Baur's specimens might not have originated at Guayaquil, where he also collected, and have been in some way mislabeled". In fact, Baur, en route for the Galapagos, had collected near Guayaquil, and the small collection made was sent to Garman, who reported on it in a paper immediately following the Galapagos study (Garman, 1892 a). Considering Slevin's skill as a collector, Van Denburgh's idea was not unreasonable.

Barbour & Loveridge (1929: 269), in their first list of MCZ types, made the following comments: i) there was then just one specimen extant; ii) this was a poorly preserved one; iii) "perhaps from Guayaquil".

Slevin (1935: 21, footnote), on a semi-popular account of Galapagos reptiles, repeated Van Denburgh's hypothesis of mislabeling.

In 1939, however, Wood reported on an authentic female, collected at Wreck Bay by H.A. Pilsbry and compared with the

type by Shreve. From this comparison one learned that the surviving Garman specimen was a male.

Very recently Mertens (1963) received a preserved male from the type-locality, and the sender reported on three terrarium-kept additional specimens. Unaware of Wood's report, Mertens titled his paper "Die Wiederentdeckung der Geckonengattung *Gonatodes* auf den Galapagos".

Mertens very rightly pointed out that the presence of a probably rare animal exclusively in the easternmost of the islands tends to suggest passive dispersal. He believed, however, the form to be probably endemic ("Es scheint aber, dass es sich um eine endemische Species handelt...", *loc. cit.*: 23).

I have had the opportunity of examining the type of *collaris*, in the course of studies on Guiano-Brasilian geckos, made in 1957, during tenure of a Guggenheim fellowship at the Museum of Comparative Zoology.

The specimen is by no means in such a bad shape as stated by Barbour and Loveridge, so much so that I checked it carefully against the original description, to verify the possibility that, in spite of Mr. Loveridge's careful curatorship, there could have been an involuntary substitution. I could find nothing to support the suspicion, and now Mertens' specimen confirms the authenticity of the type.

At that time, in trying to determine the position of *collaris* in the general picture of *Gonatodes*, I compared the type with all described forms and especially with excellent series of the Western Ecuadorian species *G. caudiscutatus* Günther in the American Museum of Natural History and in the Museum of Comparative Zoology. I could find no differences.

In fact, being unaware, at the time, of Wood's record, and considering the high degree of endemism of the Galapagos fauna, I tended to believe the hypothesis of a mistake in labeling dating from Baur's day.

Wood's specimen, being a female, added much to the evidence, but not decisively, as females of related *Gonatodes* are at times hard to identify (e.g., Vanzolini & Williams, 1962). I believe, however, that Mertens' example, well figured and described, clinches the argument.

Highly characteristic of the species are: the variegated pattern of the head; the forward position of the pre-scapular light band; the light spots on the flanks; and the sudden break between throat and belly color at the level of the arms.

The genus *Gonatodes* is a difficult one, as color patterns, which seem to be extremely important biologically, are, especially in the males, rather poorly preserved. However, in the present case it seems fairly safe to assume that *Gonatodes collaris* is either a strict synonym or a subspecies of *G. caudiscutatus*.

REFERÊNCIAS

- BARBOUR, T. & A. LOVERIDGE, 1929: Typical reptiles and amphibians. *Bull. Mus. Comp. Zool.* 49:203-360.
- BOULENGER, G. A., 1885: *Catalogue of the lizards in the British Museum (Natural History) vol. 1*: xii + 436 pp., 32 pls. London.
- DENBURGH, J. van, 1912: Expedition of the California Academy of Sciences to the Galapagos Islands, 1905-1906. VI. The Geckos of the Galapagos Archipelago. *Proc. California Acad. Sci.* (4)1:405-430.
- GARMAN, S., 1892: The reptiles of the Galapagos islands. *Bull. Essex Inst.* 24:73-87.
- 1892a: On reptiles collected by Dr. Geo. Baur near Guayaquil. Ecuador. *Ibidem*: 88-95.
- HELLER, E., 1903: Papers from the Hopkins Stanford Galapagos Expedition 1898-1899. XIV. Reptilia. *Proc. Washington Acad. Sci.* 5:39-98.
- MERTENS, R., 1963: Die Wiederentdeckung der Geckonengattung *Gonatodes* auf den Galapagos. *Senckenbergiana Biol.* 44(1):21-23.
- SLEVIN, J. R., 1931: Log of the schooner "Academy". *Occ. Papers California Acad. Sci.* 17: 162 pp., 16 pls., 1 map.
- 1935: An account of the reptiles inhabiting the Galapagos Islands. *Bull. N. York Zool. Soc.* 38(1):3-24.
- VANZOLINI, P. E. & E. E. WILLIAMS, 1962: Jamaican and Hispaniolan *Gonatodes* and allied forms. *Bull. Mus. Comp. Zool.* 127:479-498.
- WOOD, G. C., 1939: Results of the Pinchot South Sea Expedition III — Galapagos reptiles. *Notulae Naturae, Philadelphia*, 15: 4 pp.

