



NOTES ON GEOGRAPHIC DISTRIBUTION

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## First record of *Amapasaurus tetradactylus* Cunha, 1970 (Squamata: Gymnopthalmidae) in Suriname

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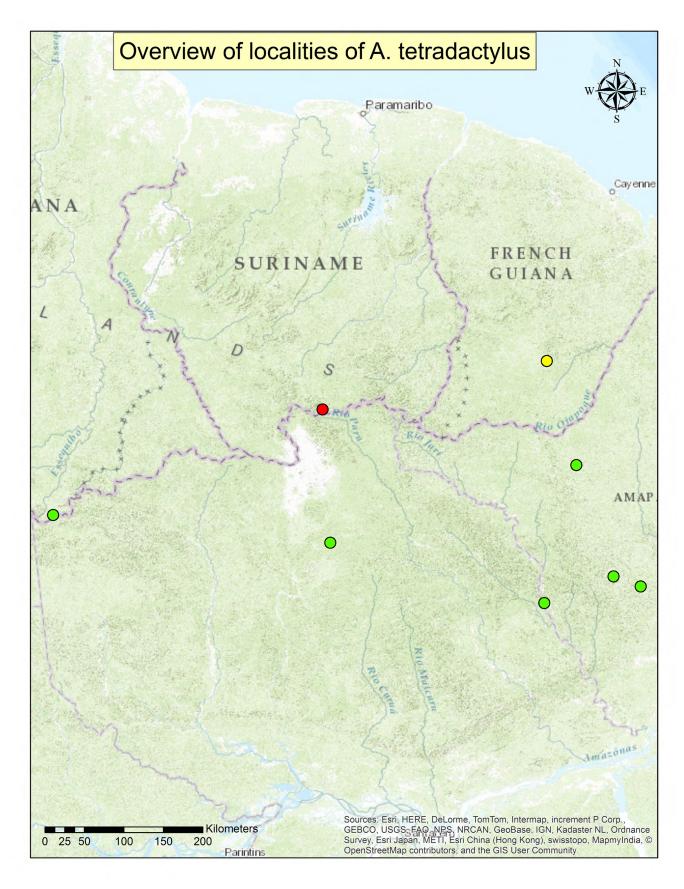
**Abstract:** A new country record for the Guiana Shield endemic *Amapasaurus tetradactylus* is noted for Suriname. The only specimen was captured during a Rapid Assessment Program (RAP) of Conservation International in the upper Palumeu river, south Suriname. This range extension shows the presence of *A. tetradactylus* in yet another country of the Guiana shield. A range extension of 290 km southwards is noted for this new record.

**Key words:** *Amapasaurus tetradactylus*, Suriname, Rapid Assessment Program

The gymnopthalmid Amapasaurus tetradactylus Cunha, 1970 is a small leaf litter occupant, predominantly found in the leaf litter of well drained primary rainforests, attaining a max SVL of 36 mm (Cunha 1970; Avila-Pires 1995; Avila-Pires et al. 2013). The holotype (collected in 1969) and paratype (collected in 1960) were from Igarape Camaipi, tributaryaffluent of the upper Rio Maraca in the state of Amapá, Brazil (Cunha 1970). Additional specimens were caught from the state of Pará (Brazil), more specifically in Oriximiná, Estação Ecológica Grão--Pará, Serra do Acaraí and Óbidos, Floresta Estadual do Trombetas; from the state of Amapá, specimens were collected at Laranjal do Jari, Reserva de Desenvolvimento Sustentável do Rio Iratapuru, Serra do Navio, Parque Nacional Montanhas do Tumucumaque, Pedra Branca do Amapari, Reserva de Desenvolvimento Sustentável do Rio Iratapuru, and Mazagão, Floresta Estadual do Amapá (Avila-Pires et al. 2013). Three specimens of A. tetradactylus were also collected for the first time from French Guiana on Mount Itoupé (Dewynter and Surugue 2012). Because this species was also found in the Serra do Acaraí near the border with Guyana, it also may be found in southern Guyana (Figure 1) (Avila-Pires et al. 2010).

This report documents an additional find of the gymnopthalmid *Amapasaurus tetradactylus* in Suriname. A single individual was caught during a Rapid Assessment Program (RAP) of Conservation International Suriname that lasted from 8–29 March 2012 (Alonso and Larsen 2013). This RAP was carried out in the Upper Palumeu River watershed in southern Suriname. Some of the locations explored during this expedition were Juuru camp (site I) on the upper Palumeu River, Grensgebergte Rock (site II), Makrutu Creek (site III) and Kasikasima Camp (site IV). The single individual of *A. tetradactylus* was caught at site I which was located on the west bank of the upper Palumeu River (02°28′37.20″ N, 055°37′45.88″ W) (Alonso and Larsen 2013). The camp was situated in tall seasonally flooded forest but sampling occurred in more upland areas. These upland areas (elevation ca. 417 m above sea level) consist of a high dryland tropical rainforest situated on a laterite/granite substrate (Alonso and Larsen 2013). The vegetation at Site I is tall tropical rainforest, with high canopies reaching to 50 m and standing on well-drained soil. Some of the tree species found at Site I are Alexa wachenheimii, Parkia pendula, Lecythis zabucajo, all higher than 30 m, with Astrocaryum sciophilum dominating the understory (Banki and Bhikhi 2013).

In the field the specimen of Amapasaurus tetradactylus was misidentified as Alopoglossus buckleyi, but a more thorough examination at the National Zoological Collection of Suriname (NZCS) revealed its true identity (Figures 2 and 3). Important distinguishing characteristics were the presence of only four fingers, and an unspotted ventral side. A comparison was made of scales (pre-anal and chin shields) with previous descriptions of this species. Additional information regarding the scalation of the captured specimen is listed as follow; frontonasal divided into two scales; two prefrontal scales, both almost identical in size; four supraoculars, the first divided into two smaller scales



**Figure 1.** Map showing the occurrences of *Amapasaurus tetradactylus*. Green circles depict the localities in Brazil, the yellow circle shows the locality in French Guiana and the red circle shows the locality in Suriname. Some points in Brazil are not shown on the map due to the relative short distance in between.

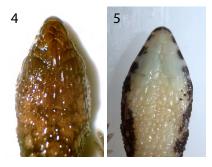


**Figures 2 and 3.** Overview of the specimen collected. **2**: Dorsolateral aspect. **3**: Ventral aspect.

and evident on both sides of the head; 5 or 6 supralabials respectively on each side of the head; infralabials consists of five scales on both sides and the gulars are found to be consisting of 10 rows. A close up of the head showing the dorsal and ventral scales is given in Figures 4 and 5.

Information regarding correct identification and scalation was acquired from Cunha (1970), Avila-Pires (1995) and Avila-Pires et al. (2013). Unfortunately no pictures of the live specimen were taken in the field. The measured specimen has a SVL of 21 mm and a tail length of 37 mm. The collected specimen is field labeled BPN 2909 and stored at the NZCS under voucher number R676. Specimen collection during the RAP program was authorized by the Nature Conservation division of Suriname. The collection of this specimen in southern Suriname extends the range of Amapasaurus tetradactylus 290 km westwards from the previous ocurrence in French Guiana. Found approximately 7 km from the border with Brazil, this is the nineth known occurrence for this species. (Figure 1). All known occurrences with coordinates are provided in Table 1.

The new country record of *Amapasaurus tetradactylus* shows that presently little is known about the actual distribution of this cryptic species and more surveys are needed to provide a better overview of the range.. Suriname is the third country after Brazil and French



**Figures 4 and 5.** Overview of the head scales. **4**: Dorsal aspect. **5**: Ventral aspect.

**Table 1.** Occurrences of *Amapasaurus tetradactylus* with corresponding coordinates.

Country / Locality	Latitude	Longitude
Brazil		
RDS do Rio Iratapuru (Rio Jari)	00°16′35″ N	053°06′24″ W
RDS do Rio Iratapuru (Rio Cupixi)	00°34′46″ N	052°19′08′′ W
FLOTA Amapá, Município de Mazagão	00°27′55.46″ N	052°01′22.02′′ W
FLOTA Amapá, Município de Mazagão	00°27′55.18″ N	052°00′35.48″ W
PARNA Montanhas do Tumucumaque	01°50′41″ N	052°44′28″ W
FLOTA Trombetas	00°57′43.50″ S	055°31′47.09″ W
FLOTA Trombetas	00°57′45.66″ S	055°32′5.32″ W
FLOTA Trombetas	00°57′44.52″ S	055°31′35.82″ W
FLOTA Trombetas	00°57′39.12″ S	055°33′99.00″ W
FLOTA Trombetas	00°57′44.10″ S	055°32′12.36″ W
FLOTA Trombetas	00°57′45.53″ S	055°32′26.17″ W
FLOTA Trombetas	00°57′45.36″ S	055°32′29.88″ W
ESEC Grão Pará, Serra do Acari	01°16′39.4″ N	058°41′41.8″ W
French Guiana		
Mount Itoupé, south of Sommet Tabulaire mountain	03°01′39″ N	053°04′39″ W
Suriname		
Southern Suriname, Upper Palumeu River	02°28′37.2″ N	055°37′45.88″ W

Guiana where this species was found. Noteworthy is that for the localities in French Guiana and Suriname specimens were found relatively close to their south border with Brazil. The distance for Suriname is approximately 7 km, the distance for French Guiana is approximately 94 km from their south border to Brazil. The specimen found in Serra do Acari in Brazil was found less than 2 km from the south border of Guyana.

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## LITERATURE CITED

Alonso, L.E and T.H. Larsen (eds.). 2013. A rapid biological assessment of the upper Palumeu watershed (Grensgebergte and Kasikasima) of southeastern Suriname. RAP Bulletin of Biological Assessment 67: 3–176.

Avila-Pires, T.C.S. 1995. Lizards of Brazilian Amazonia (Reptilia: Squamata). Zoologische Verhandelingen 299: 1–706. http://www.repository.naturalis.nl/record/317788

Avila-Pires, T.C.S., J.D. Lima, M.S. Hoogmoed, J.R.F. Lima, and W.A. da Rocha. 2013. Variation in *Amapasaurus tetradactylus* (Reptilia: Squamata: Gymnophthalmidae), a rare Guiana lizard. Boletim do Museu Paraense Emílio Goeldi. Ciências naturais, Belém 8(3): 419–429.

Ávila-Pires, T.C.S., M.S. Hoogmoed, and W.A. da Rocha. 2010. Notes on the Vertebrates of northern Pará, Brazil: a forgotten part of the Guianan Region, I. Herpetofauna. Boletim do Museu Paraense Emílio Goeldi. Ciências naturais, Belém 5(1): 13–112.

Bánki, O., and C. Bhikhi. 2013. Floristic assessment of the Upper Palumeu River, the Grensgebergte, and the Kasikasima areas; pp. 57–78, in: L.E. Alonso and T.H. Larsen (eds.). A Rapid Biological Assessment of the Upper Palumeu River Watershed (Grensgebergte and Kasikasima) of southeastern Suriname. RAP Bulletin of Biological Assessment 67.

Cunha, O.R. da. 1970. Lacertílios da Amazonia IV. Um nôvo gênero e espécie de lagarto do territória federal do Amapá (Lacertilia: Teiidae). Boletim do Museu Paraense Emílio Goeldi. Série Zoologia 74: 1–8.

Dewynter, M., and Nicolas S. First record of *Amapasaurus* tetradactylus Cunha, 1970 (Squamata: Gymnophthalmidae) in French Guiana. Check List 8(4): 815–816. http://www.checklist.org.br/getpdf?NGDo88-12

**Authors' contribution statement:** RJ performed the field work and collected the data; RJ and SJD wrote the text.

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