SEAVR 2020: 047-049 ISSN: 2424-8525

Date of publication: 22 November 2020 Hosted online by ecologyasia.com



First report of *Tropidolaemus subannulatus* (Gray 1842) from Romblon Island Group, Central Philippines

Ace Kevin S. AMARGA & Christian E. SUPSUP ace amarga061@yahoo.com (Amarga), supsupchristian@gmail.com (Supsup)

Collaborators: Juniel G. Lucidos, Reymark Manoy, Gregorio A. Floredo, Jr.

Photographs by: Ace Kevin S. Amarga.

Subjects identified by: Ace Kevin S. Amarga, Christian E. Supsup, Emerson Y. Sy.

Location: Calatrava-San Andres-San Agustin (CALSANAG) Watershed, Mari-Norte, San Andres, Tablas Island,

Philippines.

Elevation: 250 metres ASL.

Habitat: Admixture of secondary lowland forest and agroforest.

Date and time: September 2018.

Identity of subject:

Bornean Keeled Green Pitviper, Tropidolaemus subannulatus (Reptilia: Squamata: Viperidae).

Description of record: Two individuals of *Tropidolaemus subannulatus* were encountered in CALSANAG Watershed Forest Reserve, one on the ground (Fig. 1) and one on a sapling branch (Fig. 2), with snout–vent lengths of approximately 75 cm and 100 cm, respectively.



Fig. 1. Tropidolaemus subannulatus, male.

© Ace Kevin S. Amarga



Fig. 2. Tropidolaemus subannulatus, female.

© Ace Kevin S. Amarga

Remarks:

The snakes were identified as *Tropidolaemus subannulatus* based on (i) the number of dorsal scales (13) on head along a line between the supraocular scales, (ii) third upper labial scale is separated by one scale from subocular scale (Fig. 2 & inset) and (iii) scales on both head and chin are strongly keeled. Specimens' morphological characters were obtained in the field and identified following Weinell et al.'s (2019) key on Philippine snakes. *Tropidolaemus subannulatus* along with *T. huttoni*, *T. laticinctus*, and *T. philippensis* were previously included in *T. wagleri* complex (Vogel et al. 2007), which are native to tropical Southeast Asia (Kurniawan et al. 2018).

Tropidolaemus subannulatus has a wide distribution in the Philippines and is currently known to occur on the islands of Balabac, Cebu, Dinagat, Leyte, Luzon, Mindanao, Palawan, Negros, Samar, Panay, Polillo, and Sulu archipelago (Alcala 1986; Vogel et al. 2007; Brown et al. 2013; Malaki et al. 2020; Supsup et al. 2020). It has also been documented in Brunei, Indonesia, and Malaysia (Leviton et al. 2014; Das and Charles 2015). This record represents the first observation of *T. subannulatus* from the Romblon Island Group as it was not included in the recent herpetofaunal report of the region (Siler et al. 2012).

This venomous species can thrive in a wide range of habitats, including lowland and lower montane tropical moist forest, secondary forests, and agricultural plantations. Due to its wide geographic distribution, it is presumed to have a large population, and likely tolerant to habitat modifications. At present, the International Union for Conservation of Nature listed the species as "Least Concern" (Auliya et al. 2012). Furthermore, due to its vibrant colorations, the species is often targeted for the international and local pet trade (Sy 2018).

Permit: This report was part of Biodiversity Assessment and Monitoring System (BAMS) conducted in CALSANAG Watershed Forest Reserve through the Monitoring and Detection of Ecosystems Changes for Enhancing Resilience and Adaptation in the Philippines (MODECERA) Research Program of the Romblon State University-Odiongan Campus and the University of the Philippines Los Baños.

References:

Alcala, A.C. (1986) Guide to Philippine Flora and Fauna: amphibians and Reptiles. Manila: Natural Resource Management Center and University of the Philippines 195p.

Auliya, M., Dehling, M., Inger, R.F., Iskandar, D., Vogel, G., Diesmos, A.C. & Sy, E. (2012) *Tropidolaemus subannulatus*. The IUCN Red List of Threatened Species 2012: e.T192241A2060104. Retrieved on 24 October 2020 from https://dx.doi.org/10.2305/IUCN.UK.2012-1.RLTS.T192241A2060104.en

Das, I. & Charles, J.K. (2015) Venomous snakes and envenomation in Brunei. In: Goplalakrishnakone, K. et al. (eds.), Clinical Toxinology in Asia Pacific and Africa, Toxinology, 103-114 pp.

Brown, R.M., Siler, C.D., Oliveros, C.H., Welton, L.J., Rock, A., Swab, J., van Weerd, M., von Beijnen, J., Jose, e., Rodriguez, D., Jose, E., Diesmos, A.C. (2013) The amphibians and reptiles of Luzon Island, Philippines, VII: the herpetofauna of Cagayan and Isabela Provinces, northern Sierra Madre Mountain Range. ZooKeys 266: 1-120.

Gray, J.E. (1842) Synopsis of the species of rattle snakes, or Family of Crotalidae. Zoological Miscellany 2: 47-51.

Kurniawan, H., Tjong, D.H. & Novarino, W. (2018) Morphological variation of temple pitviper *Tropidolaemus* wagleri (Serpentes: Viperidae) in West Sumatra, Indonesia. Jurnal Metamorfosa 5(1): 130-136.

Leviton, A.E., Brown, R.M. & Siler, C.D. (2014) The dangerous venomous snakes of the Philippine archipelago with identification keys and species accounts. In: Williams, G.C. & Gosliner, T.M. (eds.) The Coral Triangle. The 2011 Hearst Philippine Biodiversity Expedition, California Academy of Sciences 473-530.

Malaki, A.B.B., Alcazar, S.M.T., Lillo, E.P., Rosales, R.C., Redoblado, B.A., Diaz, J.L.B., Buot, Jr., I.E. (2020) First distribution record of North Philippine temple pitviper (*Tropidolaemus subannulatus* Gray 1842) on Cebu Island, Philippines. Philippine Journal of Science 149(3): 669-673.

Siler, C.D., Swab, J.C., Oliveros, C.H., Diesmos, A.C., Averia, L., Alcala, A.C., Brown, R.M. (2012) Amphibians and Reptiles, Romblon Island Group, central Philippines: Comprehensive herpetofaunal inventory. Check List 8(3): 443-462.

Supsup, C.E., Asis, A.A., Carestia Jr., U.V., Diesmos, A.C., Mallari, N.A.D., Brown, R.M. (2020). Variation in species richness, composition and herpetological community structure across a tropical habitat gradient of Palawan Island, Philippines. Herpetozoa 33: 95-111.

Sy, E.Y. (2018) Trading Faces: Utilisation of Facebook to Trade Live reptiles in the Philippines. TRAFFIC, Petaling Jaya, Selangor, Malaysia 33p.

Vogel, G., David, P., Lutz, M., Van Rooijen, J., Vidal, N. (2007) Revision of the *Tropidolaemus wagleri*- complex (Serpentes: Viperidae: Crotalinae). I. Definition of included taxa and redescription of Tropidolaemus wagleri (Boie 1827). Zootaxa 1644: 1-40.

Weinell, J.L., Hooper, E., Leviton, A.E., Brown, R.M. (2019) Illustrated Key to the Snakes of the Philippines. Proceeding of the California Academy of Sciences 66:1–49