

Nomenclatural status of
FITZINGER's (1861) *Pseudocalotes archiducissae*,
and confirmation of *Bronchocela cristatella* (KUHL, 1820)
from the Nicobar Archipelago
(Squamata: Sauria: Agamidae)

Nomenklatorischer Status von FITZINGERS (1861) *Pseudocalotes archiducissae*, und
Bestätigung von *Bronchocela cristatella* (KUHL, 1820) für die Nikobaren
(Squamata: Sauria: Agamidae)

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KURZFASSUNG

Das während der Reise der österreichischen Fregatte 'Novara' von den Nikobaren aufgesammelte Agamenmaterial, auf das FITZINGER (1861) *Pseudocalotes archiducissae* begründete, wurde in der Herpetologischen Sammlung des Naturhistorischen Museums in Wien aufgefunden. Es wird gezeigt, daß dieser Name ein nomen nudum darstellt. Die von STEINDACHNER (1861) festgestellte Identität von *P. archiducissae* und *B. cristatella* (KUHL, 1820) wird bestätigt und folglich auch das Vorkommen dieser Art auf dem Inselarchipel der Nikobaren (Indien).

ABSTRACT

The specimens of agamid lizards collected from the Nicobar Islands during the voyage of the Austrian fregate 'Novara', on which FITZINGER (1861) based *Pseudocalotes archiducissae*, were found extant in the collection of the Museum of Natural History in Vienna; the name is shown to be a nomen nudum. The identities of *P. archiducissae* and *Bronchocela cristatella* (KUHL, 1820) as evaluated by STEINDACHNER (1861), were verified. This report confirms the presence of *B. cristatella* from the Nicobars Archipelago, India.

KEY WORDS

Reptilia, Sauria, Agamidae; *Pseudocalotes archiducissae*, *Bronchocela cristatella*, distribution, nomenclature, taxonomy, Nicobar Archipelago, India

The name *Pseudocalotes archiducissae* appears for the first time in a list of mammals and reptiles collected during the voyage of the Austrian fregate, 'Novara', around the world, authored by FITZINGER ("1860": 387 and 398, although published in 1861). GANS (1955) provided an itinerary of the voyage of the 'Novara'. The taxon was subsequently considered a synonym of *Bronchocela cristatella* (KUHL, 1820) by STEINDACHNER (1867: 27), who provided diagnostic characters of the purported new taxon. SMITH (1935: 184), too, treated the Nicobarese species tentatively as synonymous with *B. cristatella*, mentioning that the type of the former was lost, as did WERMUTH (1967) and BARTS & WILMS (1997: 64.1), although no worker subsequently appears to have tried to trace the material. BARTS & WILMS (1997: 66.1)

considered *B. danieli* (TIWARI & BISWAS, 1973) to be a valid taxon. Given that two species of the genus are reported as sympatric on the Nicobars, and the fact that *B. cristatella* has not been recorded from these islands in recent years (DAS 1999), a note verifying the systematic status of *P. archiducissae* and reporting on the discovery of the so-named lost specimens at the Natural History Museum, Vienna (NMW), was thought important.

Interest in the herpetofauna of the Nicobar Archipelago was to be spurred nearly a century later by the collections by the staff of the Zoological Survey of India (ZSI) in the 1960s, leading to a large number of species descriptions. These included an agamid, collected from the Nicobars and described as *Calotes danieli* TIWARI & BISWAS, 1973. However, no further specimens

of *B. cristatella* were reported from these islands. Few subsequent workers have had access to either the specimens of *Pseudocalotes archiducissae* FITZINGER (1861) or the unique holotype of *Calotes danieli* TIWARI & BISWAS, 1973. Following MOODY (1980), DIONG & LIM (1998) transferred the latter taxon to the genus *Bronchocela* KAUP, 1827, presumably based on its morphological similarities to *B. cristatella*, dividing the catchall genus *Calotes* CUVIER, 1817 (sensu BOULENGER 1885) in different genera. The holotype of *Calotes danieli* is extant in the collection of the Zoological Survey of India, Calcutta (ZSI 22455 from "Campbell Bay, Great Nicobar"; DAS et al. 1998), while two specimens labelled

Calotes cristatellus rect.

Pseudocalotes archiducissae FITZ.

Nikobaren 1857-59 Novara exp.

were found to be extant in the NMW collection (NMW 21002: 1-2), as ethanol preserved specimens. The syntypes of *Agama cristatella* KUHLE, 1820, of unknown provenance, which were reportedly "in Museo Parisiensi" according to the original description, were not located in the Museum National d'Histoire Naturelle, Paris (MNHN) (BRYGOO, 1988), but MNHN 6884 (three syntypes) carry data suggesting that these were materials upon which KUHLE based his name. These three syntypes match the description of *Bronchocela cristatella*.

The systematic status of *Pseudocalotes archiducissae* was evaluated through

an examination of the NMW specimens, in order to verify their identity. The absence of a dark temporal patch, relatively slender head (head length > head width), fifth toe > fourth finger, reduced midbody scale rows (numbering 68 and 71), and weakly developed dorsal crest (extending to the level of the forearm), indicate that these specimens (fig. 1) refer to *Bronchocela cristatella* (KUHLE, 1820).

Pseudocalotes archiducissae is not an available name (in the sense of Article 11.6; INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE, 1999), there being no formal description. The only text which attempts to briefly describe the types was that of STEINDACHNER (1967), who clearly synonymises it under *Calotes cristatellus* (KUHLE, 1820). No subsequent works have treated the name as valid. Thus, *Pseudocalotes archiducissae* FITZINGER, "1860" 1861, is confirmed to be a nomen nudum, as well as a junior synonym of *B. cristatella* (KUHLE, 1820).

Calotes cristatellus has been reported from the Nicobar Islands by SMITH (1935) and by more recent workers (e. g., BISWAS & SANYAL 1980), although no examples have been collected from these islands, except for a single unverified specimen at the Zoologisk Museum, Københavns Universitet, Copenhagen, Denmark, that was reported to be the present species (SMITH 1935). The Nicobars Archipelago is included in the range of the species by DIONG & LIM (1998), probably following the existing literature.

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REFERENCES

- BARTS, M. & WILMS, T. (Eds.) (1997): Catalogue of valid species and synonyms. Volume 4. Agamidae. Bredell (Herprint International). i-xl; 1.1-1.418.1.
 BISWAS, S. & SANYAL, D. P. (1980): A report on the Reptilia fauna of Andaman and Nicobar Islands in the Collection of Zoological Survey of India.- Rec. Zool. Surv. India, Calcutta; 77: 255-292.

- BOULENGER, G. A. (1885): Catalogue of the lizards in the British Museum (Natural History). I. Geckonidae (sic), Eublepharidae, Uroplatidae, Pygopodidae, Agamidae. London (British Museum), xii + 436 pp; 32 pl.
 BRYGOO, É. R. (1988): Les types d'Agamides (Reptiles, Sauriens) du Muséum national d'Histoire naturelle Catalogue critique.- Bull. Mus. Nat. d'Hist.

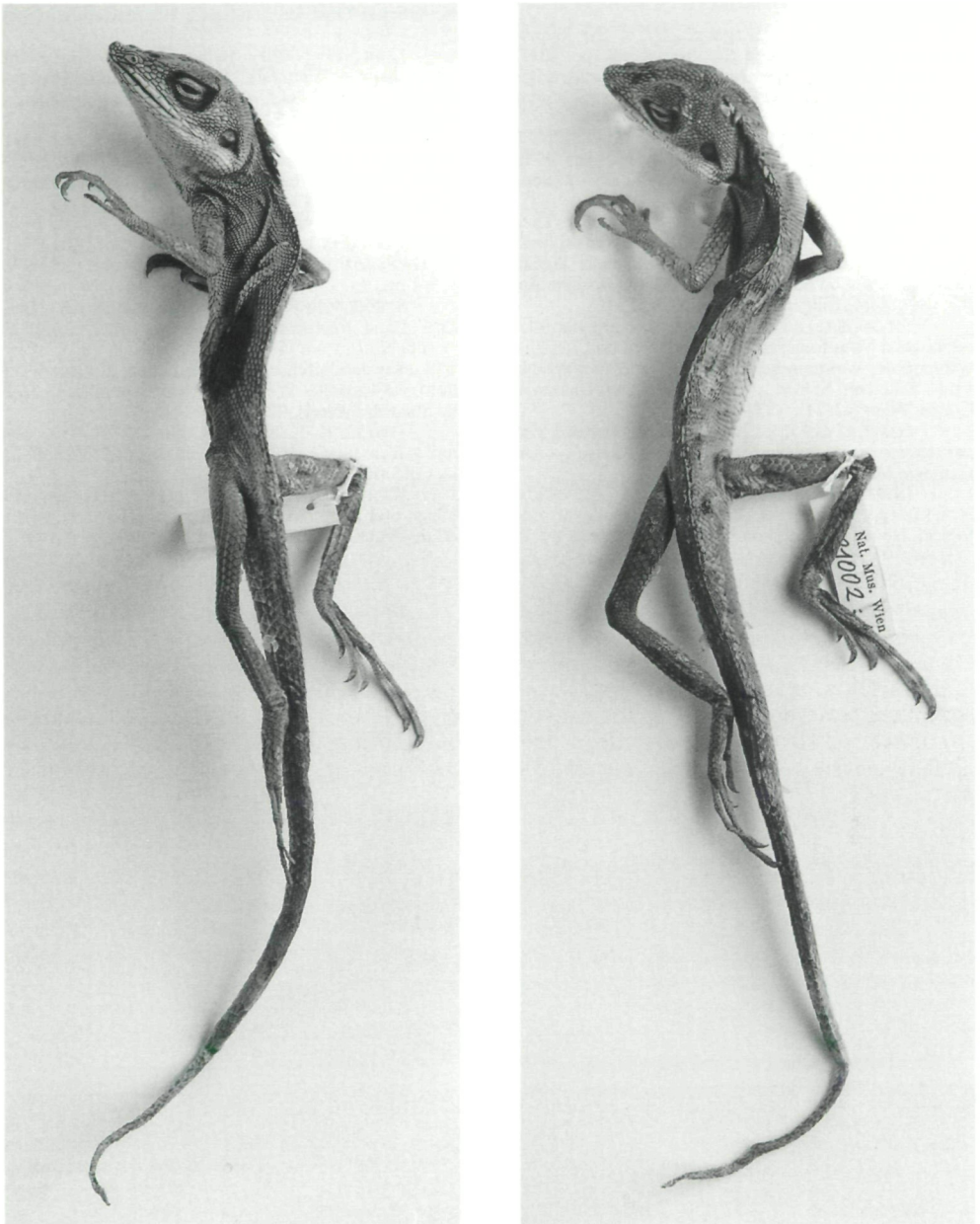


Fig. 1: One of two specimens (NMW 21002: 1) on which FITZINGER (1861) based *Pseudocalotes archiducissae* nomen nudum. Lateral view (left) and dorsal view (right). Photographs by A. SCHUMACHER, Natural History Museum, Vienna.

Abb. 1: Eines der beiden Exemplare (NMW 21002: 1), auf die FITZINGER (1861) sein nomen nudum *Pseudocalotes archiducissae* begründete. Lateralansicht (links) und Dorsalansicht (rechts). Fotos: A. SCHUMACHER, Naturhistorisches Museum Wien.

nat., Paris; sér. 4 sec. A (Zool., Biol. Écol. anim.) 10 (3) suppl.: 1-56.

DAS, I. (1999): Biogeography of the herpetofauna of the Andaman and Nicobar Islands; pp. 43-77. In: OTA, H. (Ed.): Tropical island herpetofauna. origin, current diversity, and conservation. Amsterdam (Elsevier Science B.V.).

DAS, I. & DATTA GUPTA, B. & GAYEN, N. C. (1998): History and catalogue of reptile types in the collection of the Zoological Survey of India.- J. South Asian nat. Hist., Colombo; 3(2): 121-172.

DIONG, C.H. & LIM, S.S.L. (1998): Taxonomic review and morphometric description of *Bronchocela cristatella* (KUHL, 1820) (Squamata: Agamidae) with notes on other species in the genus.- The Raffles Bull. Zool., Singapore; 46(2): 345-359.

FITZINGER, L. J. (1861): Die Ausbeute der österreichischen Naturforscher an Säugethieren und Reptilien während der Weltumsegelung Sr. Majestät Fregatte Novara.- Sitz.-ber. Kaiserl. Akad. Wiss., math.-naturwiss. Classe, Wien; 42(21): 383-416.

GANS, C. (1955): Localities of the herpetological collections made during the "Novara Reise".- Ann. Carnegie Mus., Pittsburgh; 33: 275-285.

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE (1999): International Code of Zoological Nomenclature. Fourth Edition adopted by the

International Union of Biological Sciences, London (The International Trust for Zoological Nomenclature 1999), XXIX + 306 pp.

KUHL, H. (1820): Beiträge zur Zoologie und Vergleichenden Anatomie. Erste Abtheilung. Beiträge zur Zoologie. Frankfurt am Main (Hermannsche Buchhandlung), 8 + 152 pp.

MOODY, S. M. (1980): Phylogenetic and historical biogeographical relationships of the genera in the family Agamidae (Reptilia: Lacertilia).- Ph. D. Dissertation, University of Michigan, Ann Arbor. 373 pp.

SMITH, M. A. (1935): The fauna of British India, including Ceylon and Burma. Reptilia and Amphibia. Vol. II.- Sauria. London (Taylor and Francis), xiii + 440 pp. + 1 pl.

STEINDACHNER, F. (1867): Zoologischer Theil, Erster Band Reptilien. In: Reise der österreichischen Fregatte Novara um die Erde in der Jahren 1857, 1858, 1859 unter den Befehlen des Commodore B. VON WÜLLERSTORF-URBAIR. Wien (Kaiserlich-Königliche Hof- und Staatsdruckerei), 98 pp + Pl. I-III.

TIWARI, K. K. & BISWAS, S. (1973): Two new reptiles from the Great Nicobar Island.- J. Zool. Soc. India, Calcutta; 25(1 & 2): 57-63.

WERMUTH, H. (1967): Liste der rezenten Amphibien und Reptilien. Agamidae. Das Tierreich. Berlin (W. de Gruyter), 86: i-xiv + 1-127.

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