

COMMENTS ON THE SPECIES STATUS AND DISTRIBUTION  
OF *TOMOPTERNA DOBSONII* BOULENGER  
(ANURA : RANIDAE) IN INDIA

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(With 3 Figures)

The generic status of *Tomopterna* has already been evaluated by Clarke (1981) and there is no reason to regard *Tomopterna* as a subgenus of *Rana* as has been done by Dubois (1983) and Pillai (1982). The genus has four nominal species in India. A possible fifth species, *Rana* (= *Tomopterna*) *dobsonii* (described by Boulenger, 1882) was synonymized by Bhati and Shukla (1975) with *Tomopterna breviceps*. However, Pillai (1982) has continued to recognize *Rana* (= *Tomopterna*) *dobsonii* as a distinct species without mentioning anything about Bhati and Shukla's (1975) paper. Here I provide evidence in favour of Pillai (1982) regarding the species identity of *T. dobsonii*.

***Tomopterna dobsonii* Boulenger, 1882**

(Figs. 1 and 2)

*Rana dobsonii* Boulenger, 1882, Cat. Batr. Sal. British Mus. London : 82-83, pl. 3, fig. 1 ; 1890, Fauna British India, Rept. Batr. : 452 ; 1920, Rec. Indian Mus. Calcutta 20 : 105-106.

*Rana* (*Tomopterna*) *dobsonii* Daniel, 1975, J. Bombay Nat. Hist. Soc. 72 (2) : 522 ; Pillai, 1982, Rec. Indian Mus. Calcutta 79 : 363-365.

*Rana* (*Tomopterna*) *breviceps* Bhati and Shukla, 1975, Ann. Zool. 9 (3) : 73-75.

*Specimens examined* : BM (British Museum, London) 1947. 2. 28. 45 (Holotype, from "Mangalore, west coast of India") ; CAS (California Academy of Sciences, San Francisco) 104188, from Karnataka : Mysore : South Canara : Kadunjhar Khana, 22 miles NE Udipi ; 104324, from Karnataka : Mysore : South Canara : Manipal : Udipi ; USNM (United States National Museum, Washington, D. C) 239424, from Andhra Pradesh : Vishakhapatnam : Wangasara ; AMNH (American Museum of Natural History, New York) 40025-31, from Maharashtra ;

Satara district : Panchgani ; 62989, from Maharashtra : Bombay :  
Western Ghats : Khandala.

*Systematic notes* : The species *Tomopterna breviceps* is widely distributed in Pakistan, all over India, Nepal, Sri Lanka and some parts of

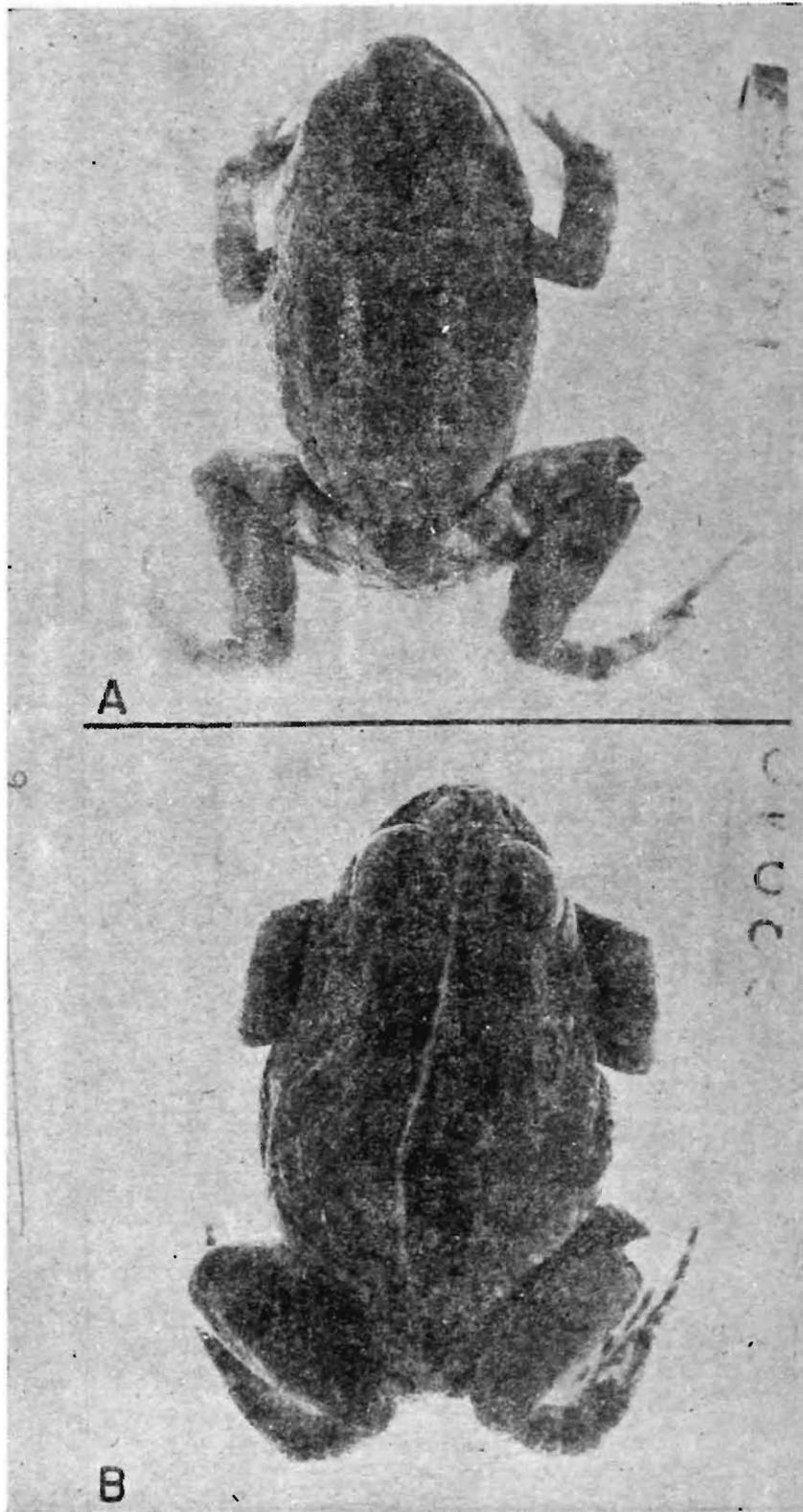


Fig. 1. Dorsal view of *Tomopterna dobsonii*, (A) without vertebral band (AMNH 40031), (B) with vertebral band (USNM 289424).

Burma and exhibits much morphological variation in color pattern, presence or absence of a mid-dorsal vertebral band from the snout to the vent, toe webbing, dorsal tubercles and the presence or the absence of a white tubercle at the joint of tibia and tarsus. Based on some of these characters, Boulenger (1882) described *Rana dobsonii* (= *Tomopterna dobsonii*) from "Mangalore, west coast of India" (=Karnataka). His description of the species is based on two specimens.

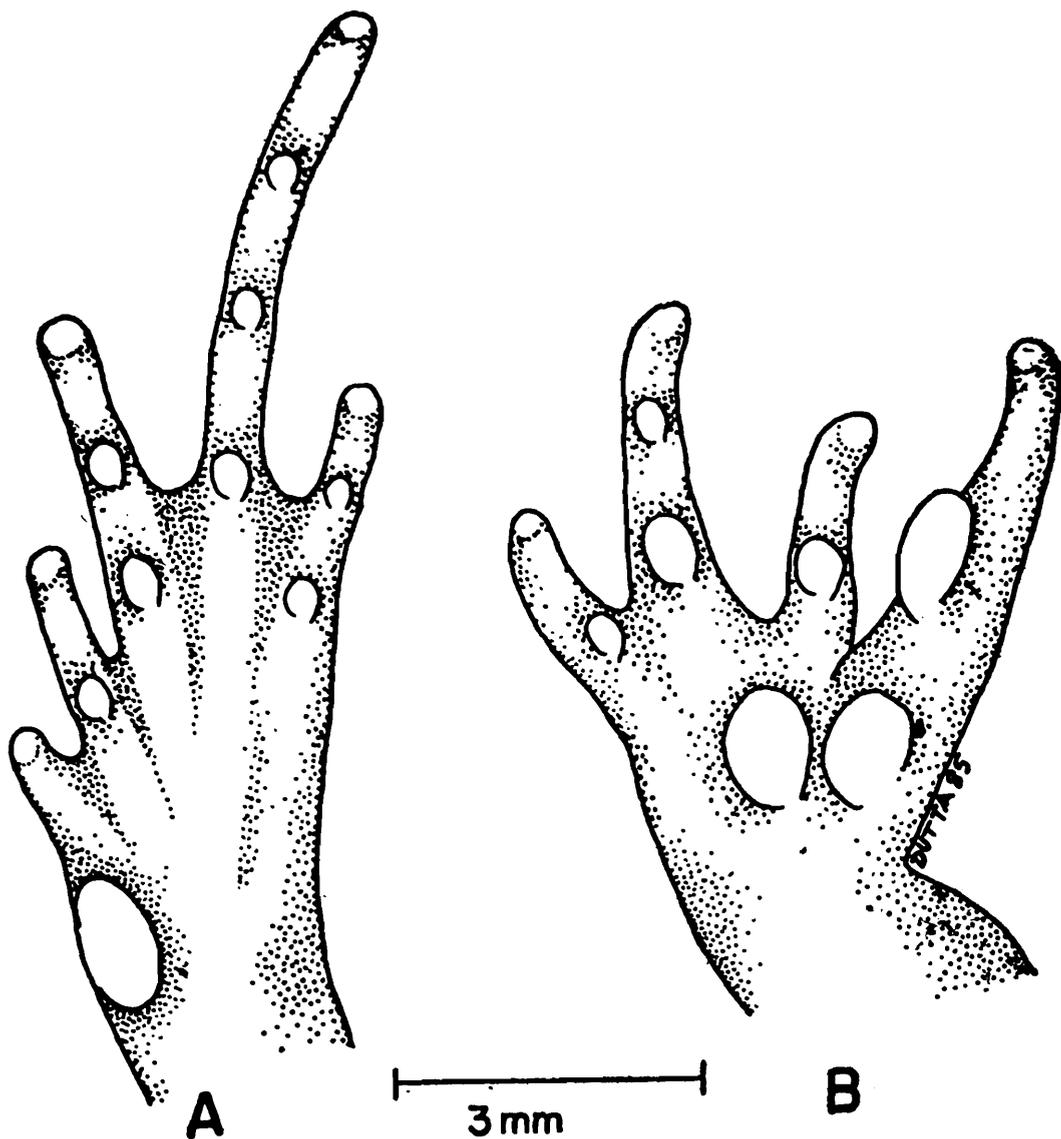


Fig. 2. (A) foot and (B) hand of *T. dobsonii*.

Until 1975, *Tomopterna dobsonii* was considered as a distinct species, but no subsequent collection was made since the type description. Bhati and Shukla (1975) collected specimens of *Tomopterna* from Dayalbagh, Agra, which were later identified by Alice G. C. Grandison of the British Museum of London as *Rana breviceps* (= *Tomopterna breviceps*). Without examining the details of characters used by Boulenger (1882) to distinguish *T. dobsonii* from *T. breviceps*, Bhati and Shukla (1975) considered *T. dobsonii* as a junior synonym of *T. breviceps*. Further, without examining the types of *T. dobsonii*, they commented

that the two specimens of *T. dobsonii* in the British Museum are "presumably aberrant" (which is not true). Though, *T. dobsonii* is closely related to *T. breviceps*, they can be easily distinguished from *T. breviceps* by their smooth dorsum, rudimentary webbings on the toes, distinct canthus rostralis, small tympanum and a black streak laterally from the tip of the snout through the nostril and the eye and covering a portion of the tympanum.

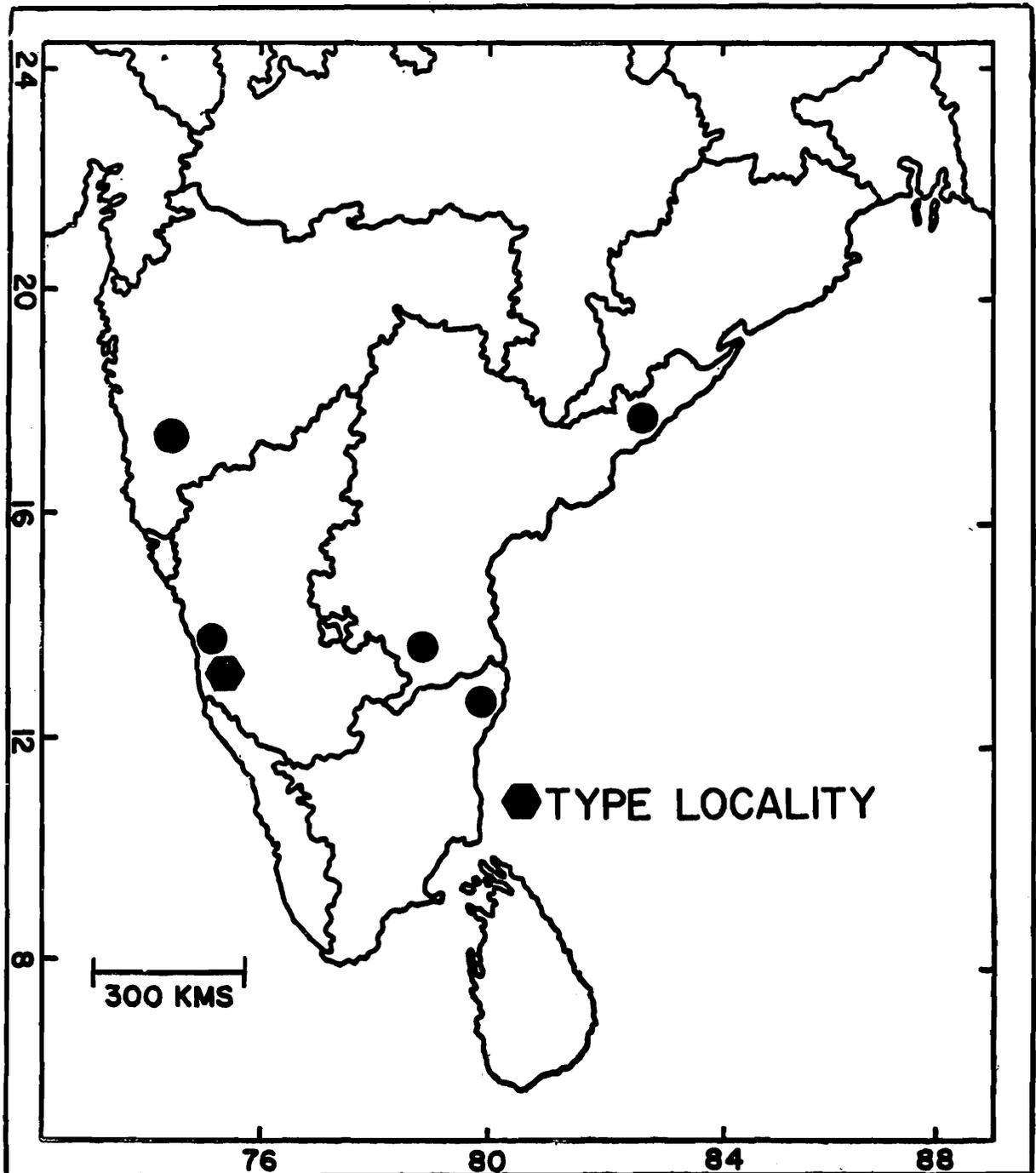


Fig. 3. Distribution map of *T. dobsonii*.

Boulenger (1882) did not mention about the dorsal pigmentation of the species. However, the illustration given by him clearly indicates that the specimens were without any pigmented patches on the dorsum. But, the specimens of *T. breviceps* possess pigmented patches whole

over the dorsum. Pillai (1982) provided a key for the identification of the species of *Tomopterna* in India. He mentioned that there is variable toe webbing (1/4 to 1/2) in *Rana breviceps* (= *Tomopterna breviceps*) and the webbing on the toes of *Rana dobsonii* (= *T. dobsonii*) is rudimentary. Based on my studies with the populations of *Tomopterna* in India (unpublished data), I suspect that there is another undescribed species involved within the *T. breviceps* complex. Perhaps, this undescribed species has been confused by Bhati and Shukla (1975) to be *T. breviceps*. The diagnostic characters for *T. dobsonii* described by Pillai (1982) indicate that his description of *T. dobsonii* from Chingleput district of Tamil Nadu and Chittor district of Andhra Pradesh are probably combination of specimens of *T. breviceps*, *T. dobsonii* and the undescribed *Tomopterna* sp. which is found in sympatry with *T. breviceps*.

The specimens of *T. dobsonii* examined in the present study (excluding the type) come from close vicinity of the type locality, from the northern range of Western Ghats and only one specimen from Andhra Pradesh. If, we consider Pillai's (1982) specimens to be *T. dobsonii*, the species extends its range from the western to the southeastern India (Fig 3).

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