

NOTES ON *RANA DOBSONII* BOULENGER

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Rana dobsonii (Subgenus *Tomopterna*, Family Ranidae) was erected by Boulenger in 1882 on the basis of two female specimens collected at Mangalore, now preserved in the British Museum, London. There has not been any subsequent record of this species. The present record, therefore, is of considerable interest, more so because it is from the east coast of India while the types were from the West coast (S. Canara). Nothing is known about the ecology of this species.

Three lots of a total of 28 examples have been collected from scrub jungles at Vandalur and Kambakkam. Vandalur is about 50 km south of Madras in the Chingleput District of Tamilnadu. Kambakkam is about 100 km north in the Chittoor district of Andhra Pradesh. All of them were taken from rainwater puddles during the N. E. Monsoon months of October to December, 1977. They were mostly juveniles, the largest being a female measuring 32.5 mm from the tip of snout to vent.

Reference may be made to Boulenger (1920) for a good description. Additional notes are given below.

Profile microhylid like. Tympanum smaller being only about half the diameter of eye. First finger much longer than second and a trifle shorter than third. Tibia stouter and shorter being at best $2\frac{1}{2}$ times as long as broad. Webbing rudimentary, $3\frac{1}{2}$ to 4 digits of fourth toe free. Inner metatarsal tubercle large, crescentic and $1\frac{1}{2}$ to $1\frac{3}{4}$ times as long as first toe (measured from the distal extremity of the tubercle). Skin finely granulate or with small inconspicuous tubercles. Some have elongated warts disposed symmetrically along the back which tend to vanish in distended specimens. A strong glandular fold from eye to shoulder. Two whitish glandules behind angle of jaws. Belly and lower parts of thighs granulate in the larger examples ; smooth and translucent in the smaller ones. Grey or light brown above with slightly darker, oval or irregular patches on dorsum encircling the tubercles. Supratympanic fold deeply coloured on its lower aspect. Two dark bars from the two upper eyelids running a little backwards without meeting each other. A broad verte-

bral patch from snout to vent which is sometimes divided by a thread-like dark middle line. Limbs cross-barred. Ventral side immaculate, throat faintly spotted in some. Some examples show a tiny whitish tubercle placed on the inner aspect of the tibio-tarsal articulation in a line with the inner metatarsal tubercle as reported in *Rana breviceps* (Bhaduri and Kripalani, 1954).

The only features available in literature to distinguish *R. dobsonii* from *R. breviceps* is its snout being equal to eye in length and the rudimentary web on toes (Daniel, 1975). Study of the present examples has brought out more differences between these two confusing species as summarised below. *Rana breviceps* has also been collected from the same locality.

<i>Rana dobsonii</i>	<i>Rana breviceps</i>
1. Snout equal to diameter of eye.	1. Snout less than eye.
2. Occiput not swollen.	2. Occiput swollen.
3. When apposed, second finger much shorter than first.	3. Second a little shorter than first finger.
4. Heels meeting when limbs are folded at right angles to body.	4. Heels not meeting.
5. Tibio-tarsal tubercle when present small and inconspicuous.	5. Larger and more pronounced.
6. Webbing rudimentary.	6. Atleast one-third webbed.
7. Subarticular tubercles fairly conspicuous.	7. Subarticular tubercles not conspicuous.

One example of a male of *Rana dobsonii* which was hitherto unknown has been discovered from the present lot by examination of the gonad. External sex differences are wanting presumably because the specimen is immature.

The close similarity in terrain and vegetation between the scrub jungles of Vandalur and Kambakkam from where the present material was collected is undoubtedly a pointer to the type of habitat that is preferred by this species. The soil is hard and dry during the greater part of the year and vegetation consists only of thorny shrubs. Their food, as evidenced from stomach content examination, consisted of millipedes, centipedes, caterpillar, beetles, hymenopterans, gryllid, winged termite and earthworm.

Three species from India and one from Pakistan have been recognised under the subgenus *Tomopterna* by Boulenger (1920). Rao (1937) has described two more species from South India making a total of six. A key which identifies these species is given in the next page.

Genus *Rana*Subgenus *Tomopterna*

1. First finger nearly equal to the second	...	...	2
— First finger longer than second	...	...	3
2. Inner metatarsal tubercle spurshaped, outer tubercle conspicuous	...		<i>R. strachani</i>
— Inner metatarsal tubercle not spur-shaped, outer not conspicuous	...		<i>R. parambikulamana</i>
3. A small outer metatarsal tubercle present	...	...	4
— Outer metatarsal tubercle absent	...	...	5
4. Tarsal fold present on inner side, no fold from eye to shoulder, dorsum smooth.	...		<i>R. leucorhynchus</i>
— No tarsal fold, strong fold from eye to shoulder, dorsum warty.	...		<i>R. rufescens</i>
5. Snout shorter than eye, toes $\frac{1}{2}$ to $\frac{1}{2}$ webbed	...		<i>R. breviceps</i>
— Snout as long as eye, web on toes rudimentary	...		<i>R. dobsonii</i>

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