GEGENOPHIS CARNOSUS (BEDDOME) FROM SOUTH INDIA

By B. R. Seshachar
(Department of Zoology, Central College, Bangalore)

And

L. S. Ramaswami
(Department of Zoology, Intermediate College, Mysore)

Four genera of Apoda (Amphibia) are reported from India of which Uræotyphlus and Gegenophis are known only from this country. The latter has a single species (G. carnosus) and all existing descriptions of this genus are based on the examination of two specimens obtained originally by Beddome and first described by him (1870) as Epicrium carnosum. These two specimens were collected by Beddome at Peria peak, Wynaad (South India) and are preserved in the British Museum (Natural History). Günther (1875) re-examined these specimens and described them as Gegenes carnosus. Neither of these authors figured the animal they were describing. Four years later Peters (1879) examined the same specimens and described them as Gegenophis carnosus. Later this was altered by Boulenger (1882) to Gegenophis carnosus and is the name applied by this author in the Fauna of British India Volume on Batrachia (1890) and by Nieden (1913) in his "Gymnophiona".

Since Beddome’s collection of two specimens of this genus in 1870, no other worker has obtained them. In 1941 one of us (L. S. R.) collected a few specimens in Trivandrum. A later visit paid by the other (B. R. S.) to Travancore yielded a large number of adults and eggs of this animal. More recently a few specimens have been collected (by L. S. R.) from Kottigebar, incidentally the first time the specimens have been taken in Mysore State.

The present account is therefore based on large collections of this form made at intervals in the following localities:

1941. Trivandrum (Travancore) L. S. R. Sea-level.
1942. Trivandrum and Tenmalai (Travancore) B. R. S. 0–500 ft.
1943. Kottigebar (Mysore) L. S. R. 3,100 ft.
As a result of these collections we are in a position to present an accurate
description of the species.

_Gegenophis carnosus_ (Bedd.)

_Epicnrum carnosum_ Beddome (1870)
_Gegenes carnosum_ Günther (1875)
_Gegeneophis carnosus_ Peters (1879)
_Gegenophis carnosus_ Blgr. (1882)

Skin without scales, eyes roofed over by bone, visible in buff coloured
specimens as a dark speck. Two rows of teeth in the lower jaw. Squamosal
and parietal closely apposed (Ramaswami, 1942). Tentacle globular, near the
tip of the snout, slightly posterior and under the naris. Snout narrow and
prominent. Body folds 100–120, distinct and complete, crowded towards the
posterior end. Tail very short and rounded.

The length of the specimens collected by Beddome was about 7 inches and
the diameter about 0.2". From the examination of the specimens at our
disposal this does not appear to be the adult size of the animal. We have
in our possession specimens measuring 15 inches in length and more than half
an inch in diameter. One of the smaller specimens has been photographed
(Figs. 1–5). The Kottigehar specimens, however, approximate to Beddome's
forms and it is possible that they, like Beddome's are adolescents. It is also
probable that the animal increases in size throughout life, as in the case of
_Ichthyophis glutinosus_, where the adolescents measure 170 mm, while the
adults reach a length of 250 mm. (Derranyagala, 1933). In large forms of
_Gegenophis_ the body rings are far more distinct and number 100–120.

In colour too, the Kottigehar specimens resemble the descriptions given
of Beddome's forms,—“uniformly fleshy colour when alive”. But the
larger specimens obtained from Travancore show a different colour scheme.
They are steel blue in colour with small but distinct white spots on the skin.
The rings are indicated by darker lines.

The animals are active burrowers. Beddome obtained them “under
stones”, which indicates that they are surface cryptic forms. But our
observations show that they are active burrowers. Specimens were obtained
from both localities by digging to a depth of 8–10 inches in banana, rubber and
cardamom plantations along the small water-courses.

Peria peak, Wynaad, where Beddome's specimens were gathered is about
5,000 ft. above sea-level but our specimens have been taken at different
Fig. 1. Photograph of an entire specimen of *Gegenophis carnosus* (Bedd.). ×½
Figs. 2, 3, 4. Dorsal, ventral and side views of the head and anterior part of the body. ×3.
Fig. 5. Ventral view of the posterior end of the animal showing the anus. ×3.
altitudes which shows that the range of the occurrence of the species extends from sea-level to 5,000 feet above sea-level.

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LITERATURE REFERRED TO:

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