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A NEW LEAF SPOT OF *COMMIPHORA WIGHTII* A MEDICINAL PLANT, CAUSED BY *PHOMA* SP.

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COMMIPHORA WIGHTII (Arnott) Bhand is an important medicinal plant and is popularly known as guggal which is the oleogum resin exudate of this plant. It is widely distributed in Karnataka, Maharashtra, Gujarat and Rajasthan states of India. It is reputed for its numerous medicinal properties[1–4]. We have extensively survyed the guggal-growing areas of Rajasthan and encountered a severe leaf spot disease occurring in serious proportions. The leaf spot covering two-third portion of leaves, makes the leaves dry, and which in later stages wither away. This might be affecting overall growth of the plant. This is the first report on leaf spot disease of *C. wightii* caused by a new species of *Phoma*.

The diseased leaf showed symptoms of black concentric ring spots, which in initial stages of infection shows brown discoloration of tissues, but later takes the shape of black concentric rings. Isolations were made from diseased tissues of leaves in petri plates. The small bits of infected tissues along with adjoining healthy areas were dipped in mercuric chloride (0.1%) for surface sterilization for 1–2 min, washed thrice in sterile water and plated on PDA medium poured in petri dishes and incubated at 20–25°C for 7 days. Pure cultures of the fungus were transferred on PDA slants. In pathogenicity tests, fungus produced the symptoms after seven days of inoculations. Morphological characteristics of fungus were studied and it was identified as *Phoma glomerata*. The identification was confirmed by CMI, Kew, England (Herbarium IMI No. 2999459). The fungus is a species of *Phoma* close to *P. glomerata*. Studies on morphological and taxonomic details of the fungus are in progress.

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STUDIES ON THE NEMATODES FROM MANGROVE SWAMPS OF DELTAIC SUNDARBANS, WEST BENGAL, INDIA. (III) *ANOPLOSTOMA MACROSPICULUM* N. SP. (*ANOPLOSTOMATIDAE: NEMATODA*)

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ANOPLOSTOMA MACROSPICULUM n. sp. is described and figured as new from a mangrove environment of deltaic Sundarbans, West Bengal. The new species under consideration is unique among all the described species of the genus *Anoplostoma* Buetschli, 1874, in having very long and unequal spicular apparatus (5.5–7.8 a.b.d. and 12.5–16.8 a.b.d.). The worm was found to be prevalent in detritus-rich mangrove litter soil around roots of *Phoenix peludosa* in the intertidal zone of Hooghly estuary.

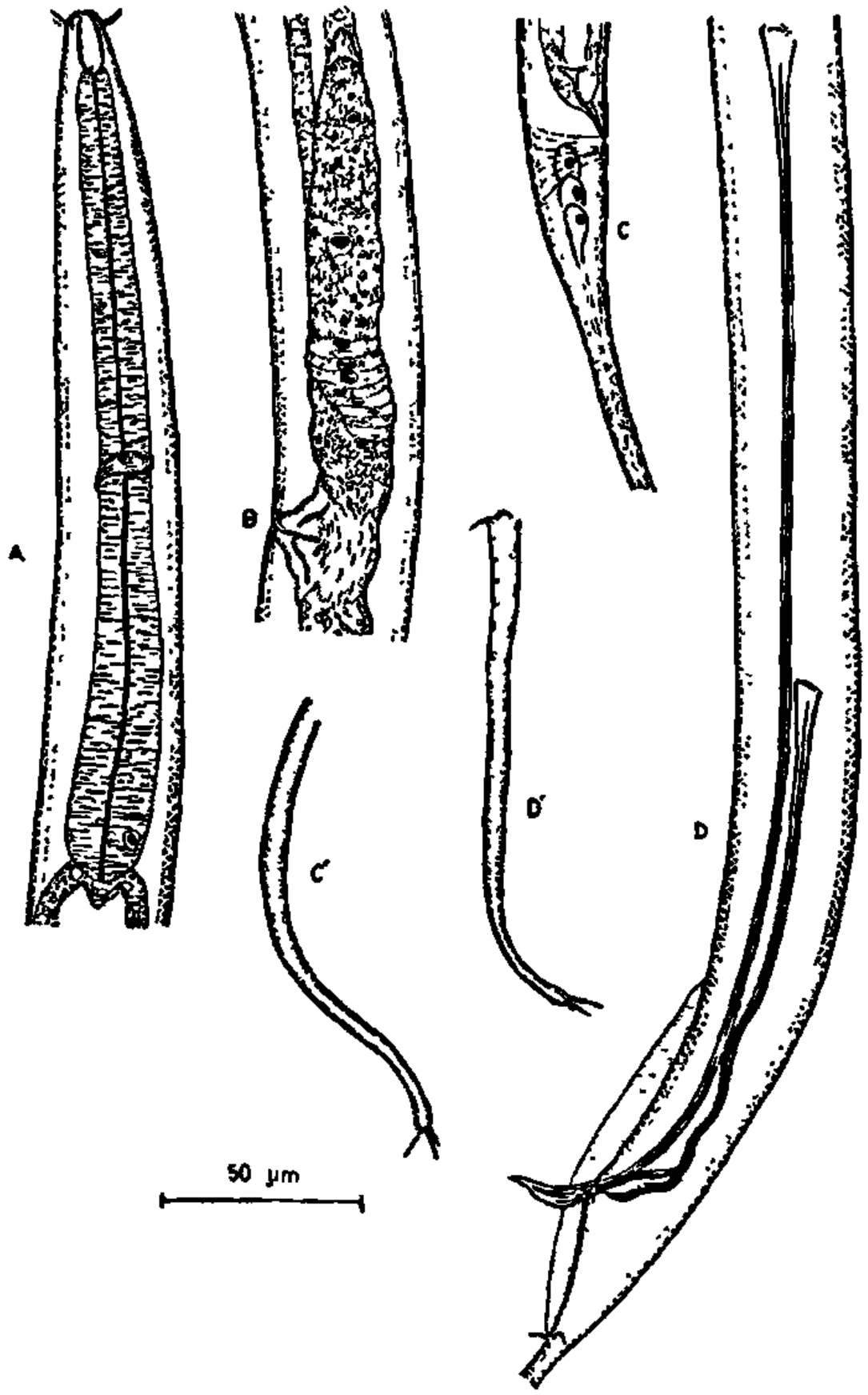

Figure 1. **A.** Anterior end; **B.** Vulval region with anterior uterine branch; **C.** Posterior end of female; **C′.** Tail tip of female; **D.** Spicular apparatus of male; **D′.** Tail tip of male.

Morphology:

Anoplostoma macrospiculum n. sp. (figure 1)

Pronounced sexual dimorphism. Observation based on 10 specimens ♂ 5; ♀ 5). Cuticle smooth without lateral alae. Sclerotized stoma 11–11.5 µm deep. Cephalic setae 12 of 8–9 µm long. Oesophagus 210–215 µm long, Amphids obscure. Head not offset but marked with slight depression. Vulva almost pre-equatorial, gonad amphidelphic, reflexed, spermatheca filled with sperms. Rectum less than one anal body width long. Tail long, 180–185 µm or about 10.5–10.8 anal body diameters long with slightly rounded terminus possessing three 5–6 µm long caudal spines in female. Two spicula in male are of different lengths, measuring about 100–130 µm and 250–305 µm long or 5.5–7.8 a.b.d. and 12.5–16.8 a.b.d. long with distal cephalated end. Gubernaculum somewhat spiral, 50–58 µm long. Caudal alae 82–88 µm long with a posterior pair of 5 µm long spine-like setae. As regards the length of the tail, it is 140–150 µm or 7.3–7.9 a.b.d. long.

Since the organism does not completely agree with the described species of the genus *Anoplostoma* Buetschli, 1874, by its unique possession of very long and unequal spicular apparatus (5.5–7.8 a.b.d. and 12.5–16.8 a.b.d. long), it is considered as a new species and named as *Anoplostoma macrospiculum* sp. nov.

Type habitat and locality:

The type material has been collected from the mid-littoral zone of Gangasagar around roots of *Phoenix peludosa*. Habitat exposed, salinity 24‰. It has been deposited in the National Zoological Collections of Zoological Survey of India, Calcutta.