

A New Species of *Janetia* Ellis (Hyphomycetes) from India

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In the mycofloristic survey (1987-1988) of some Dematiaceous Hyphomycetes from the western ghats of Karnataka, India, the authors have collected an undescribed species of anamorphic genus Janetia Ellis. The present species is different from the earlier described taxa of Janetia in its conidiogenous cells and conidial morphology. The present paper deals in detail the new anamorphic fungus, viz., Janetia indica sp. nov.

Keywords: Anamorph, dematiaceous hyphomycetes, corticolous fungus

During a survey (1987-1988) of microfungi from the forests of Bhagavati, Karnataka which is in western ghats of the Indian Peninsula representing tropical features, a dematiaceous hyphomycete was collected on unidentified branches. It similar with the generic characters of *Janetia* Ellis (1976), but differs from the earlier described species in its conidiogenous cells and conidial morphology. Therefore it is being reported as a new species. The type material has also been deposited in Herbarium Cryptogamae Indiae Orientalis (HCIO) at Indian Agricultural Research Institute (IARI), New Delhi, India (HCIO 186A).

Janetia was proposed by Ellis (1976) with *J. euphorbiae* Ellis (1976) as the type species. Goh & Hyde (1996) recognised sixteen species which are mainly from tropical or subtropical regions and are also reported from other parts of the world. The present taxa differs from all the known species of *Janetia* Ellis in having distinctive conidiogenous cells and conidial morphology.

The material was collected from the Bhagavati forests of Karnataka in fresh polythene bags and decontaminated with naphthalene. The material was immediately brought

to the laboratory and remoistened with sterile water for 2-4 days in glass Petri dishes containing filter paper to get sufficient sporulation. Fungus was screened under Meopta stereobinocular research microscope. The microslides were prepared and mounted in lactophenol. The slides were sealed with DPX mountant. The fungus was identified using monographs of Ellis(1971, 1976) and Carmichael et al (1980).

Colonies effuse, thin, dark blackish brown. Mycelium partly superficial, partly immersed in the substratum. Hyphae 3-4 µm wide, pale to dark olivaceous brown, branched, septate, bearing intercalary dark denticulate conidiogenous cells. Setae absent. Hyphopodia lacking. Conidiophores micronematous, mononematous. Conidiogenous cells integrated, mostly intercalary denticulate, solitary or clustered, monoblastic to polyblastic determinate, inflated, ampulliform, dark brown to almost black, uniform in color, thick walled, not verruculose, 7.5 -16.5 µm long, 8-10 µm wide at the bottom, 2-5 µm wide at the apex. Conidia holoblastic, solitary, dry obclavate or slightly curved, often rostrate 5-9 septate, smooth, pale to mid brown, gradually tapered towards a paler acicular apex, 65-105 µm long, 9-15 µm wide. Basal cell

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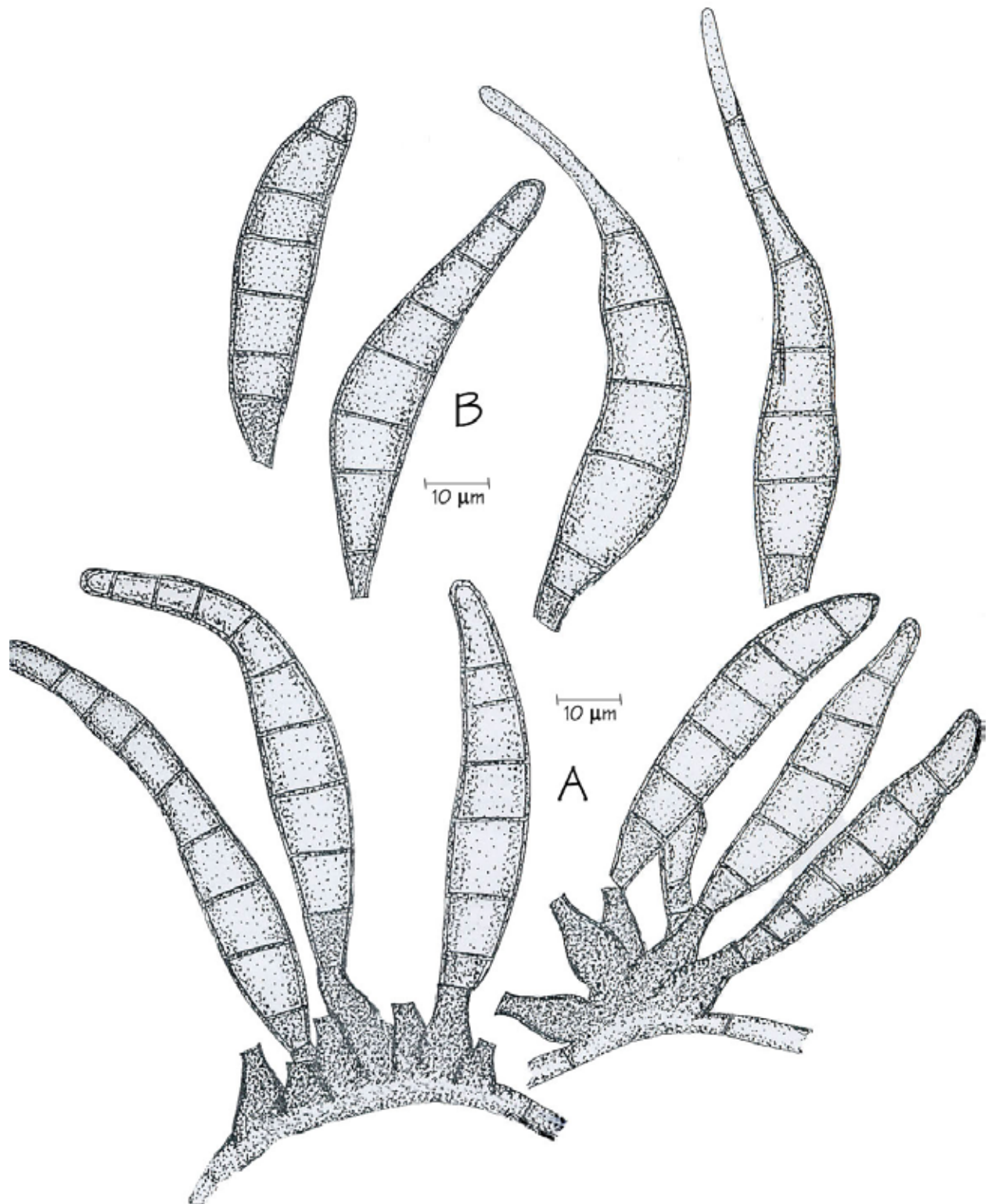


Figure 1. *Janetia indica* sp. no. A. Conidiogenous cells with conidia. B. Conidia.

4-8 x 2-5 µm, conspicuously darker than the rest of the conidium cells, obtuse-tapered to an obconically truncate base. Conidial secession schizolytic.

TYPE: On unidentified branches, Bhagavati, Karnataka, India. VMRL No. 1332 Nov., '87 Coll. B.S.R. & V.R.

Janetia was proposed by Ellis with *J. euphorbiae* M.B.Ellis (1976) as the type species. Goh & Hyde (1996) emended the generic description of the genus *Janetia* and proposed a key for 15 species of *Janetia* excluding *J. cubensis*. Considering the conidial width as more stable taxonomic character than the length they treated *J. tetracentri* Guo (1989) as synonymous to *J. faureae* Ellis and have also described a new species, *J. curviapicis* Goh & Hyde.

The present taxon is comparable to *J. euphorbiae*, *J. capnophila* and *J. curviapicis* (Table 1). The proposed new species *J. indica* differs with *J. euphorbiae* in possessing a larger number of conidiogenous denticles, a larger size of conidia, a larger number of septa and tapering conidial apex. Though conidial in shape of *J. indica* sp.nov. is close to *J. capnophila* Hughes, it differs with *J. capnophila* in possessing more conidiogenous denticles and lesser number of septa in conidium. *J. capnophila* is a foliicolous whereas *J. indica* sp. nov. is lignicolous. *J. capnophila* is mycophilic on sooty molds but the nature of *J. indica* sp.nov. is not known. *J. indica* sp.nov. is also shows some resemblances with *J. curviapicis* in possessing conidiogenous denticles in clusters but differs from it in other characters. Conidiogenous denticles are cylindrical in shape and measure 8-10 x 2-3.5 µm, 5-6.5 µm wide at bulbous base and apex 2-3 µm wide in *J. curviapicis* whereas in *J. indica* sp.nov. they are inflated, ampulliform and measure 12.5-16.5 µm in length and 6-10 µm wide at base, 3-4 µm at the apex. Further *J. indica* differs from *J. curviapicis* in the following conidial characters viz: the conidial apex not circinate, conidial breadth is more, eusepta are less in number, besides lacking characters such as distoseptate and constrictions at the septa. Further *J. curviapicis* has been found to be growing on other fungi and this character is not seen in *J. indica* sp. nov. In view of the above peculiarities and distinct characters the present taxon is described as *J. indica* sp. nov.

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