

Notes on Fungi from North-East India - VI. *Xylobotryum andinum* Pat. on tea [*Camellia sinensis* (L.) O. Kuntze.

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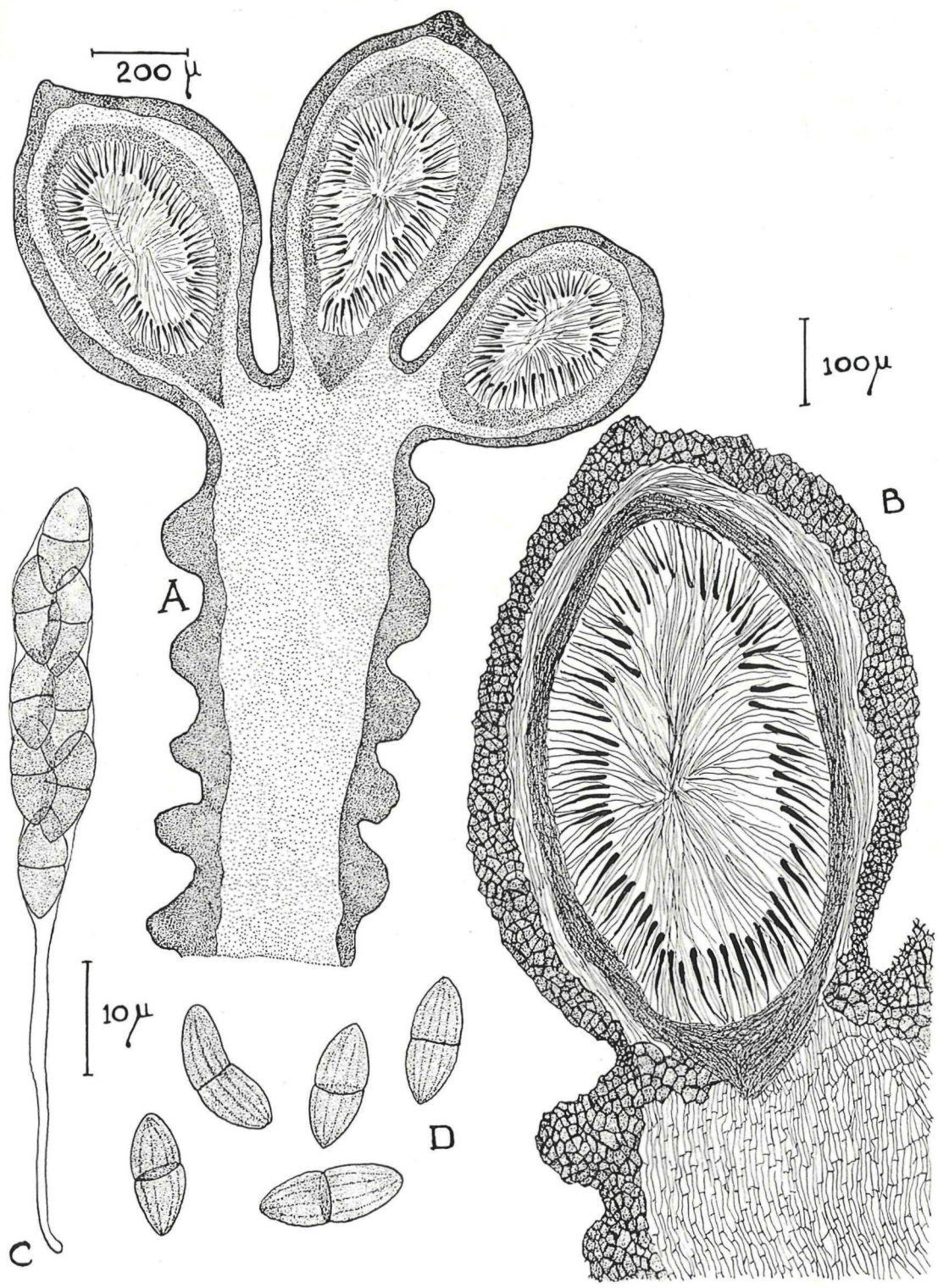
With Plate XXII.

Very frequently a Sphaeriaceous fungus was encountered on the collars of tea bushes growing in water-logged soils. The fungus has been identified as *Xylobotryum andinum* Patouillard, a member of the stromatic *Sphaeriaceae* (Saccardo, 1895). The following is the description of the locally occurring forms of the fungus. Our Herbarium has 3 collections of *X. andinum* on tea, one of which is from the Dooars (West Bengal) and two are from Upper Assam tea gardens.

The fructifications are about 6 to 8 mm. in height and in a few instances extend for more than 2 to 3 cm. Stroma prominent, dark, carbonaceous, erect, subterete, dendroid, branched in an irregularly corymbose pattern ending in botryosely aggregated perithecia. Perithecia 500 to 800 μ in diameter, flask-shaped, dark, carbonaceous, ostiolate. Asci cylindric, measuring 48 to 54 by 5 to 7 μ inclusive of a stalk which is up to 24 μ in length, octosporous; spores biseriata. Paraphyses present, long, hyaline, filiform, up to 150 μ long. Ascospores ovate-elliptic with obtuse apices, medianly septate, constricted at the septum, glabrous, faintly striate, measuring 8 to 12 by 3 to 5 μ .

The fungus appears to occur very frequently on tea bushes in North-east India. Its parasitic abilities are being investigated. From the available literature, it is known that *X. andinum* was first described from South America and it has since been not reported from elsewhere. This is perhaps the first time that the fungus is being reported from the Eastern hemisphere.

In North-east India the fungus is very frequently associated with tea bushes growing in water-logged or poorly aerated soils and it appears that *X. andinum* was mistaken for the perfect stage of *Sphaerostilbe repens* B. et Br. a fungus generally infecting tea roots in similar situations (Tunstall, 1929, 1940). Except for the didymosporous ascospores, there appears to be no similarity between the two fungi. The hypocreaceous *S. repens* in contrast to the stromatic,



carbonaceous *X. andinum* has got bright reddish perithecia. According to Petch (1911, 1923), *S. repens* has aparaphysate asci that are up to 220 by 9 μ with uniseriately arranged ascospores measuring 19 to 21 by 8 μ .

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Literature cited

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Xylobotryum andinum Pat. A = Section through an ultimate branch of the dendroid stroma showing perithecial aggregation. B = A longitudinal section through perithecium showing asci and paraphyses. C = Ascus. D = Ascospores.

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Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

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