Anthostomella scotina (Dur. et Mont.) Sacc. new for India

By S. K. Bose and E. MÜLLER

(Fruit Utilisation U. P., Ranikhet (Distr. Almora) India; Department of Special Botany, Swiss Federal Institute of Technology, Zürich, Switzerland)

In a recent paper on the presently known European species of the pyrenomycetous genus Anthostomella Sacc., Francis (1975) discussed also Anthostomella scotina (Dur. et Mont.) Sacc., which occurs on dead leaves of a number of host plants belonging to different families of flowering plants as Betulaceae, Cyperaceae, Fagaceae and Lauraceae. The known geographical distribution of that species centres in the mediterranean portion of Europe and Africa, but it also has been found in Western Europe and Chile (South America).

Additionally A. scotina has been found in India. That material agrees well with the European specimens and there is no doubt about its identity. It may be described as follows:

Ascocarps scattered, embedded in the host tissue and erumpent on the upper surface of the leaf, globose or pear-shaped, often with a conical apex, clypeate, $150-250~\mu$ diameter. Wall of ascocarp composed of four to five layers of elongated, polyhedral brownish cells; in the upper portion of the ascocarp the cells are thickwalled, dark brown, forming the thick neck and the clypeus which penetrates slightly into the epidermis. Apical papilla conical, with a central canal $24-40~\mu$ wide and $60-100~\mu$ in length and lined with periphyses.

Asci cylindrical, $75-100\times4,5-5,5$ μ with a J+ apical apparatus (2 μ in length and 1 μ in bredth) eight-spored. Ascospores uniseriate, two-celled, with a central brown cell, $8-10\times4-4,5$ μ and with one end flattened and cariing a dwarf, hyaline cell and the other rounded with a gelatinous appendage (dwarf cell and appendage look almost the same). Paraphyses filiforme, hyaline, septate, gelatinous.

On fallen leaves of *Machilus duthiei* King (Lauraceae), India, Uttar Pradesh, distr. Almora, Ranikhet (near Jhula Devi), on September 24th 1963, leg. Bishan Singh (ZT).

According to our specimen and to the description of Francis (1975) Anthostomella scotina differs in several respects from the majority of Anthostomella species. The development of ascospores has been studied by Francis (1975). There is no principal difference compared to other species with originally two-celled ascospores.

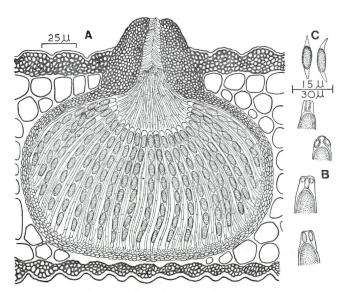


Fig. 1. Anthostomella scotina. A Section of an ascocarp; B. Ascus apices with apical structures. C. Ascospores

However the absence of a germ slit in the ascospores (according to Francis, 1975, the germ slit is indistinct) is a characteristic which arises some doubts on the correctness of the arrangement with Anthostomella. It is premature to decide on that problem until similar monographic arrangements are made on extra-European species, and therefore until the whole range of variation is known within that genus.

Literature

FRANCIS, S. M. (1975). Anthostomella Sacc. (Part I), Commonwealth Mycol. Inst. Mycological Papers 139, 1—97.

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: Sydowia

Jahr/Year: 1976/1977

Band/Volume: 29

Autor(en)/Author(s): Bose S. R., Müller Emil

Artikel/Article: Additions to "On cuboid-spored species of Entoloma". 300-301