

Critical Notes on Rust Fungi of Maharashtra (India)

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With 2 Fig. in the Text

5* *Skierka agallocha* Racib.

Among the collections of the Rust Fungi made by the writer in parts of Maharashtra State during the year 1967 was a rust on *Excoecaria agallocha* L. (Euphorbiaceae) in its pycnial, aecial and uredinal stages. (M. A. C. S. Mycol. Herb. No. 330). The telial stage was absent. The distinctive nature of urediospores with characteristic lateral ridges obtained in this material was suggestive of its relationship with the rust genus *Skierka* Racib. This rust had also not been previously reported from India. A detailed description of the Indian Collection of this rust was therefore undertaken and is presented in this paper:

Pycnia subepidermal epiphyllous, with ostiolar filaments and resembling type-5 as defined by Hiratsuka and Cummins (1). Aecia-hypophyllous, subepidermal, deep seated, possibly peridiate, associated with pycnia, opening by a pore. Aeciospores golden yellow, borne singly on pedicels, wall double layered, with two lateral ridges, somewhat translucent, echinulate, $8.2\ \mu$ to $4.1\ \mu$ laterally, $41-69.7 \times 20.5-32.8\ \mu$, mostly $61.5 \times 20.5-28.7\ \mu$. Uredia (Fig. 1) similar to aecia, amphigenous, diffused, subepidermal deep seated, Urediospores (Fig. 2) look like spiny club heads, similar to aeciospores, germ-pores obscure.

Raciborsky (1909) collected a rust parasitizing *Excoecaria agallocha* in telial stage from Java and referred it to *Skierka agallocha* Racib. No other stages were encountered in this case (Saccardo 3). Mains (2), in his monographic studies on this genus, reports that this rust is known only in telial stage and from the original collection at type locality viz. Batavia, Java on *Excoecaria agallocha*. His examination of other species of *Skierka* with uredial stage showed that the urediospores were distinctive of the genus with characteristic lateral ridges which could be utilized in determining the genus *Skierka* even in the absence of telia. On this basis, the Indian collection of rust on *Excoecaria agallocha* could be accommodated in the rust genus *Skierka* Racib. It may, however, be mentioned that the subsequent findings of Thirumalachar (4) in respect of the rust *Ctenoderma toddaliae* affecting *Toddalia* species revealed that while this rust had urediospores

very similar to those of the genus *Skierka* as pointed out by M a i n s (2), the teliospores were of the *Didymopsora* type, thus showing that the urediospore character alone could not be utilized in determining the rust genus *Skierka* in the absence of telia. However, the occurrence of the Indian rust on the same host as that of the type species together with the distinctive nature of the urediospores would appear to justify its assignment to the genus *Skierka* under *S. agallocha* Racib. pending the discovery of the telial stage.

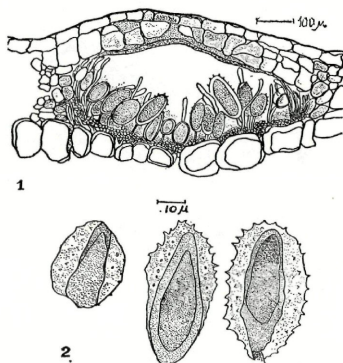


Fig. 1. Uredial sorus in section.

Fig. 2. Urediospores.

Summary

Skierka agallocha Racib. is a new genus record to India. Pycnial, Aecial and Uredial stages are described for the first time for this rust species.

When this paper was in press, the author has come across a paper leg Boedijn (The Uredinales of Indonesia, Nova Hedwigia, I: 463—496, 1960) where in he describes both uredia and telia of this rust species. This confirms the view about identification of this rust under study.

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L i t e r a t u r e c i t e d

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