

The Genus *Rosellinia* in India

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The genus *Rosellinia* was erected by Cesati & de Notaris (1844) with *R. aquila* as the type species. Up-till now 10 species have been reported from India. Recently Tilak (1966) reported *R. aquila* Ces. & de Not. on *Zizyphus jujuba* Lam. as new host record.

During his mycological investigations of this region the author collected dead stems of various plants showing heavy infections. These were brought to the laboratory and critical studies revealed these as belonging to the genus *Rosellinia* Ces. & de Not. The genus is characterised by the superficial perithecia, often occurring in dense swarms upon a common blackish or brownish hyphal mat (subiculum). Perithecia subglobose to globose, smooth, black, ostiole papillate. Asci cylindrical, stipitate with well developed apical ring, paraphysate, ascospores, brown to black uniseriate, non-septate, often with minute colourless appendages or oil globule or longitudinal furrow.

I. *Rosellinia cassiae* Kale sp. nov.

Perithecia globosa vel subglobosa, 750—1050 × 675—900 μ , plus minusve depressa, ostiolo papilliformi ornata, levia, nigra, subiculo

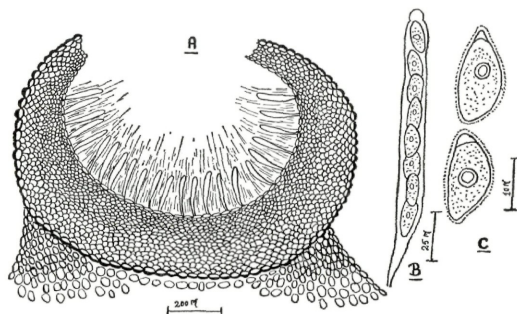


Fig. I. *Rosellinia cassiae* sp. nov. — (a) Section through ascocarp. — (b) Ascus. — (c) Ascospore.

brunneo, hyphoideo insidentia; asci cylindranei vel clavati, octospori, tenuiter tunicati, pedicellati, paraphysati, $112-120 \times 6.4-8 \mu$; sporae monostichae, ellipsoideae, brunneae vel nigrescentes, $17.6-19.6 \times 6.4-7.8 \mu$, continuae, postice saepe appendicula minuta, hyalina auctae, in uno latere applanatae, guttula oleosa et sulco tenui longitudinali praeditae.

Perithecia globose to sub-globose, $750-1050 \times 675-900 \mu$, flattened round, with the papillate ostiole, smooth, black, seated on brown hyphal mat (submiculum). Asci $112-120 \times 6.4-8 \mu$, cylindrical to clavate, 8-spored, unitunicate, pedicellate, hyaline, paraphysate. Ascospores uniseriate, elliptical, brown to black, $17.6-19.2 \times 6.4-7.2 \mu$, non-septate. One side some what flattened and bearing a longitudinal furrow and an oil globule. At the end of ascospore is present a minute hyaline appendage.

Collected on dead stem of *Cassia auriculata* L. at Moregaon (Sailu) in the month of January 1966 and at Mulaj in the month of October 1966 leg. S. B. Kale and deposited in the herbarium of S. C. S. College, Omerga under No. SBK-201 (Kale type).

The species also occurs on various hosts however as these correspond in major morphological features these are only additional host records and the material has been deposited in the herbarium of S. C. S. College, Omerga.

Table No. I

Rosellinia cassiae sp. nov. on various hosts.

Host.	Perithecia.	Asci.	Ascospores.
<i>R. cassiae</i> sp. nov.	750—1050 =	112—120 =	17.6—19.2 =
<i>Cassia auriculata</i> L.	675—900 μ	6.4—8 μ	6.4—7.2 μ
<i>New Hosts:</i>			
<i>Punica granatum</i> L.	900—1005 =	120—128 =	16.8—17.6 =
	900—1005 μ	6.4—8 μ	6.4 μ
<i>Ficus glomerata</i> Roxb.	900—1350 =	114—133 =	16—17.6 =
	675—900 μ	7.6 μ	6.4—8 μ
<i>Grewia</i> sp.	825—900 =	104—112 =	17.6—19.2 =
	900—1050 μ	6.4—8 μ	6.4—8 μ
<i>Prosopis juliflora</i> Dc.	750—1050 =	120—128 =	16—17.6 =
	900—1050 μ	7.2—8 μ	6.4 μ
<i>Pithecolobium dulce</i> Benth.		107—112 =	16—19.2 =
		8 μ	6.4—7.2 μ
<i>Phyllanthus</i> sp.	805—975 =	128—138 =	16—19.2 =
	750—900 μ	6.9 μ	8 μ

2. *Rosellinia mimosae* Kale sp. nov.

Perithecia globosa vel subglobosa, $805-900 \times 750-805 \mu$, in vertice circa ostiolum papilliforme distincte applanata, levia, nigra, subiculo

brunneo, hyphoideo insidentia; asci cylindricei vel clavati, pedicellati, octospori, paraphysati, $114-140.6 \times 7.6-9.5 \mu$, sporae monostichae, ellipsoideae, brunneae vel nigrescentes, $17.6-19.2 \times 7.2-8 \mu$, continuae, postice appendicula minuta, hyalina, auctae, in uno latere leniter applinatae, guttula oleosa et sulco tenui, longitudinali praeditae.

Perithecia globose to subglobose, $805-900 \times 750-805 \mu$, flattened round with the papillate ostiole, smooth, black, seated on brown hyphal mat (subiculum). Asci $114-140.6 \times 7.6-9.5 \mu$, cylindrical to clavate,

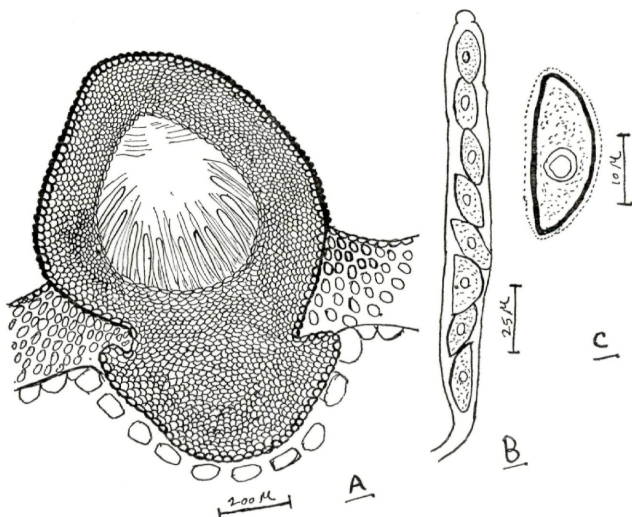


Fig. II. *Rosselinia mamosae* sp. nov. — (a) Section through the ascocarp. — (b) Ascus. — (c) Ascospore.

8-spored, unitunicate, pedicellate, hyaline, paraphysate. Ascospores uniseriate, elliptical, brown to black, $17.6-19.2 \times 7.2-8 \mu$, non-septate, one side some what flattened and bearing a longitudinal furrow or an oil globule, at each one end of each ascospores, is present a minute hyaline appendage.

Collected on *Mimosa hamata* Willd. at Mulaj in the months of October 1966, leg. S. B. Kale and deposited in the herbarium of S. C. S. College, Omerga under No. SBK-208 (Kale type).

Similar fungus has been collected on dead stem of *Prosopis spici-*

gera L. at Mulaj in the month of October 1966 and as it corresponds in major morphological features as can be seen from Table No. 2. It is considered as the same and hence this constitutes the new host for the same species.

Table No. II
Rosellinia mimosae sp. nov.

Host.	Perithecia.	Ascus.	Ascospores.
<i>Mimosa hamata</i> Willd.	805—900 = 750—805 μ	114—140.6 = 7.6—9.5 μ	17.6—19.2 = 7.2—8 μ
<i>Prosopis spicigera</i> L.		112—115.2 = 9.6 μ	19.2—20.8 = 8—9.6 μ

Summary.

The present papers deal with the description of two new species of the genus *Rosellinia* Ces. de Not. viz. *Rosellinia cassiae*, *Rosellinia mimosae*. With addition of these two species the number of species in India is now 12.

Acknowledgements.

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