A new species of Cicinnobolus, parasite on Oidium abelmoschi Thüm.

By J. Júlio da Ponte

(Plant Pathologist, School of Agronomy, Federal University of Ceara, Fortaleza, Ceara, Brazil)

With one fig. in the text

Numerous species of fungi, such as *Darluca filum* (Biv. ex Fr.) Cast., *Darluca sorghi* Zimm., *Woronina polycystis* Cornu, *Parasitella simplex* Bain. and many others, exist in nature by means of parasitism upon other fungi (Clements & Shear, 1931; Silveira, 1946).

In this case, as outstanding example, are the species of the genus *Cicinnobolus* Ehr., which are parasites on various other species of fungi, especially the conidial forms of *Erysiphaceae* — of particular importance to Plant Pathology, as agents of "powdery mildew" (Roger, 1953; Barnett, 1955). For this reason we cannot deny the importance of *Cicinnobolus* spp., whose energetic parasitic action upon the "powdery mildews" constitute in nature one of the main obstacles to the greater transmission of them. It is certainly not out of question to make reasonable use of the fungus in biological control.

In this paper we describe a new species of *Cicinnobolus*, parasite on *Oidium abelmoschi* Thüm. the "powdery mildew" fungus which was found on okra, *Hibiscus esculentus* Linn.

Cicinnobolus priscii sp. nov.

The morphologic study of this fungus showed clearly that it should be considered as a new species of the genus *Cicinnobolus* Ehr. As a matter of fact, the peculiar characteristics it presents differentiate it from other species of the same genus, including *Cicinnobolus cesatii* De Bary, which appear to be closest species.

Diagnosis: Pycnidia dark, separate, measuring 47,52—79,20 × 42,24—58,00 μ, predominantly ovoid to almost globoid, rarely clavate, elongate or fusoid; thick walls, constituted of polygonal or irregular cells, of light to dark brown color, measuring 1,0—7,0 × 1,0—3,5 μ; oidicole, formed in hyphae and especially in conidiophore of *Oidium;* split at the apex by one irregular ostiole, extremely variable in size, measuring 18,69—48,06 μ in diameter.

A large number of conidia, predominantly ovoid (sometimes slightly curved) or oblong, sometimes globose or ellipsoid, rarely irregular, hyaline to subhyaline, one-celled, measuring 1,32—7,12 × 1,00—3,17 μ.

The fungus was found on leaves of okra, *Hibiscus esculentus* Linn., living as a parasite on *Oidium abelmoschi* Thüm. It was collected at Viçosa, Minas Gerais, Brazil, by Dr. Ivo C a r v a l h o, in October, 1965. A specimen (type 507 a) is kept in the Plant Pathology Herbarium of the School of Agronomy of the Federal University of Ceara, in Fortaleza, Ceara, Brazil.

Pycnidia castaneo-brunnea, signularia, 47,52—79,20 × 42,24—58,00 μ, glabra, ovoidea vel fere globosa, raro crasse clavata, oblonga

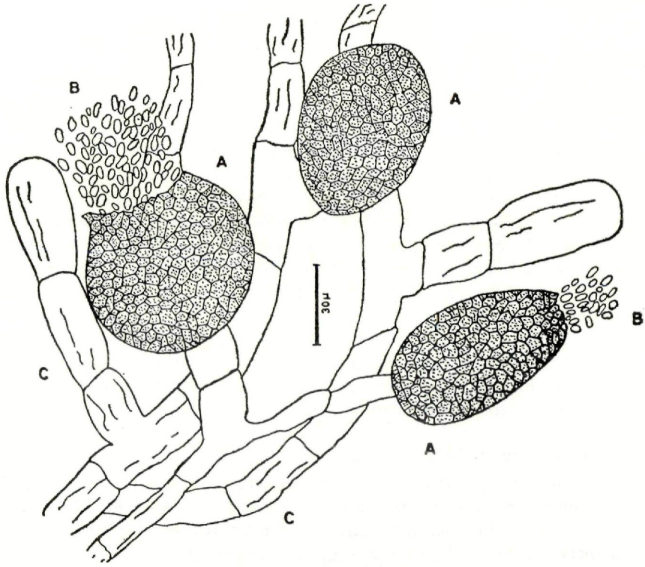

Fig. 1. A. Pycnidia of *Cicinnobolus*. — B. Conidia of *Cicinnobolus*. — C. Conidiophora of *Oidium*.

vel fusiformia, pariete crasso e cellulis polygonalibus vel irregularibus, 1,0—7,00 × 1,0—3,5 μ composito, oidicola, supra hyphas vel imprimis in conidiophoris *Oidii* evoluta, in apice irregulariter ostiolata, poro, 18,69—48,06 μ diam. aperta.

Conidia numerosa, 1,32—7,12 × 1,00—3,17 μ, plerumque ovoidea interdum leviter curvula vel oblonga, saepe globosa vel ellipsoidea, raro irregularia, unicellularia, hyalina vel subhyalina.

Species parasitica in *Oidio abelmoschi* Thüm. in foliis *Hibisci esculenti* Linn. Viçosa, Minas Gerais, Brasil. Leg. Dr. Ivo Carvalho, 19-10-1965. Typus 507 a, EAUFC, Fortaleza, Ceara, Brasil.

They differ from *Cicinnobolus cesatii* De Bary, which is the closest species, by some morphologic details, principally by the dimensions of the pycnidia and of their spores. In fact, the pycnidia of *Cicinnobolus priscii* Ponte are much larger, while their spores paradoxically are smaller (fig. 1).

The species name was attributed in honor of Dr. Prisco Bezerra, pioneer of Mycology in the State of Ceara, Brazil.

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