A NEW FUNGUS ON FICUS NITIDA THUNB

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While visiting at the Agricultural Experiment Station in Río Piedras during the summer of 1936 the writer became interested in a fungus appearing upon *Ficus nitida* Thunb. which had been sent to the laboratory for identification. Subsequent study of the organism at the botanical laboratory of the University of Pennsylvania indicated that it was an unreported species of *Hypoxylon*. The name *Hypoxylon borinquensis* is proposed by the writer and the species is herewith described:

Hypoxylon borinquensis sp. nov. Stroma latissime effsa, carbonaceo, nitida, subsuperficiale in trunci ramorumque cortice, aliquid scabra propter ostiolis papillis, extus intusque nigrum. Peritheciis prerique, ovoides-oblongis, 2—.4 mm. lata. Ascis cylindraceis, densissime stipatis, brevissime stipatatis, aparaphysatibus, 130–160 \times 7–8 μ , octosporis. Sporidiis monostichis, subacutis, fusiformibus v. ovatis, saepe inequalateralbus, subflavis, 16–18 \times 3.5–5 μ . Hab. in ramis truncibusque Fici nitidi in Puerto Rico.

Stroma broadly effused, carbonaceous, shining, subsuperficial in bark of the trunk and branches; somewhat rough due to the papillate ostioles; black within and without. Perithecia numerous, avoidoblong, 2—.4 mm. wide. Asci cylindrical, very densely crowded, very short stiped, 130–160 \times 7–8u, eight spored. Ascospores monostichous, subacute, fusiform or ovate, often inequilateral, yellowish, 16–18 \times 3.5–5µ. Habitat in branches and trunks of Ficus nitida in Puerto Rico.

The stroma in gross form bears some resemblance to both *Eutypa* erumpens Massee and Nummularia tinctor Berk. and, since these fungi are also found in many of the islands of the Wset Indies, a careful examination should be made of diseased Ficus in order that the organism involved may be correctly determined. *Eutypa erum*pens has been reported as occurring on *Ficus nitida* and Cacao in Trinidad.

Is is quite difficult in many cases to identify the genus of a fungus in the group of the *Spheriales* which includes *Eutypa*, *Diatrype*, *Hypoxylon* and *Nummularia*, as they are similar in many respects

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and have transitional forms of which the generic status is debatable. Hypoxylon borinquensis corresponds in certain respects to Nummularia tinctor and perhaps should be regarded as a Nummularia, but the writer is included to consider Nummularia an invalid genus. Ellis & Everhart (1) refer to the genus as being too close to Hypoxylon in many of its forms and Miller (2), points out that the conidial layer actually arises in the same manner in both genera, although it was upon this character that the two genera were originally separated. Nummularia supposedly possesses a substromal conidial layer which is not found in Hypoxylon, but Miller has proved this distinction to be fallacious and concludes: "It is only logical to place the species that were taken out of Hypoxylon and placed in Nummularia back in Hypoxylon." The writer concurs with this point of view and accordingly has placed the fungus from Ficus in the genus Hypoxylon.

Hypoxylon borinquensis forms an unusually large stroma on its host. The average dimentions were not included in the description, as there was not enough material available to make a significant average, but a single stromatic surface of 1 dm. in width by 1-3dm. in length might be expected when occurring on a limb or trunk of a sufficiently large diameter.

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 Collens, A. E. Dept. of Agri. of Trinidad. (n.s.) 61: 33-43, 1909.
Ellis & Everhart North American Pyrenomycetes. Newfield 1892.
Miller, J. M. Biologic Studies in the Spheriales. Mycologia 20: 1928.



EXPLANATION OF PLATES

- Fig. 1.-Stroma on wood of Ficus nitida.
- Fig. 2.-Ascospores of Hypoxylon borinquensis sp. n.
- Fig. 3.—Habitat drawing.
- Fig. 4.—Surface of stroma showing ostioles. Enlarged.
- Fig. 5.—Diagramatic section through stroma. Asci omitted.
- Fig. 6.-Ascus of H. borinquensis.
- Fig. 7.—Ascospores.