

bearing attractive fragrant flowers, and is commonly grown in horticultural and private gardens. Jasmine wilt caused by *S. rolfsii* was first reported in Formosa by Goto in 1933. The present record of *Sclerotium* wilt from Bangalore is of interest since no *Sclerotium* species is reported on *J. sambac* from India.

In laboratory, a pure culture of the fungus was obtained on potato dextrose agar and identified as *S. rolfsii*. The disease symptoms were drooping as though suffering from lack of water, followed by the death of the entire plant. White mycelium was found generally girdling the roots and the sclerotia were found adhering to the roots of the wilted plants.

Pathogenicity was established by inoculating the healthy jasmine plants which were grown in pots with sterilized soil. The inoculum was placed by scooping the soil round the roots for about 6 mm. and then the soil was covered. The plants were kept in the moist inoculation chamber for two days and then watered. The plants showed the typical symptoms of wilting in six weeks after inoculation. Initially a web of white mycelium was seen on the plant at the soil level as well as on the soil around the plant after one week of inoculation. Later, the white mycelium disappeared and masses of brown sclerotia about the size and colour of mustard seeds were seen at the collar region. By the time the sclerotia were formed, the lower region of the stem was girdled resulting in ultimate death of the plant. The fungus was re-isolated and confirmed as *S. rolfsii*.

The fungus is confined largely to the root tissues though it may advance up the stem and kill it slightly above the surface of the soil. The roots are the main tissues invaded normally by the wilt fungus, and are very quickly killed.

Pure culture of the fungus grown on potato dextrose agar plates at room temperature for 5 days showed abundant radial growth of white, septate, branching mycelium. Sclerotia in culture were formed within 7-9 days. At first they were small, round, whitish, later turning to dark to olivaceous brown. Sclerotia taken from agar plates measured 0.5-1.5 mm. in diameter.

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Hebbal, Bangalore-24, August 13, 1965.

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LEAF BLIGHT--A NEW DISEASE OF JASMINE

A SEVERE leaf blight of Jasmine (*Jasminum officinale* Linn.) was observed on potted plants in the garden and a commercial plantation crop at the Drug Farm, Jammu, in August, 1963. The disease made its first appearance in the middle of August and continued upto the middle of April when most of the plants were defoliated.

Initial symptoms appear in the form of irregular water-soaked spots on the leaflets which turn into brown spots within two to three days. In later stages the diseased lesions enlarge causing upward curling of leaflets and wilting of the entire twig. It is often seen that infection of one or two leaflets causes death of entire leaf and once one or two leaves are affected the other living leaves also wilt and die indicating the elaboration of a toxin which is probably translocated to the unaffected parts of the twig. Infection of the entire plant causes complete defoliation with the result that there is considerable decrease in the production of flowers. Flowers produced on infected plants are smaller and often deformed.

A large number of isolations from infected leaves always yielded a pure culture of *Glomerella cingulata* (Stonem) Spauld. and Schrenk., which produced both conidia and mature perithecia in culture. The pathogenicity of the fungus was tested on potted plants of *Jasminum officinale*. A heavy spore suspension was sprayed on the plants and the inoculated plants were kept in moist chamber for 24 hours. Typical symptoms of the disease appeared within 48 hours and complete defoliation of the inoculated plants occurred within a week. The organism was re-isolated from all the inoculated plants.

Two different leaf-spots of *Jasminum officinale* have been reported earlier.¹⁻⁹ These have been reported to be caused by *Cercospora jasminicola* Muller and Chupp. and *Colletotrichum jasminicola* Tilak. During the studies on this disease *Cercospora* could not be isolated from any of the infected plants and the symptoms when compared with *Cercospora*-affected plants from Bangalore were found to be quite different. In case of the plants obtained from Bangalore the spots are smaller, roundish and with a thicker texture. On these infected leaves numerous spores of *Cercospora* were observed. The description of *Colletotrichum jasminicola* does not agree with the imperfect stage of the fungus isolated from Jammu area. Thus, it appears that the disease found in Jammu which has been hitherto considered as

caused by *Cercospora jasminicola* is actually caused by *Glomerella cingulata*. This also seems to be the first record of this fungus on *Jasminum officinale*. Initial studies have shown that the fungus produces a heat stable toxic metabolite in culture.

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November 20, 1965.

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A NEW SPECIES OF *NISSLIA* FROM INDIA

DURING recent investigations of Ascomycetous fungi from Marathwada (India), the author came across with dead fallen leaves of *Ficus bengalensis* L., heavily infected with a black fungus. On detailed examination the fungus was found to be new to science on the basis of host specificity and comparative morphological studies.

Niesslia muelleri sp. nov.

Perithecia globose to ovoid, superficial, ostiolate, 90-150 × 90-150 μ., provided with dark setae 4-6 in number measuring 90-155 × 7-9 μ. Wall consisting of thick-walled outer cells and thin-walled inner cells. Asci ellipsoid, hyaline, bitunicate, 8-spored, pedicellate, 30-40 × 6-8 μ. Ascospores 8, biseriate, hyaline to slight yellow, ovoid to fusoid, two-celled, constriction at the septum, 6-8 × 1.5-2.4 μ.

On dried leaves of *Ficus bengalensis* L., Aurangabad, April 1965, Leg. Ramchandra Rao and deposited in the herbarium of Marathwada University under No. MUH. 187 (Rao type).

Niesslia muelleri sp. nov.

Perithecia globosa vel ovoidea, superficialia, ostiolata, 90-150 × 90-150 μ., ornata setis brunneis 4-6, quæ sunt 90-155 × 7-9 μ., Parietes constant cellulis exterioribus crasse parietatis et cellulis interioribus graciliter parietatis. Asci ellipsoidei, hyalini, bitunicati, octospori, pedicellati, 30-40 × 6-8 μ. Ascosporæ 8, biseriatæ, hyalinæ vel pallide luteæ, ovoideæ vel fusoidæ, bicellulares, ad septa constrictæ, 6-8 × 1.5-2.4 μ.

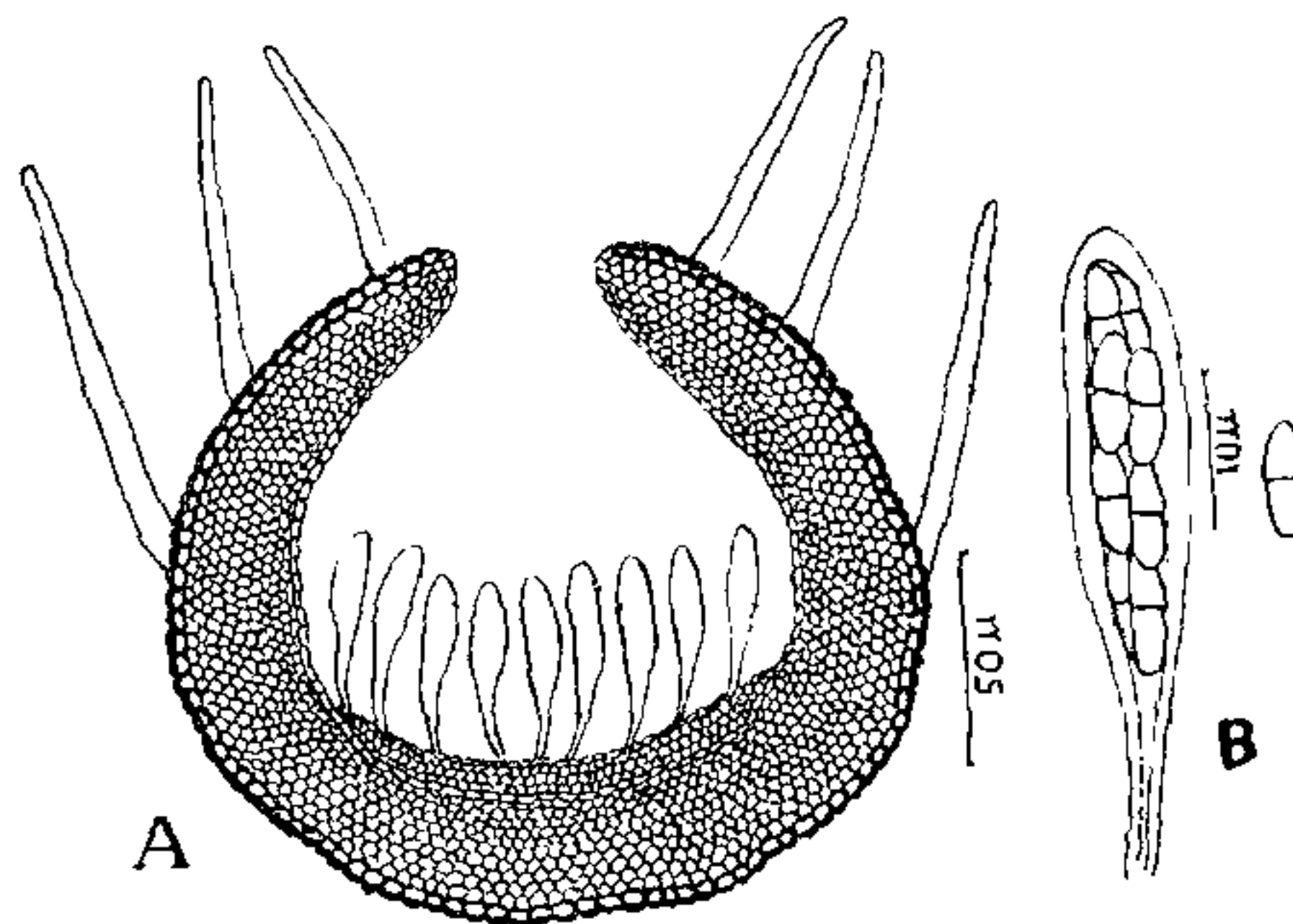


FIG. 1. A. Section through Ascocarp. B. Ascus and Ascospore.

In foliis siccis *Ficus bengalensis* L., Aurangabad, aprili 1965, Leg. Ramchandra Rao, et positus in herbario universitatis marathwadensis subnumero MUH. 187 (Rao typus.).

The species has been described after Dr. Emil Mueller, Department of Special Botany, Swiss Federal Institute of Technology, Zurich-6.

Type material is deposited in the herbarium of Commonwealth Mycological Institute, Kew, under No. IMI. 112019 and Cryptogamiae Indiae Orientalis, New Delhi, India.

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