NOTES AND BRIEF ARTICLES

Aerosol OT in the Preparation of Microscopic Mounts of Fungi

In making mounts for the microscopic examination of various fungi with aerial sporulation, difficulty is often encountered in wetting the conidia and conidiophores in water. It has been customary to use 70 per cent alcohol as a wetting agent in the preparation of the mount but the alcohol treatment is not always satisfactory because of its dehydrating effect upon the protoplasm and the rapid evaporation of the alcohol at the surface, causing violent currents which disrupt the arrangement of the conidial head. It was suggested to me by Dr. Gerrard Macleod of the Upjohn Company that the wetting agent, Aerosol OT, might be useful as a substitute for alcohol. In the past year I have used successfully a 1 per cent aqueous solution of Aerosol OT in the preparation of hundreds of temporary mounts of the Aspergilli, Penicillia, Mucorales, Actinomycetes, and a miscellaneous group of Hyphomycetes. The Aerosol solution serves not only as a wetting agent but also as a mounting medium which is readily miscible with the lacto-phenol mixture commonly used in the preservation of the temporary mount. Since I have seen no report in the literature of the use of Aerosol OT as a wetting agent for microscopic mounts of the fungi, the publication of this note seemed to me to be advisable.

Aerosol OT is manufactured by the American Cyanamid and Chemical Corporation. It is advisable to purchase Aerosol OT–100%, a waxy solid which will dissolve slowly in distilled water.—Alma J. Whiffen.

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Isolation of Thielaviopsis basicola from Soil by Means of Carrot Disks

In attempting to isolate *Sclerotinia sclerotiorum* from soils and plant debris by means of living carrot slices, which are highly sus-

ceptible, very little *Sclerotinia* was isolated, but *Thielaviopsis basicola* (Berk. and Br.) Ferraris was isolated in abundance from a number of soils. This method of isolation appears superior to the methods previously published by Gilbert [1] and Levykh.[2]

Soils from field collections were spread over the surface of 5 mm. thick carrot root disks in petri dishes and enough water was added by atomizing to make the soil quite moist but with no free water present. After two to four days at room temperature the disks were washed to free them of soil and incubated in moist chambers. When soils containing *Thielaviopsis* were used as inoculum, grayish colonies appeared in about six days after inoculation. At first masses of endoconidia were formed, and later the colonies turned almost black as macroconidia were formed in abundance. Transfers direct from the aerial mycelium to potato dextrose agar gave pure cultures of *Thielaviopsis* in most cases. There was no apparent discoloration or decay of the carrot disks until about ten days after inoculation, and microscopic examination of stained free hand sections indicated that the mycelium had penetrated between and within the cells without disorganizing them until invasion was well advanced. Cultures on carrot disks, like cultures on agar, yielded a strong odor of amyl acetate. When dilute spore suspensions from pure cultures of *Thielaviopsis* from agar cultures were used as inoculum and the carrot slices were therefore not washed after inoculation, *Thielaviopsis* colonies could be counted in three days.

Of seventeen soil collections from twelve locations in the San Francisco Bay and Santa Clara Valley regions, *Thielaviopsis* was isolated in twelve collections at seven locations. The two most abundant sources were an ornamental garden in Berkeley, and an apricot orchard near Hollister. In one test from the flower bed, all of seventeen test disks showed *Thielaviopsis* and most of them showed several colonies. A collection from a carrot field where carrots had been raised frequently in previous years yielded

[1] Gilbert, W. W. An improved method of isolation of *Thielavia basicola*. Phytopath. **16**: 579. 1926.

[2] Levykh, P. M. (Translated title.) Methods of determining the degree of soil infestation with chlamydospores of *Thielaviopsis basicola* (Berk.) Ferraris. Abstract in Rev. Appl. Myc. **17**: 710–711. 1938.

Thielaviopsis on only one of eight test disks. Of two hundred and forty disks in all tests, *Thielaviopsis* was isolated on sixty-six. In none of the locations was *Thielaviopsis* observed as a pathogen of the crops grown there.—C. E. YARWOOD.

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NOTE ON BAGNISIOPSIS

Recently the writer has received parts of type material of *Phyllachora mexicana* Sacc., *Bagnisiopsis orellana* Syd. and *B. puyana* Syd. from Dr. Th. Arwidsson of the Botanical Museum of Stockholm. At the time of writing the paper, "Bagnisiopsis species on the Melastomaceae" (Mycologia **35**: 312–334. 1943) it was impossible to obtain these from Europe.

Bagnisiopsis orellana Syd. on *Miconia crocea* Naud. No. 1182, Sydow, Fungi exotici exsiccati and No. 177, Sydow Fungi Aequatoriensis, both have small, black orbicular stromata with no spines and with spores 9–16 × 7–12 μ, and so this name becomes a synonym of *B. tijucensis* Theiss. & Syd.

The other two specimens, *Phyllachora mexicana* Sacc. on *Miconia* sp. collected by Bonansea, and No. 1183 *Bagnisiopsis puyana* Syd., Fungi exotici exsiccati, on *Miconia pujanae* Markgr., both have the macroscopic appearance of *B. tijucensis,* but are immature with no ascospores and so cannot be placed in a specific position.—JULIAN H. MILLER.

A NEW WESTERN POLYPORE

W. A. MURRILL

A fine new polypore was collected last fall in a coniferous forest in the state of Washington by Dr. A. S. Rhoads, who made complete notes on the fresh specimens.

Scutiger skamanius sp. nov.

Pileo subplano, 19 × 16 × 3 cm., griseo, dein fuligineo, subfibrilloso, atromaculoso; tubulis decurrentibus, sulphureis, 1–2 per mm., angulatis, dein fibriatis; sporis ellipsoideis, levibus, hyalinis, 7.5–8 × 6.5 μ; stipite solido, bulboso, atromaculoso, 15 × 5–5.5 cm.