

Additional Information on Coniochaeta tetraspora (G218)

ORIGIN OF STOCK: (additional information)

Soil Sample #20 collection information: Isla Santa Cruz, Galapagos Islands; elevation 1,750 feet; moist dwarf woodland dominated by Miconia shrubs 3 to 4 meters tall with lots of moss on the branches. Collected Sept. 9, 1965 by Dr. Dennis Knight (University of Wisconsin, Madison).

Coniochaeta tetraspora (G218) was isolated by Dr. Daniel P. Mahoney in late 1966, employing glucose ammonium nitrate agar (Gochenaur, S. E. 1964. A modification of the immersion tube method for isolating soil fungi. Mycologia 56:921-923.). The soil was pretreated with 60% ethanol for 20 minutes (see unpublished research report: Mahoney, D. P. 1968. Soil microfungi of the Galapagos Islands and Ecuador isolated by a modification of the Warcup alcohol-treatment technique. M.S. Research Report, Univ. of Wisconsin, Madison.).

IF UNPUBLISHED: (additional information)

Coniochaeta tetraspora was isolated only once during D. Mahoney's examination of Galapagos Island soil and litter microfungi, M.S. and Ph.D., 1965-1971. He suggested its use to Dr. David Perkins and Dr. Namboori Raju and provided them with the culture. They have used it as part of their ongoing cytologic and genetic research on pseudohomothallic species. The FGSC accession number for Coniochaeta tetraspora (G218) will be published in their forthcoming publication.

COMMENTS: (additional information)

Growth Media employed for C. tetraspora: Difco corn meal agar (CMA) and modified Leonian's agar (ML) (for ML see Malloch, D. 1981. Moulds, Their Isolation, Cultivation and Identification. University of Toronto Press, Toronto, Canada. 97 pp. -- xerox of ML recipe attached).

Incubation conditions: normal laboratory temperature and lighting.

Brief description from a 25 day old culture on modified Leonian's agar (CMA also gave good results): Perithecia numerous over the surface of the agar, maturing in approximately 3 weeks. Perithecia light brown (translucent in this strain) with short brown chaetae around the base of the perithecial necks. Mature asci without specialized apices, containing 4 uniseriately arranged ascospores which are forcibly discharged. Ascospores smooth, dark olive brown to dark brown, mostly 13-14.5 (length) X 10-11 (width) X 5.5-6.5  $\mu$ m (thickness) with germ slits along the length of the spore only on one side in side view (the "thickness" view). Phialophora anamorph also present.

Galapagos strain (G218) differs from the 2 California strains (SA451 and SA42) in the following ways: Perithecia softer with much less pigment, maturing somewhat earlier with