

Dothichiza pithyophila (Cda.) Petr. the pycnidial Stage of a Mycelium of the Type *Pullularia pullulans* (de B.) Berkhout.

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The characteristic, dark-coloured, budding mycelium type usually mentioned under the name *Pullularia pullulans* (de B.) Berkh. (*Dematium pullulans* de B.) by various authors has been considered the vegetative stage of different ascomycetes. In some cases the statement has been confirmed by culture tests (for historic v. R o b a k 1932). Obviously, the reason must be that the name covers several species which can hardly be distinguished between in their vegetative stage (cp. Melin & N a n n f e l d t 1934).

Recently, I happened to demonstrate myself the genetical connection between a mycelium of the type in question and a sphaeropsidaceous fungus, namely the wellknown *Dothichiza pithyophila* (Cda.) Petr. (= *Sclerophoma pithyophila* v. Höhn.).

Numerous pycnidia of this fungus have occurred on quite a high proportion of the dead leaders of Norway spruces showing the characteristic type of apical die-back once described by Lagerberg (1914) in Sweden. The identification of the fungus was confirmed by Dr. F. Petrak, Vienna, to whom I give my most respectful thanks for the valuable help thus yielded me. The fungus can in no way be considered the cause of the die-back, however. From the bark of such leaders were frequently isolated — among several other fungi — a mycelium of the *P. pullulans* type. Therefore, by means of the ordinary dilution method, I made a number of malt agar plate cultures from spores exuded by the pycnidia. Invariably these cultures yielded pure vegetations of the mycelium type in question and of an absolutely uniform appearance within the various isolates.

Among all the mycelia previously described as belonging to the *P. pullulans* complex none agrees so closely with these isolates as does that described by Lagerberg and Melin (1927) as *Hormonema dematioides* n. g. et sp. This fact, together with the highly frequent occurrence of both fungi on dead coniferous material in the Scandinavian countries (*D. pithyophila* in the bark of branches and stems and *H. dematioides* as a blueing fungus in lumber and ground-wood pulp) leaves but little doubt that they are identical.

The perfect stage of *D. pithyophila* is still unknown, however. That *Cenangium ferruginosum* Fr. is not the fungus sought for seems now to be definitely settled, according to K u j a l a (1950).

Forest Research Station of Western Norway, Bergen in April 1952.

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