A MYCOLOGICAL SURVEY OF THE SOUTH ADRIATIC SEA WATERS AND MEASURES AGAINST THEIR POLLUTION

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Presque 500 cultures fongiques, appartenant à 33 genres et 93 espèces, furent identifiées au cours d'une étude mycologique des eaux territoriales de la partie sud de l'Adriatique, qui comprennait depuis les napes superficielles jusqu'à 100 m de profondeur. Par sa distribution, densité de population et nombre d'espèces, le genre Penicillium fut le mieux répresenté. Quelques espèces de différents genres furent identifiées qui sont connues comme potentiellement pathogeniques pour l'homme et pour les animaux.

A total of 493 fungal isolates belonging to 33 genera and 93 species were identified in the course of a two year survey of the southern part of the Yugoslav Adriatic Sea's territorial waters. The best represented genus was Penicillium (32.25% of the total number of isolates), P. chrysogenum and P. notatum being the most abundant species, fillowed by P. verrucosum var. cyclopium and P. brevi-compactum. With 110 isolates and 12 species, the genus Aspergillus represented 22.31% of the total, A. versicolor being the most ubiquitous of the aspergilli. To the Dematiaceae as a group, with 147 isolates included in 14 genera and 26 species, corresponded 30% of the total, the dominating genera being Cladosporium, Alternaria, and Ulocladium, with 14.40%, 5.50%, and 4.00% respectively of the total number of isolates. With 46 isolates included in 90 genera and 20 species, the Hyphomycetes with hyaloconidia constituted about 4% of the total, the best represented genus in this group being Fusarium, with 10 species. To the Sphaeropsidales cor-

responded 6% of the total number of isolates, the genus Phoma being the most abundant.

Among the species identified, several are known as phytopathogenic or potentially human and animal pathogenic. Although less polluted than other coastal sea waters, regional systems of waste water purification would be needed to safeguard the south Adriatic against pollution, since sanitary and industrial establishments pour their refuse waters into it along the coast.

The following genera and species were identified:

Acremonium rutilum, A. sclerotigenum, A. strictum, Alternaria alternata, A. chlamydospora, A. phragmospora, A. triticina, Aspergillus amstelodami, A. alliaceus, A. flavus, A. nidulans, A. niger, A. terreus, A. repens, A. ochraceus, A. protuberus, A. ruber, A. ustus, A. versicolor, Beauveria bassiana, Botryotrichum piluliferum, Botrytis cinerea, Chaetomium globosum, Cladosporium cladosporioides, C. herbarum, C. macrocarpum, C. sphaerospermum, Curvularia harveyi, Drechslera spicifera, Embellisia didymospora, Epicoccum purpurascens, Flagellospora sp., Fusarium concolor, F. equiseti, F. graminearum, F. heterosporum, F. moniliforme var.anthophilum, F. oxysporum, F. sambucinum var. coeruleum, F. solani, F. sporotrichioides var. minus, F. tabacinum, Geotrichum candidum, Leptosphaeria sp., Microascu albo-nigrescens, Paecilomyces varioti, Penicillium brevicompactum, P. charlesii, P. chrysogenum, P. clavigerum, P. corylophilum, P. frequentans, P. funiculosum, P. granulatum, P. janthinellum, P. lilacinum, P. notatum, P. oxalicum, P. paxilli, P. piscarium, P.raistrickii, P. steckii, P. thomii, P. verrucosum, var.cyclopium, P. wortmannii, Phialophora fastigiata, Phialophorophoma litoralis, Phoma betae, P. cava, P. exigua, P. fimeti, P. glomerata, P. herbarum, P. levillei, P. putaminum, P. sorghina, P. violacea, Phomopsis sp., Pyrenochaeta, sp., Rhinocladiella elatior, R. mansonii, R. pedrosoi, Scopulariopsis brevicaulis, S. candida, Sphaeronaema sp., Stachybotrys atra, Stemphylium botryosum, Trichoderma viride, Tritirachium sp., Ulocladium atrum, U. botrytis, U. chartarum, U. oudemansii, Verticillium lecanii, V. sulphureum, V. tenereum.