INHIBITORS OF AQUATIC AND AERO-AQUATIC HYPHOMYCETES IN PINE AND OAK WOOD

Stanley A. Gunasekera
(Department of Botany, University of Kelaniya, Sri Lanka)
and
John Webster
(Department of Biological Sciences, University of Exeter, England)

During an investigation of the effect of supplementary inorganic nutrients (nitrates and phosphates) on the decay of pine and oak would by some aquatic and aero-aquatic Hyphomycetes, higher weight losses were consistently associated with oak wood. This is quite contrary to the common belief that oak wood is more decay-resistant than pine wood, and led us to investigate the effect of pine and oak wood on the growth of these fungi on agar media. Pine and oak wood powder were added at three concentrations (5.0, 2.5 and 1.25%) to 0.25% malt extract agar, and their effect on the growth of nine aquatic and two aero-aquatic Hyphomecetes was estimated. Pine wood powder was more effective than oak wood powder in depressing the mycelial growth and in most instances the degree of inhibition was directly proportional to the amount of powder added. The inhibitory effect was either reduced or completely lost on leaching the powder in running water; and leached oak powder exhibited a significant growth-stimulatory effect on *Aegerita candida* and *Helicondendron conglomeratum*. Pine and oak powders were least effective towards *Heliscus lugdunensis* and *Lemonniera aquatica*, *Tetracladium marchalianum* and *T. Setigerum*. Other fungi tested (i. e. *Tricladium splendens*, *T. giganteum*, *Clavariopsis aquatica*, *Anguillospora crassa*) showed intermediate responses to the presence of pine and oak wood powder.

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