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Specificity of Three Wood-Destroying Fungi for Gymnosperm and Angiosperm Woods

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SPECIFICITY OF THREE WOOD-DESTROYING FUNGI FOR GYMNOSPERM AND ANGIOSPERM WOODS

H. H. LAFUZE

Certain differences in nutritional characteristics of *Polyporus betulinus* Fr., *Polystictus versicolor* Fr. and *Fomes pinicola* (Fr.) Cooke appeared to be correlated with differences in chemical analyses of Gymnosperm and Angiosperm woods. Worthy of special mention were the water soluble extractives containing simpler carbohydrates and the pentoses in coniferous woods, the commonest hosts of *F. pinicola*. This organism and also the birch fungus, *P. betulinus*, showed high reductase activity, a phenomenon reported common in brown rot fungi on Gymnosperm, birch and alder woods. In contrast, *P. versicolor*, which attacks a wide variety of angiosperm woods in nature, displayed a high oxidase activity and uniform growth on different carbohydrates in artificial nutrient media.

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THE MICROFOSSIL SUCCESSION IN A BOG IN NORTHERN WISCONSIN

ELEANOR GALLOWAY

A stratigraphical and statistical study was made of the microfossils in the marginal mat of a bog lake located near the Limnological Laboratories of the Wisconsin Geological and Natural History Survey at Trout Lake, Wisconsin. The fossils indicate that the regional flora was dominated, early in its history by a gymnosperm element, but was gradually replaced by angiosperms. The use of microfossils in determining the vertical distribution of limnic sediments in bog deposits was found to be an accurate method. The fossils used in this connection were sponge spicules and internal leaf trichomes of water lilies.

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