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Auricularia auricula as a parasite on *Schizopora paradoxa*

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Auricularia auricula (Hook.) Underwood, a lignicolous basidiomycete, has been recorded as a mycoparasite on another lignicolous basidiomycete *Schizopora paradoxa* (Fr.) Donk. Mycoparasitism of *A. auricula* has been tested in artificial culture and it has been found that *A. auricula* is a necrotrophic mycoparasite on *S. paradoxa*.

Key Words : *Auricularia auricula* (Hook.) Underwood, *Schizopora paradoxa* (Fr.) Donk, mycoparasitism

INTRODUCTION

Some basidiomycetes have been reported to live as mycoparasite and some of them parasitise basidiomycetous fungi (Buller 1924) while others parasitise non-basidiomycetous ones (Barnett 1963, Trappe 1972). The author has observed a case of mycoparasitism in which *Auricularia auricula* (Hook.) Underwood, a lignicolous basidiomycete, has been found to parasitise *Schizopora paradoxa* (Fr.) Donk, another lignicolous basidiomycete.

During a routine mycological excursion in July, 1990 *Schizopora paradoxa* was found to grow on dead wood of an unknown angiosperm. But after one month when the same wood was visited, it was found that some basidiocarps of *A.auricula* were found to grow on the resupinate basidiocarp of *S. paradoxa* (Fig. 1).

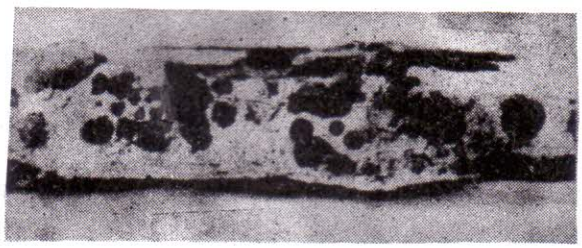

Fig. 1: Basidiocarps of *Auricularia auricula* produced on basidiocarp of *Schizopora paradoxa*

MATERIALS AND METHODS

Free hand sections of basidiocarp of *S. paradoxa* were made to see whether the mycelia of *S. paradoxa* were penetrated by mycelia of *A. auricula*.

Polysporous cultures of both *S. paradoxa* and *A. auricula* were made on 2.5% malt-agar medium. For study of parasitism of *A. auricula* on *S. paradoxa* disc of mycelium of 5 mm diameter of both the fungi were placed at a considerable distance on a petridish containing 2.5% malt-agar medium. After 6 weeks it was observed that mycelia of *A. auricula* have grown over the surface of *S. paradoxa* in petridish culture.

OBSERVATIONS AND DISCUSSION

Sections of basidiocarp of *S. paradoxa* showed that mycelium of *A.auricula* has partially filled some of the hymenial pores of *S. paradoxa* and has extended to a considerable depth into its tissues. Some of the hyphae of *A.auricula* have been found to enter into the hyphae of *S. paradoxa*.

Mycelia of *S.paradoxa* taken from culture showed that many of them have been invaded by hyphae of *A. auricula*. No haustorium was formed by *A. auricula* but its mycelia passed directly through the cell wall of generative hyphae of *S. paradoxa* and entered into hyphal cells. On entering the generative

hyphae of *S. paradoxa*, hyphae of the parasite grew profusely. Many of the penetrated mycelia of *S. paradoxa* were found to be collapsed and dried. Therefore, it is evident that *A. auricula* acted as a necrotrophic mycoparasite on *S. paradoxa*.

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