Antibacterial Activity of an Indian Isolate of *Claudopus byssisedus* (Pers.: Fr.) Fr.

Sangita Dighe¹ and A. D. Agate²

¹Plant Sciences Division, Mycology Group, Agharkar Research Institute, G. G. Agarkar Road, Pune 411 004, Maharashtra, India, and ²7 Narmada Apt., United Western Society, Navasahyadi P. O., Pune 411 052, Maharashtra, India

As there is a growing prevalence of resistance to existing antibacterials, it heightens the urgency to find new antibiotics. Therefore, it is necessary to scour fresh areas to locate novel microorganisms for their products. Many members of the Basidiomycetes are known to be a source of novel bioactive metabolites and have been extensively investigated. As Indian work is meager in this field, it was thought worthwhile to investigate the Indian native flora for their antibacterial properties.

During our screening of the culture collection at ARI for antibacterial properties of 112 mushroom strains from India, 18 cultures belonging to 11 genera were found to be active; from these, activity in *Claudopus byssisedus* (Pers.: Fr.) Fr. was reported for the first time. This beautiful purple mushroom, being minute and hardly visible, seems to have been overlooked for studies. It showed activity against *Salmonella typhimurium* and *Staphylococcus aureus*, was a slow grower, displaying maximum activity after 5 days in broth culture studies, declining from the 10th day. Activity in dilution units of the broth was 128 (at the end of 16 hr).

The present study reports the optimization studies of the parameters required for production of the active substance, partial characterization, and minimum inhibitory concentration (MIC) of crude solvent extract. The results of these experiments are presented.