

Antifungal activity of N-phenylbenzohydroxamic acid against Mucor sp.

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Some N-phenylbenzohydroxamic acid derivatives were prepared and their antifungal activities were explored. The compound was characterized with ¹H-NMR and IR spectra. There are many hydroxamic acids prevailing in living organisms. Hydroxamic acids generally have low toxicities and have a wide spectrum of activities in all types of biological system. The anti fungal activities of the derivatives were studied preliminarily against the growth of Mucor sp. by disc method. Different concentrations of acid were tested against the fungi and the growth was observed for 4 days. Nphenylbenzohydroxamic acid was markedly inhibitory to growth of Mucor sp. quantitatively at 10.5 ppm. Activity was apparently not mediated through a release of free hydroxyl-amine and it was directly controlling the growth of the above fungi. This was evidenced by the loss of normal pattern of growth and colour change in the mycelia.

Key words: Hydroxamic acids, Antifungal activity, Mucor sp.