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NOTE

Fungicidal Activity of the Root Extracts of *Vitis vinifera*

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Anitmicrobial activity of some plant extracts have been found to inhibit or accelerate the growth of microbes and control of various types of diseases caused by fungi and bacteria. With this view, the present investigations have been carried out to determine the antifungal activity of successive extracts of roots of *Vitis vinifera* against some highly human and animal pathogenic fungi.

Vitis vinifera[1–3] is indigenous to India and is reported to be used as a remedy for skin diseases. It is reported to be laxative, purgative, diuretic and having appetizing properties. The ash of stem is used to remove pain in joints, stones in bladder, swelling of testes and in piles. The sap of flowering branches is a popular remedy for skin and eye diseases.

Roots of *Vitis vinifera* were taken and then successively extracted in a soxhlet extractor with petroleum ether, benzene, solvent ether, chloroform, acetone and methanol and the solvents were removed under reduced pressure and the residue used to study antifungal activity. The antifungal activities were examined following filter paper disc plate method as described by Loo.[4]

The filter paper discs (8 mm diameter) were soaked in each extract and were kept on Sabouraud's dextrose agar media plates of 80 mm diameter.

Freshly seeded petri dishes were incubated at 30 ± 10°C for 70 h. The filter paper discs were soaked in griseofulvin (1000 ppm) and served as control.

The antifungal activity was measured as an average of maximum dimensions of zones of inhibition around the filter paper discs.

The observation and results are recorded in Table-1.

The petroleum ether extract was not antifungal except in case of *Microsporum glypsum* while the benzene extract was active for *Chrysasporium tropicum, Malbranches pulchella and Microsporum glypsum* Chloroform and acetone were antifungal against all while ethyl acetate extract had activity against *Aspergillus niger and Aspergillus fumigatus.*

The root extracts in chloroform and acetone were found to have better zones of inhibition although chloroform extracts were a shade better than acetone. Of course to some extent the antifungal activity was also observed against methanol. However it may be mentioned that none of the extracts were found to have as much of the antifungal activity as that of the control.

TABLE-1

Organisms	Inhibition zone [mm] seed extracts in different soxhlets							
	Pet. ether	C_6H_6	$(C_2H_5)_2O$	$CHCl_3$	$(CH_3)_2CO$	$CH_3COOC_2H_5$	CH_3OH	Control 1000 ppm
Microsporum glypsum	6	–	8	12	9	7	10	19
Malbranchea pulchella	–	6	7	11	10	8	–	20
Keratinophyton terreum	–	–	7	10	11	9	–	24
Chrysasporium tropicum	–	7	9	11	10	11	11	6
Aspergillus fumigatus	–	–	–	8	8	–	8	15
Aspergillus niger	–	–	–	9	9	–	8	13

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