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NOTE

Antifungal Activity of the Unsaponifiable Fraction of the Fixed Oils of *Trichosanthes* Seeds

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In the present note, antifungal activity of the unsaponifiable fraction of the fixed oils of *Trichosanthes* seeds is studied.

The literature survey of *Trichosanthes* plants[1–8] revealed that there is enough scope for carrying out further investigation on the various extracts of these plants because of being associated with fascinating medicinal values. As such the following plants were subjected to further investigation:

1. *Trichosanthes anguina*
2. *Trichosanthes bracteata*
3. *Trichosanthes cucumerina*
4. *Trichosanthes dioica*

The seeds of the above plants were collected locally and authenticated. Thereafter the seeds were crushed and subjected to soxhlet extraction, with petroleum ether. The solvent was removed by distillation and the fixed oils were dried over anhydrous sodium sulphate and saponified by refluxing with alcoholic KOH and unsaponifiable parts were obtained by shaking the soap solution with solvent ether and subsequent removal of the solvent.

The unsaponifiable matter was successively extracted with pet. ether, benzene, chloroform, ethyl acetate and alcohol and solvents were removed by evaporation and the residue used for studying their antifungal activities.

The antifungal activities were assayed following filter paper disc plate method as reported by 100%. The filter paper discs (6 mm diameter) were separately dipped in each extract and subsequently placed on Sabourand's dextrose agar medium plates (90 mm diameter).

Thereafter the freshly seeded petridishes were incubated at 27 ± 1°C for about 70 h. Filter paper discs soaked in griseofulvin (1000 ppm), were used to serve as control.

The antifungal activities were measured as the average of maximum dimension of zones of inhibition around the filter paper discs.

The observation and results are recorded in Table 1.

A critical examination of the data recorded in the table revealed that most of

TABLE 1
ANTIFUNGAL ACTIVITY OF DIFFERENT EXTRACTIVES OF UNSAPONIFIABLE MATTER OF *TRICHOSANTHES* SEEDS

S.No.	Organism	Diameter of growth of inhibition zone (in mm), including the diameter of the well (10 mm)											
		Unsaponifiable matter in different solvents											
		Petroleum ether		Benzene		Chloroform		Ethyl actate		Alcohol		Control 1000 ppm	
		Trichosanthes anguina	Trichosanthes bracteata	Trichosanthes anguina	Trichosanthes bracteata	Trichosanthes anguina	Trichosanthes bracteata	Trichosanthes anguina	Trichosanthes bracteata	Trichosanthes anguina	Trichosanthes bracteata	Trichosanthes anguina	Trichosanthes bracteata
1.	*Chrysosporium tropieum*	3	2	3	11	10	3	9	10	9	4	20	20
2.	*Keratinomyces ajelloi*	10	8	12	13	10	4	15	19	12	10	20	20
3.	*Microsporum gypseum*	4	10	5	9	4	3	8	20	10	11	20	20
4.	*Penicillium liliscinum*	8	3	12	19	9	11	10	15	14	7	18	18
5.	*Verticillium lecanum*	10	9	11	15	10	3	12	7	17	9	19	18
		Trichosanthes cucumerina	Trichosanthes dioica	Trichosanthes cucumerina	Trichosanthes dioica	Trichosanthes cucumerina	Trichosanthes dioica	Trichosanthes cucumerina	Trichosanthes dioica	Trichosanthes cucumerina	Trichosanthes dioica	Trichosanthes cucumerina	Trichosanthes dioica
1.	*Chrysosporium tropieum*	3	10	5	9	10	1	12	9	9	10	18	20
2.	*Keratinomyces ajelloi*	13	3	9	9	3	10	14	1	1	15	20	16
3.	*Microsporum gypseum*	8	1	3	10	15	12	10	14	8	10	20	15
4.	*Penicillium liliscinum*	1	12	10	10	8	9	14	3	10	12	16	18
5.	*Verticillium lecanum*	10	3	9	10	1	5	13	12	3	13	18	20

the extracts are associated with adequate antifungal activity, whereas no inhibition zones were noticed with pure solvents.

The results thus conclude that the unsaponifiable matter may potentially find application as successful antifungal agent and so further investigations in the arena are imperative and will be useful for ameliorating human sufferings.

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