

BEFUNDBOGEN

Dept. of Chemotherapy
Mycology/Protozoology

Präp.-Nr. H 726146 A - Octopirox^R
(Piroctone Olamine)

berichtet am: Oct. 26, 1981

Antifungal spectrum

Solvent: Ethanol/Water

pH: 6.5

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Test medium: Sabouraud dextrose broth modif.

TEST MICROORGANISMS		MIC µg/ml
DERMATOPHYTES	Trichophyton mentagrophytes 100/1	1,95
	Trichophyton mentagrophytes 100/16	1,95
	Trichophyton mentagrophytes 100/22	0,98
	Trichophyton mentagrophytes 100/28	1,95
	Trichophyton rubrum 101/36	1,95
	Trichophyton rubrum 101/54	0,49
	Trichophyton rubrum 101/58	1,95
	Trichophyton rubrum 101/64	0,98
	Trichophyton rubrum 101/66	1,95
	Trichophyton violaceum 109/95	1,95
	Microsporum canis 150/128	1,95
	Microsporum gypseum 151/137	0,49
	Microsporum gypseum 151/138	0,98
	Epidermophyton floccosum 190/144	1,95
YEASTLIKE FUNGI	Candida albicans 200/161	0,98
	Candida albicans 200/162	0,98
	Candida albicans 200/168	0,98
	Candida albicans 200/175	0,98
	Candida albicans 200/178	0,98
	Candida tropicalis 201/205	0,98
	Candida tropicalis 201/207	0,98
	Candida tropicalis 201/217	0,98
	Torulopsis glabrata 250/255	0,98
	Torulopsis glabrata 250/257	0,98
	Trichosporon cutaneum 240/328	0,98
MOULDS	Aspergillus niger 500/284	1,95
	Aspergillus fumigatus 501/287	0,98
	Aspergillus fumigatus 501/305	1,95
	Aspergillus flavus 502/288	3,90
	Penicillium notatum 510/333	1,95
	Penicillium chrysogen. 515/326	0,98
	Scopulariopsis brevicaulis 571/293	1,95

Method of in vitro assay

The medium used in the experiments intended to determine the minimum inhibitory concentration (MIC) of the substance to be tested was Sabouraud dextrose medium containing a selected peptone. It was made in our laboratory of 10 g Neopeptone Difco 0119-01 (Difco Laboratories, Detroit, Mich., USA), 20 g of D(+)-Glucose (Monohydrate), Item No. 8342 (E. Merck AG, Darmstadt, Fed. Rep. of Germany), and distilled water ad 1 l, sterilized by autoclaving at 121 °C for 15 min, and adjusted to a pH of 6.5 with 1 n NaOH and 1 n HCL respectively.

The microorganisms were pre-cultured at 28 °C on a modified Gruetz agar for 1 - 4 weeks, depending on the rapidity of growth and sporulation. Unhomogeneous pathogen suspensions were separated from coarse particles by a short sedimentation and adjusted photometrically to such optical density as would normally correspond to 10^4 microconidia in dermatophytes, 10^3 yeast cells in yeastlike fungi, and 10^4 conidia in moulds (per ml of the final medium).

The MIC values were determined in serial dilution tests, each concentration being half the previous one. 25 mg of the substance to be tested were dissolved in 4 ml of ethanol, and 16 ml of distilled water were added to form a substance stock solution containing 1250 µg of substance/ml and 20 % of ethanol. A tenfold dilution with the medium represented the highest test concentration, 125 µg substance/ml, and by successive dilutions at 1 : 2 till 0.25 µg/ml was reached, a descending series of concentrations was obtained. Each tube contained 3 ml of the medium. After 7 days of incubation at 28 °C the growth-inhibiting concentrations were read macroscopically.