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HR EXCELLENCE IN RESEARCH

(μ_2-ETHYLENDIAMINE-N,N,N',N'-TETRAACETATO)-{N-PHENYL-N'-[1-(PYRIDIN-2-YL)ETHYLYDENE]CARBAMOHYDRAZONTHIOATOCUPPER(II)}-DI(AQUA)BISMUTH (III) TETRAHYDRATE WHICH SHOWS ANTIMYCOTIC ACTIVITY AGAINST Candida albicans

ACCEPTED PATENT APPLICATION: MD a 2022 0022 (DECISION no. 10337 of 2023.10.16)

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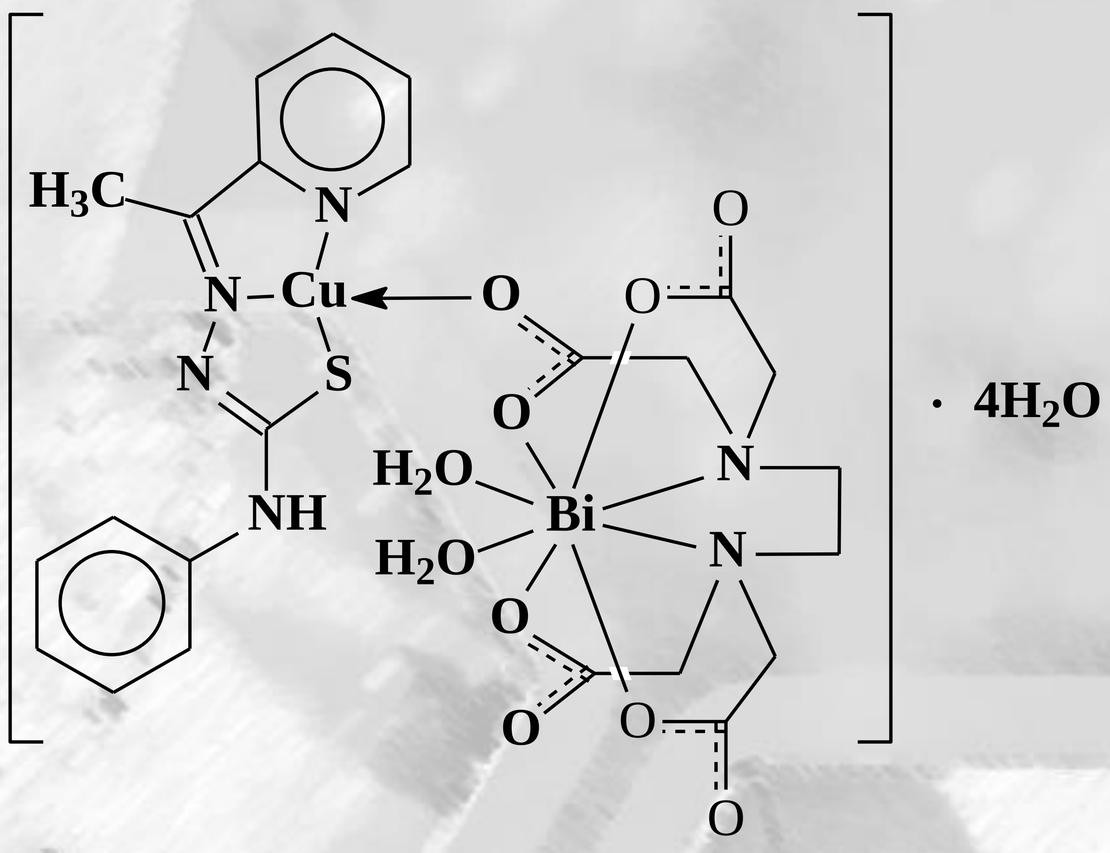
APPLICATION FIELDS: chemistry and medicine

AIM: extending the arsenal of inhibitors with high antimycotic activity against *Candida albicans* fungi

SOLUTION: A new heterometallic Cu(II)-Bi(III) coordination compound with high fungistatic activity against *Candida albicans* species.



· $4H_2O$

The fungistatic activity (μg/mL) of the claimed compound against *Candida albicans* compared to fluconazole and the closest prior art

Compound	Minimum inhibition concentration
Fluconazole	15,62
N-cyclohexyl-2-[1-(pyridin-2-yl)ethylidene]-hydrazinecarbothioamide (closest prior art)	0,7
(μ_2-Ethylenediamine-N,N,N',N'-tetraacetato)-{N-phenyl-N'-[1-(pyridin-2-yl)ethylidene]carbamohydrazonthioato-copper(II)}-di(aqua)-bismuth(III) tetrahydrate (claimed compound)	0,49

ADVANTAGES: The claimed coordination compound exhibits 31.9 times higher activity than fluconazole and 1.4 times higher than the closest prior art.

IMPLEMENTATION STAGE: At the laboratory level

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