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AMINO-1-($\Delta^{8,9}$ -BICYCLOHOMOFARNESENOIL)-BENZIMIDAZOLE WITH ANTIFUNGAL AND ANTIBACTERIAL PROPERTIES

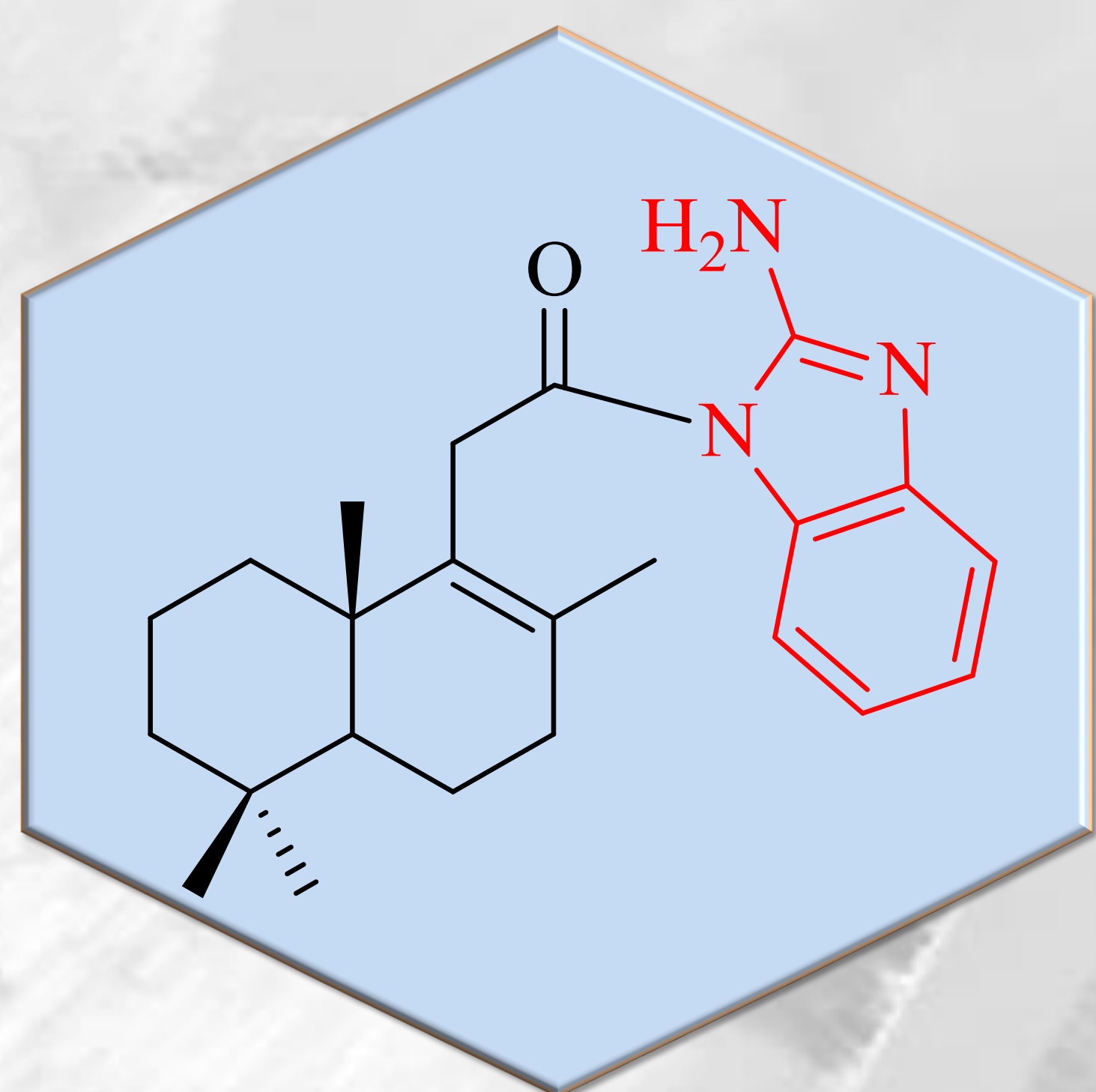
PATENT: 46674_a_2022_0029

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APPLICATION FIELDS: Medicine-Chemistry-Agriculture

AIM: The invention relates to the field of chemistry and medicine, namely to a compound with hybrid terpenic and benzimidazole skeleton having antifungal and antibacterial properties.

SOLUTION: The invention relates to the field of chemistry and medicine, namely to a compound with hybrid terpenic and benzimidazole skeleton, which can be used in medicine as antifungal and antibacterial preparation. The amino-1-($\Delta^{8,9}$ -bicyclohomofarnesenoil)-benzimidazole has pronounced antifungal and antibacterial properties with the minimum inhibitory concentration values of 0,064 $\mu\text{g/mL}$ and 0,5 $\mu\text{g/mL}$. The invention contributes to the increasing of the number of compounds with high antifungal and antibacterial activity.



ADVANTAGES: The capitalization of local, renewable and easily accessible vegetal by-products from production of *Salvia sclarea* L. essential oil into antimicrobial agents; the accessibility of synthesized compounds; the high antifungal efficiency of claimed compounds.

IMPLEMENTATION STAGE: At the laboratory level.

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