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Activity anti-*Candida albicans* and Effects of the Association of β-citronellol with Three Antifungal Azolics

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***SUMMARY. Candida albicans* is the main yeast agent provider opportunistic fungal infections in healthy and immunocompromised humans. This work evaluated the antifungal potential of the monoterpene β-citronellol (3,7-dimethyl-6-octen-1-ol) against twelve *C. albicans* strains as well as the effects of its association with three azoles. β-citronellol showed a $MIC_{50\%}$ of 128 μg/mL being established as strong antifungal activity and $MFC_{50\%}$ de 256 μg/mL. High resistance rate against itraconazole (91,67%) and fluconazole (75%) was exhibited by the yeasts while it was sensitive to miconazole (66,67% of the yeasts showed growth inhibition). Synergism was prevailing on the association tests with all three azoles (66,67% for both fluconazole and itraconazole and 83,33% for miconazole). Association with the monoterpene also decreased the yeast's resistance angainst the azoles. β-citronellol showed activity against *C. albicans* strains, displaying optimum fungicidal potential and good interfering effect, which allows it to be considered a candidate for the development of new antifungal formulations.**

RESUMEN. Candida albicans es la principal levadura que proporciona infecciones fúngicas oportunistas en humanos sanos e inmunocomprometidos. Este trabajo evaluó el potencial antifúngico del monoterpeno β-citronelol (3,7-dimetil-6-octen-1-ol) contra doce cepas de *C. albicans,* así como los efectos de su asociación con tres azoles. El β-citronelol mostró una $MIC_{50\%}$ de 128 μg/mL que se estableció como una fuerte actividad antifúngica y $MFC_{50\%}$ de 256 μg/mL. Las levaduras exhibieron una alta tasa de resistencia contra itraconazol (91,67%) y fluconazol, (75%) mientras que eran sensibles a miconazol (66,67% de las levaduras mostraron inhibición del crecimiento). La sinergia prevaleció en las pruebas de asociación con los tres azoles (66,67% para fluconazol e itraconazol y 83,33% para miconazol). La asociación con el monoterpeno también disminuyó la resistencia de la levadura contra los azoles. β-citronelol mostró actividad contra las cepas de *C. albicans,* demostrando un potencial fungicida óptimo y un buen efecto de interferencia, lo que permite que se lo considere un candidato para el desarrollo de nuevas formulaciones antifúngicas.

KEY WORDS: anti-*C. albicans,* association, β-citronellol.

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