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# Antimicrobial activity of juniper berry essential oil (*Juniperus communis* L., Cupressaceae)

[Stjepan Pepeljnjak](#)<sup>1</sup>, [Ivan Kosalec](#), [Zdenka Kalodera](#), [Nikola Blazević](#)

Affiliations

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## Abstract

Juniper essential oil (*Juniperi aetheroleum*) was obtained from the juniper berry, and the GC/MS analysis showed that the main compounds in the oil were alpha-pinene (29.17%) and beta-pinene (17.84%), sabinene (13.55%), limonene (5.52%), and mircene (0.33%). Juniper essential oil was evaluated for the antimicrobial activity against sixteen bacterial species, seven yeast-like fungi, three yeast and four dermatophyte strains. Juniper essential oil showed similar bactericidal activities against Gram-positive and Gram-negative bacterial species, with MIC values between 8 and 70% (V/V), as well as a strong fungicidal activity against yeasts, yeast-like fungi and dermatophytes, with MIC values below 10% (V/V). The strongest fungicidal activity was recorded against *Candida* spp. (MIC from 0.78 to 2%, V/V) and dermatophytes (from 0.39 to 2%, V/V).

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