

POREĐENJE FUNGICIDNOG DEJSTVA EKSTRAKATA PROPOLISA I METRONIZADOLA

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Sažetak: Propolis je prirodna supstanca koja djeluje protuupalno (imunomodulirajuće i mikrobicidno) i ima dugu istoriju upotrebe u tradicionalnoj medicini. Cilj rada je bio da se ispituju antifugalna svojstva 10% i 30% etanolnog ekstrakta propolisa pripremljenog na tradicionalan način i komercijalnog lijeka metronidazola prema odabranim sojevima *Candida albicans* izolovanih iz uzoraka hrane, referentnog soja *Candida albicans* WDCM 00054, referentnog soja *Aspergillus brasiliensis* WDCM 00053 i referentnog soja *Saccharomyces cerevisialis* WDCM 3058. Za ispitivanje fungicidnog dejstva propolisa i metronidazola na rast odabranih kultura korištena je agar difuziona metoda. Rezultati rada su pokazali da su obe ispitane koncentracije etanolnog ekstrakta propolisa porijeklom iz Republike Srpske djelovala fungicidno na izolate *Candida albicans* kao i na referentne sojeve *Candida albicans* WDMC 00054, *Aspergillus brasiliensis* WDCM 00053 i *Saccharomyces cerevisialis* WDCM 3058. Metronidazol je djelovao slabo antifugalno.

Ključne riječi: antifugalna aktivnost, propolis, *Candida albicans*, *Aspergillus brasiliensis*, *Saccharomyces cerevisialis*

COMPARISON OF FUNGICIDAL EFFECT OF PROPOLIS EXTRACTS AND METRONIDAZOLE

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Abstract: Propolis is a natural substance that has anti-inflammatory (immunomodulatory and microbicidal) properties and has a long history of use in traditional medicine. The aim of this study was to evaluate the antifungal properties of 10% and 30% ethanolic extract of propolis prepared traditionally and of a commercial drug metronidazole, against selected strains of *Candida albicans* isolated from food samples, reference strain *Candida albicans* WDCM 00054, reference strain *Aspergillus brasiliensis* WDCM 00053 and reference strain *Saccharomyces cerevisialis* WDCM 3058. The agar diffusion method was used to investigate the fungicidal effect of propolis and metronidazole on the growth of selected cultures. The results of the study showed that both tested concentrations of ethanolic extract of propolis originating from the Republic of Srpska acted fungicidally on the *Candida albicans* isolate as well as on the reference strains *Candida albicans* WDMC 00054, *Aspergillus brasiliensis* WDCM 00053 and *Saccharomyces cerevisialis* WDCM 3058. Metronidazole showed weak antifungal activity.

Key words: antifungal activity, propolis, *Candida albicans*, *Aspergillus brasiliensis*, *Saccharomyces cerevisialis*