

***In vitro* Antiproliferative and Antifungal Activity of Essential Oils from *Erigeron acris* L. and *Erigeron annuus* (L.) Pers.**

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Antiproliferative and antifungal activities of essential oils from *Erigeron acris* root and herb and from *Erigeron annuus* herb were investigated. The cell viability assay was performed in cultured fibroblasts, cancer cell lines (MCF-7 and MDA-MBA-231), and endometrial adenocarcinoma (Ishikawa) cells as well as colon adenocarcinoma (DLD-1) cells using 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide (MTT). The essential oil from *E. acris* root showed the highest antiproliferative activity in the MCF-7 cell line with an IC₅₀ value of 14.5 µg/mL. No effect of the essential oil on normal cells at that concentration was found. Antifungal activity against various strains of five *Candida* species, i.e. *C. albicans*, *C. glabrata*, *C. tropicalis*, *C. krusei*, and *C. parapsilosis*, was tested by the microdilution method. It was found that all examined oils can be useful as antifungal agents against the above-mentioned species, but the essential oil of *E. acris* herb was the most active. Their minimum inhibitory concentrations (MIC) ranged from 30 to 0.4 µL/mL. The data presented suggest that essential oils from *E. acris* and *E. annuus* possess antifungal activity against *Candida* spp. and antiproliferative activity against breast cancer MCF-7 cells.

Key words: *Erigeron* spp., Antiproliferative, Antifungal