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Seasonal Variation, Chemical Composition and Antimicrobial Activity of Essential Oil of *Achyrocline satureoides* (Lam.) D.C.

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***SUMMARY*. Seasonal variation of the oil composition and biological activities from aerial parts of *Achyrocline satureoides* were investigated. Essential oils were analysed by gas crhromatography-mass spectrometry (GC-MS) after hydrodestillation. Results exhibited maximum amounts of hydrodistilled essential oils in spring (0.10 %; m/m). The compounds α-pinene (28.5-41.7 %) and *(E)*-caryophyllene (29.8-38.5 %) were the most abundant component in all seasons. Antimicrobial activity measurement of minimum inhibitory concentration (MIC) varied significantly ($p < 0.05$). It was more significant in autumn (37.9 μg/mL) and winter (38.4 μg/mL) than other seasons against bacterial strains *Staphylococcus epidermidis* ATCC11228. MIC against bacterial strains *Bacillus cereus* ATCC11778 was 37.9 μg/mL (autumn) and 76.8 μg/mL (winter) and 37.9 μg/mL (autumn) and 76.8 μg/mL (winter) against bacterial strains *Klebsiella pneumoniae* ATCC13883. The results showed that yield, chemical composition and antimicrobial activity of essential oil of *Achyrocline satureoides* (Lam) D.C changed according to the plant collection period.**

KEY WORDS: A. satureoides, Essential oil, Microbial activity, Seasonal variation.

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