EXTRACT OF THE HERB PURSLANE (*PORTULACA OLERACEA L.*) ON GERMINATION CHARACTERISTICS OF WILD MUSTARD

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Allelopathy properties of plants, can lead to the discovery of biological herbicides and growth inhibitors that the ecological and biological mechanisms. In fact, the inhibitory effects of physiological processes are the material recipient of allelochemical on plants or microorganisms. Wild mustard (*Sinapis arvensis* L.) is one of the most important weeds in canola crops. Effects of alcoholic extract allelopathy of herbal purslane (*Portulaca oleracea* L.) on germination characteristics of wild mustard a completely randomized design with three replications in ۲۰۱۰ were conducted. Treatments were included alcoholic extracts of purslane herb at zero concentration (distilled water) and ۵۰% were used. The test results showed that purslane herb extract was significant negative (P≤0.01) influence on mustard seed germination. So the severe inhibition of germination and don't germination seed treated with extracts of purslane. According to these results the possible inhibition effect on crop by Purslane extract, and it is suggested that influence extract on the germination of the crop and lower concentrations on the germination of weed and crop.

ESSENTIAL OIL COMPOSITION IN BERRIES OF *JUNIPERUS FOETIDISSIMA*

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The spherical blue-black seed cones of the genus *Juniperus*, commonly known as "Juniper berries" are widely used in foodstuff flavors and pharmaceuticals [۱]. Actually, the main impact on the perception of Juniper berries in pharmaceuticals should be related to the presence of several aromatic lipophilic compounds [۲]. However, in the face of the medicinal and economical importance of Juniper berries, little information is available regarding the chemical composition of its scent. The paucity of information could be owing to restricted geographical distribution of the many species. In this study, we aimed to identify the essential oil composition in berries of *Juniperus foetidissima* as one of the evergreen species of the Iranian highlands. Essential oil composition in berries of tree has been analyzed by capillary GC and GC-MS. The identified compounds were united by their terpenoid or aliphatic skeletons and low molecular weight. Above all, the significant presence of some bioactive compounds such as Sabinene (16.40%), α-Pipene (13.91%), β-Thujone (۱۲.۳۴%), l-Limonene (12.31%), Myrcene (5.28%) and α-Thujone (۴.۳۶%) was attention-grabbing. In comparison to other species of *Juniperus*, the nature and quantities of the essential oil components in berries of *J. foetidissima* were markedly different [۳, ۴]. Our results contribute towards the chemical information available on chemical components in *Juniperus*, helping to broaden the platform for further studies on essential oil of this genus.

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