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PP6. The impact of soil herbicides on the yield and quality of lavender (*Lavandula angustifolia* Mill.) essential oil

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During the period 2014-2015, the herbicidal effect and the selectivity of isoxaflutole (Merlin 750 WG), oxadiargyl (Raft 400 SK), imazamox (Pulsar 40) and flumioxazine (Pledge 50 WP) were studied on lavender fields, Hemus and Jubilee varieties [1]. The present work focuses on the influence of low doses of the applied preparations on the yield and composition of the essential oil compared to the untreated control [2]. The results of a two-year study show that the treated lavender had a higher yield on average of 0.7-1.6 kg/decare (daa). The odoriferous ingredients were found to be: linallyl acetate (20.0-38.6%), linalool (20.6-46.2%), lavandulyl acetate (1.9-5.9%), 1,8-cineole (0.4-4.9%), and camphor (0.2-0.6%). The application of oxadiargyl resulted in greater changes in the composition of the Jubilee variety, whereas the Hemus variety was most influenced by isoxaflutole [3].

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