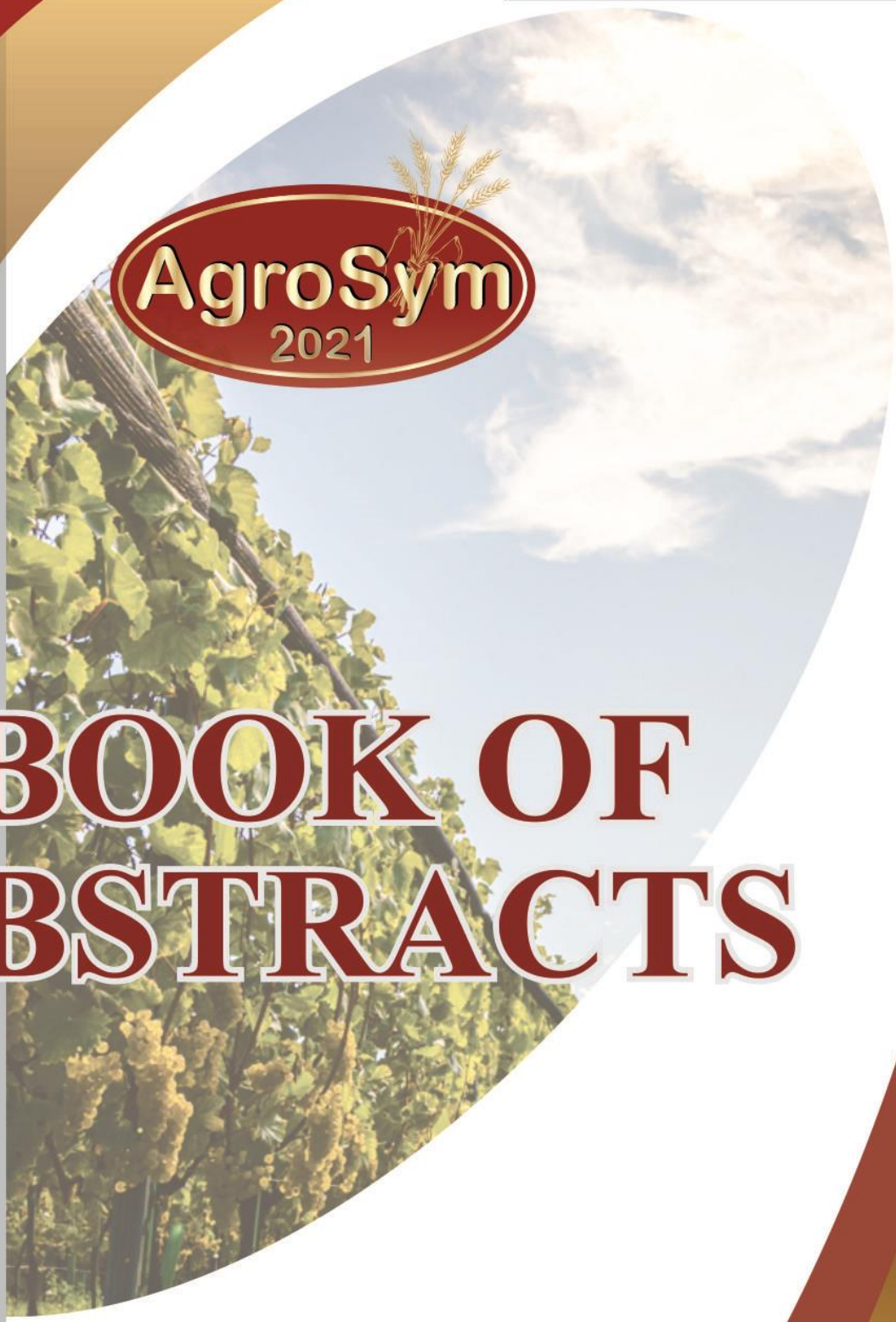

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EFFECTS OF IBA STIMULATORS ON PROPAGATION OF *LAVANDULA ANGUSTIFOLIA* MILL. BY SOFTWOOD CUTTINGS

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Abstract

Lavandula angustifolia Mill. is a perennial medicinal and aromatic plant belonging to *Lamiaceae* family. The lavender could be propagated either vegetatively or by seed. Vegetative propagation by cuttings is preferable since its seed is difficult to germinate and stocks of seeds are not always genetically homogeneous. Also, the yield of plants originated by seeds is lower than the yield of vegetatively propagated plants. The aim of this research was to determinate the optimal auxin concentration for rooting softwood cuttings of *L. angustifolia*. Cuttings were treated with the IBA based rooting powders "Chryzotop Green 0.25" (IBA 0,25%), "Rhizopon AA" (IBA 0.5%) and "Rhizopon AA" (IBA 1%) and only water (control) and put into trays filled with a mixture of peat moss and perlite for rooting. The experiment was performed in the laboratory conditions inside a polythene tent for plant propagation under artificial lighting and with the use of the intermittent mist-propagation system. After 30 days, the absolute root dry mass (mg) and the rooting rate (%) for 32 cuttings per treatment were recorded. The evaluation showed the efficacy of all IBA stimulators compared to control. The treatments with IBA 0.25%, IBA 0.5% and IBA 1% did not differ between themselves. Therefore, they could be successfully used as rooting stimulators of L. *angustifolia* as the absolute root dry masses were 5.32±1.82, 6.59±2.83 and 7.76±3.02 mg, while the rooting rates were 87.5, 90.6 and 87.5%, respectively. In control treatment, the absolute root dry mass was 2.46±0.77 mg, while the rooting rate was 68.8%.

Keywords: *lavender, vegetative propagation, cuttings, auxin*.

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