#### UDC 631.811.98: 633.88

# Influence of growth regulators "Biolan" and "Ivin on the productivity of medicinal plants

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It is shown the effects of growth regulators "Biolan" and "Ivin" on the productivity of medicinal plants: milk thistle, Safflower, Nigella seed, cornflowers real and marigolds medicines. Based on experimental data it is found significant effects on the growth and development of the studied crops, particularly it is found the impact on the biometric parameters (plant height, number of branches, number of leaves, number of inflorescences per plant), crop structure parameters (number of seeds, seed weight per plant etc.), and as a result – increase of plant productivity.

It is studied the effect of pre-treatment of seeds and spraying of growing plants in the phase of sockets leaf by growth regulators on the formation of medicinal plants and it is found a better term of treatment in the context of cultures. Thus, for crops, medicinal raw materials of which are seeds (Nigella crop, milk thistle, Safflower) greater effect was provided by agent Biolan at seed treatment before sowing, received allowances were 0,25-0,57 t / ha. For medicinal marigold, raw material of which is the inflorescence, growth regulator Ivin promoted increase of yield by 0,23 t / ha at spraying of growing plants. The

maximum yield of dry weight of plants of real cornflowers was obtained with agent Biolan for two terms, allowances accounted for 1,1-1,2 t / ha.

The specificity of growing medicinal plants, in particular by minimizing the use of crop protection chemicals and compliance with the pharmacopeial article of medicinal plants, prompted us to look for new alternative ways to fight with plant and seed diseases. Currently, investigations are carried out to verify the effectiveness of the growth regulators with bioprotective effect «Regoplant» and «Stimpo», showing high efficiency and provide resistance to plant diseases.