



Auxin-like effect of derivatives of Pyrimidine, Pyrazole, Isoflavones, Pyridine, Oxazolopyrimidine and Oxazole on acceleration of Vegetative growth of Flax

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Abstract : The comparative analysis of the stimulating effect of low molecular weight heterocyclic compounds, derivatives of pyrimidine, pyrazole, isoflavones, pyridine, oxazolopyrimidine, oxazole and plant hormones auxins IAA (1*H*-Indol-3-ylacetic acid) and NAA (1-Naphthylacetic acid) on germination of seeds and growth of seedlings of flax (*Linum usitatissimum* L.) cultivars Ukrainian 3 and Svitanok was conducted. The specific auxin-like stimulating effect of chemical heterocyclic compounds on the basic processes of flax seedlings growth: cell division, cell proliferation, cell elongation and cell differentiation was found. The growth parameters of flax seedlings grown on water solution of chemical heterocyclic compounds used at the concentrations 10^{-8} M and 10^{-9} M were similar or higher of the growth parameters of flax seedlings grown on distilled water (control) or on water solution of auxins IAA and NAA used at the same concentrations 10^{-8} M and 10^{-9} M. The obtained results proved the possibility of practical application of derivatives of pyrimidine, pyrazole, isoflavones, pyridine, oxazolopyrimidine and oxazole for intensification of vegetative growth of flax.

Keywords: *Linum usitatissimum* L., auxins IAA and NAA, pyrimidine, pyrazole, isoflavones, pyridine, oxazolopyrimidine, oxazole.

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