

INVESTIGATION OF PHENOLOGICAL DEVELOPMENT OF SOME EPHEMERAL ANNUAL ORNAMENTAL PLANTS IN REGARD TO NITROGEN APPLICATION

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Nitrogen sensitivity of *Cyanus segetum* Hill. (cornflower), *Consolida regalis* GRAY. (larkspur) and *Papaver rhoeas* L. (poppy) was investigated in outdoor experiment with ammonium-nitrate fertilizer application. The aim of our study was to prove the harmful effect of fertilization on segetal vegetation degradation.

The examination method based on horizontal and vertical plant parameters, on phenological stages comparison.

The height of poppy was decreased significantly when 240 kg/ha nitrogen was applied. Significant vegetative growth was detected on the other two species investigated especially higher doses of nitrogen application. Nitrogen application had an adverse effect on cornflower stem strength. Stress tolerance of poppies was decreased in the highest application. The other two species was not detected any biotic or abiotic damage compared to the control and treated plots.