

INFLUENCE OF BLASTOKOLINS IN GERMINATING SEEDS OF SOME GRASS SPECIES ON SEED GERMINATION AND INITIAL GROWTH OF TESTED GRASS SEEDLINGS

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Plant's interactions begin just during seed germination and last through their growth and development in habitat. Results of many studies point out that inhibition effect of allelochemicals can manifest just during seed swelling. Disturbances that occur, delay the germination, inhibit the root development being formed and make their deformations, fading or reduce the seedling height. Thus, laboratory studies upon the determination of chosen grass species reaction to allelopathic properties of substances released from germinating seeds of *Festulolium*, *Festuca pratensis*, *Lolium perenne*, *Phleum pratense* and *Poa pratensis* were undertaken.

Achieved results revealed significant influence of blastokolins from tested grass species on seed germination and initial growth of seedlings. Reaction of studied species was different. Among grasses used in the experiments, substances released from germinating *Poa pratensis* seeds inhibited seed germination to the highest extent, those from *Lolium perenne* and *Festulolium* – seedling height and root elongation of tested species. *Festulolium* was characterized with the highest sensitivity to the presence of allelochemicals in a case of seed germination and later – *Phleum pratense* and *Festuca pratensis*.