

**EFFECT OF THE FOLIAR APPLICATION OF PHOSPHORUS AND POTASSIUM  
ON THE GRAIN YIELD OF FORAGE PEAS (*PISUM SATIVUM* SSP. *ARVENSE* L.)  
ON ACID SOIL**

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Soil acidity is one of the factors that limits growth of many crops, especially legumes. In addition to the lack of calcium, such soils are characterized by a high content of mobile form Al, Fe, Mn and reduced content of readily available P and K. The aim of the study was to estimate the effect of foliar fertilization with phosphorus and potassium (water-soluble fertilizers P52K34, Haifa, Israel) on plant growth, yield and yield components (number of nodes with pods per plant, number of pods per plant, number of grain per plant) on the individual plants of forage peas. The experiment was set up in pots (15L volume, one plant per pot) filled with soil substrate (Glaysol type, pHKcl4.8) in the 2013th year. Varieties of forage peas Junior and Javor (Institute of Field and Vegetable Crops, Novi Sad) were sown using a randomized design with five replications and two variants of foliar fertilization (control and foliar fertilization). The foliar treatment was carried out two times: at the beginning of intensive growth and two weeks after, in the concentration of 1 %. Cultivars differed significantly in stem height (Junior 146.8 cm, Javor 69.5 cm). Regardless of foliar fertilization, significantly more nodes with pods per plant, number of pods per plant, number of grain per plant and grain weight per plant were recorded in cv. Junior compared to Javor. Foliar fertilization has a positive effect on yield components, so that the grain yield in both cultivars was significantly higher ( $P < 0.05$ ) in fertilized variants. Considering the positive results from this experiment, the research should be continued, regarding to determine the validity of the measure in field conditions.

Key words: forage peas, foliar fertilizers, phosphorus, potassium, grain yield

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