



# Productivity of Seed Pea Varieties in Conditions of Southern Ukraine

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**Abstract:** Peas are one of the main leguminous crops in Ukraine. It has high nutritional and fodder value. Peas are the main source of vegetable protein. In terms of pea production, Ukraine is one of the first places in Europe and the whole world. To form a high grain yield, an optimal system of plant nutrition during the growing season, as well as the selection of the most adapted varieties, is necessary. Therefore, the selection of the most effective methods of adaptive and biological technologies for growing peas is of important practical importance. Experimental research was conducted in 2024 at the research field of the Mykolaiv National Agrarian University. The object of research was the processes of growth and development of pea plants, their formation of productivity. Research has established that in the conditions of the acute drought of 2024, the studied pea varieties formed a grain yield at the level of 1.37-2.52 t/ha. The highest productivity was for the cultivation of the White Angel variety and exceeded the indicators of other studied varieties by 0.27-1.15 t/ha or 10.7-45.6%. The use of biological preparations ensured an increase in the yield of pea grain by 0.08-1.17 t/ha compared to the control. Thus, during the cultivation of the White Angel variety, pre-sowing treatment of seeds with biological preparation Azotophyt and treatment of plants during the growing season, Organic Balance produced 3.18 t/ha of grain, which is 3.5 - 20.8% more than other variants of the experiment. In the conditions of the south of Ukraine, the combination of pre-sowing seed treatment with Azotophyt biopreparation and foliar feeding of plants during the growing season with Organic-balance provides the highest seed pea yield. Among the studied varieties, the highest productivity was formed by plants of the White Angel variety.

**Keywords:** peas, varieties, biological preparations, grain yield