

## SEASONAL EXAMINATION OF THE POLLEN CONTENT OF HONEY BEE COMBS IN AN AGRICULTURAL LANDSCAPE

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Insect pollination is becoming more and more critical worldwide, as the diversity and number of wild pollinating insects is significantly decreasing. If they can, honeybees visit bee pasture with a diverse species composition, thereby not only ensuring a balanced food supply for the bee colony, but also optimal conditions for its reproduction. The aim of the research was to investigate the pollen and nectar collection habits of honey bees in an agricultural area with unfavourable ecological conditions, with particular regard to the amount of food available during the growing season. The research was carried out in Ludas settlement and its outskirts located in the northern part of Serbia close to the Hungarian border, where a family of honeybees spontaneously moved into a previously used beehive in 2023. The settlement is mainly surrounded by agricultural areas, while the extent of natural or semi-natural vegetation is minimal. Based on the results of the pollen analysis of the honey comb samples, it was established that the bees were able to collect nectar and pollen both from the plants grown on the agricultural fields and from the plants found in the kitchen gardens and small plough lands of the settlement. Rapeseed and sunflower pollen were dominant in early summer and early August. The significant increase in the number of non-arable plants in the autumn samples shows that other wild or ornamental plants can also play an important role in the autumn food supply of bees.