UDC: 633.15:632.93(498) DOI: https://doi.org/10.53040/ppap2026.71

INTEGRATED PEST MANAGEMENT (IPM) STRATEGIES OF MAIZE CROP IN ROMANIA

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Reducing the use of synthetic pesticides for maize crop is a common objective both within plant protection policies and among farmers concerned with productivity, cost reduction in technologies and production quality. In this context, the paper presents in a concise form the results of the few workshops carried out within the Horizon Europe project - "SUPPORT - Supporting uptake Integrated Pest Management and low-risk pesticide use" during the period 2024-2026, regarding farmers' opinion in adopting sustainable strategies for harmful organisms control of maize crop in Romania.

The results demonstrated that farmers are interested in adopting sustainable IPM strategies against the maize main pests, such as *Tanymecus dillaticollis*, Agriotes sp., *Helicoverpa armigera*, *Ostrinia nubilalis, Diabrotica virgifera*, based on preventive methods such as crop rotation, certified and quality seed, resistant hybrids, soil tillage, fertilization management, weeds control. Also, they are interested in apply new technologies based on the drones use and robots, high-performance equipment for localized application of pesticides and in the smallest quantities, in the context of optimizing the costs of technologies and maize productivity. Based on these results, a web platform was also developed, where different scenarios for IPM strategies can be evaluated, several indicators can be calculated, such as risk indicators, PL-EU / Pesticide Load, costs, greenhouse gas emissions and comparison between these scenarios. This platform can help the farmer choose the best control strategy specific to own farm, in terms of input costs, fertilization or plant protection strategy. More

information about this platform can be found here: https://synops.julius-kuehn.de/support/#/web-app.

In conclusion, as a perspective of IPM strategy of maize crops in Romania, monitoring is the central element of this strategy, because decisions on the control of harmful organisms are based on observations and objective data, not on the preventive application of pesticides. These tools allow: early detection of infestations; establishing the optimal time for intervention; reducing the number of insecticide treatments; protecting useful entomofauna (predators and pollinators); reducing production costs and environmental impact.

Keywords: farm strategy, Integrated Pest Management, IPM policy, maize, productivity.

Acknowledgments. This research was supported by the project with title "SUPPORT - Supporting uptake Integrated Pest Management and low-risk pesticide use", ID:101084527, funded by European Union, Horizon Europe, HORIZON-CL6-2022