Annotation

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Dynamics of colonization of the agrocenosis of the oil radish by insect pests in the Right-Bank Forest-Steppe of Ukraine

Crucifers which also include oil radish are consumed by numerous phytophagous insects that sufficiently limit its productivity. In this view the detailed research of its dynamics taking into account its phenological development is a key to successful safety system based on the evaluation of colonization dynamics, peak growth of phytophagous insect population and planning measures aimed at rational use of insecticides. This article is aimed at detailed elaboration and learning of dynamics of colonization of the agrophytocenosis of the oil radish under conditions of the Right-Bank Forest-Steppe of Ukraine with the purpose of development of effective system for its protection. This system should be based on proven methods widely used for accounting of phytophagous insects and evaluation of their harmfulness in close relation to phenological phases and periods of development of the agricultural crop and stage of its organogenesis.

As a result of the studies, the author has defined entomological complex of phytophagous insects of the oil radish which is classified into 36 species, belong to 6 orders and 14 families. The accounted insect pests have been classified into categories: mass species which harm plants systematically; quite widespread and harmful species; solitary species. The complex of crucifer flea beetles has been identified as the most harmful species in the agrocenosis of the oil radish under conditions of the Right-Bank Forest-Steppe of Ukraine. It includes several species: black flea beetle (Phyllotreta atra F.), large striped flea beetle (Phyllotreta nemorum F.), blue flea beetle (Phyllotreta nigripes F.), small striped flea beetle (Phyllotreta vitata F.), rapeseed beetle (Meligethes aeneus F.) and diamondback moth (Plutella maculipennis Curt). The specified species of phytophagous insects have been demonstrating stable high dynamics of colonization providing sufficient harmfulness and showing a real threat to preservation of cormophyte weight and seeds of the oil radish agrophytocenoses during the research period.

There has been determined the critical periods of vegetation for the oil radish in regard to its phytophagous insects: seedlings – rosette and budding – flowering, and at these stages the author recommends planning application of insecticides within the complex protection system of this agricultural crop.

Key words: entomokompleks, settlement, pests, oil radish, growing season.