середньому за роки досліджень інтенсивне проростання основної кількості бур'янів відбувалось наприкінці травня – початку червня (у фази росту пагонів і суцвіть та цвітіння винограду) від 161,9 до 232,6 шт./м2. Найбільшу чисельність їх фіксували у фазу росту ягід винограду – 264,8 шт./м2. Основну кількість бур'янів становили однорічні види: щириця звичайна, амброзія полинолиста, мишій зелений. Найчисленнішим з багаторічних видів був пирій повзучий. У фазу технічної стиглості винограду після закінчення вегетації таких видів, як пирій повзучий, осот рожевий, мишій зелений чисельність бур'янів знижувалась і становила 182,1 шт./м2.

Інтенсивне наростання маси бур'янів спостерігали в період між фазами росту пагонів і суцвіть і росту ягід винограду від 642,2 г/м2 до 3424,1 г/м2. Максимальне наростання маси бур'янів – 4236,5 г/м2 припадало на фазу дозрівання ягід винограду. Найбільшу питому вагу у структурі забур'янення в цей період мали однорічні дводольні: нетреба звичайна, щириця звичайна, лобода біла, серед багаторічних бур'янів найбільша питома вага була у осоту рожевого та у молочаю лозяного. Аналіз динаміки чисельності і маси біологічних груп бур'янів на виноградних насадженнях показав, що багаторічні бур'яни домінують у ценозі на початку вегетаційного періоду, а ярі – в кінці.

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SUSPICIOUS PHYTOPHAGES OF AGROBIOCENOSE OF PEAS IN THE SOUTHERN STEPPE OF UKRAINE

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Protection of pea crops with insecticides based on the active substances deltamethrin, 25 g/l (Decis f - Lux, k.e. (0.7 l/ha)) and dimethoate, 400 g/l (Bimmer, k.e. (1 l/ha)) against

aphids was the most reliable, the effectiveness of the variants with the application of these pesticides for 10 days was 81.3 and 84.5%. Despite the fact that the costs of growing peas when using these insecticides turned out to be UAH 3254.2-3689.5/ha higher than in the control, the profit obtained due to the increase in product yield was UAH 7869.3-8196.4 higher /ha and was from UAH 31,185.8 to UAH 33,122.7/ha.

The level of profitability of growing peas when sprayed with insecticides from Dr. deltamethrin, 25 g/l (Decis f - Lux, k.e. (0.7 l/ha)), and with d.r. dimethoate, 400 g/l (Bimmer, k.e. (1 l/ha)) reached 39.2-49.3%.

Of the factors that limit the productivity of annual leguminous crops, a prominent place is occupied by harmful insects. There are 76 types of peas registered in Ukraine [1, 2].

Phytophages of peas, taking into account their food specialization, are divided into two groups: omnivores, which feed not only on legumes, but also on many species of plants from other families, and specialized ones, which mainly damage leguminous crops [3]. Many of them are trophically related to these crops, as well as to wild plants of the *Fabacea* family [4].

The appearance of insects on peas can be divided into three seasonal groups: spring - includes April and May, summer - June, July and August, autumn - September, October and November [5].

Different types of pests of leguminous crops are characterized by adaptability to feeding on certain organs of plants, features of causing damage [6].

Pests of peas are divided into 4 groups: 1) soil-dwelling pests; 2) ladder pests; 3) leaf pests; 4) pests of generative organs (ovaries, flowers, fruits, seeds) [7].

The root system and seedlings are damaged by wireworms, cabbageworms (especially in wet areas), larvae of lamellar beetles, sprout flies, caterpillars of gnawing scoops, tuber weevils and other pests. Some scientists note a regularity between damage to pea seedlings by tuber weevils and the number of aphids [7].

According to scientists, when one colony of aphids feeds on a plant, seed yield decreases by 17-38% [8].

In May-June, peas are damaged by sucking insects - pea (*Acyrthosiphon pisi* Kalt.) and other species alfalfa (*Aphis medicaginis* Koch.), bean (*Aphis fabae* Scop.), warty (*Aphis craccae* L.) aphids, pea mosquito (Contarinia pisi Kieff.), thrips, leaf-gnawing scoops.Specialized species on peas are pea (*Bruchus pisorum* L.) and pea (*Bruchus atomarius* L.) [3].

Leaves, flowers and beans on seed crops of leguminous crops are eaten by caterpillars: cabbage borer (*Barathra brassicae* L.), alfalfa borer (*Chloridea dipsacea* L.), gamma borer (*Plusia gamma* L.) and others. In some cases, they penetrate the beans, where they damage the seeds. Also, seeds are threatened by pea fruit eaters, bean borer, and in some areas five-spotted weevil, sometimes pea mosquito [7].

As a result of two-year experiments in the conditions of the Odesa region during 2023-2024, 59 species of omnivorous and specialized pests were discovered in the agrobiocenosis of peas. Among them, 26 species were potential pests of peas.

From the number of Homoptera, the share of which was 39.7%, representatives of the families *Cercopidae, Psyllodea, Aleyrododea, Coccidea* were found on peas, which were single and had neither economic nor economic value for peas. Aphids from the Aphididae family were the most important among these groups.

From this family, four species of aphids were found, the dominant species being *Acyrthosiphon pisi* Kalt. (87.8%).

The appearance of aphids on pea crops during the years of research was recorded in the first decade of May, their number was determined by the course of weather conditions.

Records and observations of the seasonal dynamics of the number of phytophagous species from the aphid family showed that in 2023 the development of the aphid was

accelerated due to the warm weather in April and May, but its number was significantly lower. The number of aphids this year reached 1,843 copies. for 100 swings of the net. The greatest increase in the number of aphids was observed in 2024, when the density of this phytophagous was record high during May–July, reaching 2279 specimens. for 100 swings of the net in the third decade of June. This was 7.3 to 9.1 times higher than the national average.

The problem of the high number of these phytophages is constantly relevant, as peas are damaged by them every year. Without a solution, it is impossible to create systems of cultural protection measures, as well as to determine their economic effectiveness.

Protection of pea crops with insecticides based on the active substances deltamethrin, 25 g/l (Decis f - Lux, k.e. (0.7 l/ha)) and dimethoate, 400 g/l (Bimmer, k.e. (1 l/ha)) against aphids was the most reliable, the effectiveness of the variants with the application of these pesticides for 10 days was 81.3 and 84.5%.

An economic assessment conducted after spraying pea plants with systemic insecticides against aphids confirmed the high efficiency of this method of plant protection in the conditions of our farm.

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