METHODS OF IDENTIFYING AND ACCOUNTING FOR PESTS OF ROSA

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One of the important parts of the work of the service of early identification and notification of the increase and spread of pests and diseases of agricultural crops is the correct implementation of accounting work.

Measurements to determine the quantity and quality of the harvest were carried out in each harvest, and the quantities of quality and low-quality products were determined.

In order to determine the economic efficiency, the cost of growing the product, the net profit, the cost of the product, and the level of profitability were calculated as a result of determining the price of the additional crop.

Consideration of pests and diseases is conditionally divided into the following groups:

Accounting in the soil.

Counting on the surface of the soil and plant residues.

Counting through decoy baits and various insect traps.

Considering pests and diseases in plants.

In order to expand the area of agricultural crops and increase their productivity, it is necessary to pay special attention to pests in quarantine and other economic risks. In this regard, the method of ferromonitoring has a great role. As a result of determining the development of the pest in nature, this method determines the scientifically based period of using a biological or chemical method against it and increases the protection efficiency.

"Pheromone" is a mixture of organic chemicals with a complex molecular structure that separates insects from their special glands for communication. Sex pheromone traps are environmentally friendly biological protection, harmless to the environment and plants. As a result of the use of sex pheromone traps, the pest appears, and depending on the amount of the pest that falls on the pheromone, the duration of the fight against it is determined.

Sex pheromone is mainly produced by females. Sex pheromone is produced by special endocrine glands of insects and is designed to attract the opposite sex. Attracted by scents, male insects of this species fly mainly at night to court.

Currently, the sex pheromone (JF) content of about 600 insects has been determined in the world, and 100 of them are used in practice.

Pheromone traps are used for the following purposes:

Using pheromone traps to determine the period and density of the same insect that began to develop in the spring; to compile the number of joints in the season, their duration and phenogram.

Determining which protection method should be used and when, depending on the density of butterflies caught on pheromone traps; to determine the most effective time to spread the trichogram in the field.

The working process of pheromone traps is that the male butterfly, attracted by the artificial smell, sticks to the sticky paper placed inside the trap. Artificial pheromone is a strong attractant, that is, it has several times stronger attraction than a natural butterfly. Each type of insect has its own pheromone, which has a certain structure and composition. In practice, with the help of a pheromone trap, it is possible to determine the development of the same insect and to hesitate for the necessary control method. This makes it possible, firstly, to prevent damage at the expense of timely fighting, and secondly, to put an end to wasteful processing.

Catch (trap). There are many types of pheromone traps. In horticulture, a triangular cardboard handle is the most convenient, while in Rosa growing, 2-3 types of handles, which differ little from each other, are recommended. The handle of this form meets the demand in many respects. These handles consist of 2 parts and are connected to each other by an iron wire. The gap on the four sides of the handle, where the butterfly enters, is at a height that does not allow the entry of birds. Adhesive tape. On the lower part of the handles, paper coated with special glue for hanging butterflies is placed. Due to the increase of the butterfly and the surface is covered with dust, the adhesive loses its adhesion. Therefore, it should be updated. Glue is applied to special papers that cannot be absorbed. Glue is applied to one sticker 1-2 mm thick, and the second one is covered with such clean paper. In the field, the adhesives are separated from each other and put on the handles, that is, 2 adhesives are ready. The glue can be easily spread with the help of wooden shovels. One side is cut to the center to make it easier to place the stickers on the handles. Tweezers are used to replace adhesives. It is necessary to apply the glue to the cardboard papers covered with a film (laminated) on one side. In general, these papers should be moisture and glue impervious.

Glue. Pheromone traps use entomological glue, which is different from other glues, does not dry for a long time, has strong adhesive properties and is well stored. This glue is less affected even under high temperature.

Iron wire. A 3-5 mm thick iron wire is cut to a length of 15-20 cm and fixed to a wooden stake with hemp rope or aluminum wire. When fastening, it is necessary

to ensure that the wire rises 10-12 cm from the top of the wooden stake. A handle is attached to this part.

A wooden stake. It is convenient to use mulberry branches left over from feeding silkworms when setting up pheromone traps. Unbent mulberry branches are selected and cut into 130-150 cm lengths. The thick side of the branch is sharpened and made into a stake, suitable for driving into the ground. An iron wire is attached to the other side. A wooden stake is installed 100-120 cm above the ground level, it is not necessary to attach any transverse steps to it, because it has been proven that the flight (hanging) of butterflies at a height of 2 m from the ground level is the same, and it does not depend on the proximity to the crop.

In order to identify and take into account soil-dwelling pests, excavation works are carried out at different depths on the surface of 25 x 25 cm, 50 x 50 cm, and sometimes 0.5-100 cm. Samples are taken diagonally (checkerboard). The number of samples is 8 at 10, 12 at 11-50, 16 at 51-100.

In the process of digging, the soil is observed by eye, passed through a wire sieve and can be washed. Samples can also be obtained through soil borings. Washing is carried out in the place where the sample is planted. Found insects sponge and eggs in water for 10-15 seconds. After boiling, imagos are collected on a layer of Rosa, eggs and larvae are preserved in 4% formalin or 70% alcohol.

*Samples are taken at each site to account for pests and pathogens found on the soil surface and plant debris. Samples are 20 x 20 cm, 30 x 30 cm, 100 x 100 cm square or 30 x 100 cm long. If 15 samples are taken in a field, and 11 of them are found to be beetles (or other insects), the probability is 11 x 100 78%.*O‘simliklarni kasallik qo‘zg‘atuvchilarini o‘simlik qoldiqlarida va qishlovchi o‘tlarda hisobga olinadi.

Deceptive baits (yeasts, molasses, attractants) and various traps (jars hidden in the soil) are used in the light of insect traps and hokazos to keep track of harmful insects.

Pheromone traps are widely used, especially for catching butterflies.

In the light, insect traps are hung on poles at a height of 3-4 meters. Pheromone traps are hung from tree branches or placed on sticks placed in the soil in field crops.

Insects and other pests are observed on modern plants or on a randomly selected plant according to the methodology developed for counting insects and other pests on plants. The number of pests and beneficial insects is counted in 100 plants and 100 leaves. Insects found in plants are also taken into account through entomological surveys.

Entomological problems, especially alfalfa pests (alfalfa weevil, etc.) are often noted. Yellow paper coated with glue is also used to count the coins. Insects found inside plants (fruit, between leaves, under bark, wood) are identified by cutting and slitting. Insects and mites are observed through magnifying glasses. The beetles and larvae of the pest gnaw the leaves of the plant, leaving only the veins of the leaves, they make pits in the fruit and the fruit rots, the yield decreases sharply.

Rosa is a medicinal plant that is widely used in the pharmaceutical industry due to its medicinal properties. The natural populations of this plant in our Republic have a rich gene pool, their study and the selection of promising forms with valuable economic and biological characteristics and their introduction into production are the current tasks of the field of forestry and medicinal plant science. is one of the urgent issues. The study of selected forms of Rosa was carried out according to the following important economic and biological characteristics: - drought resistance and heat tolerance; - cold tolerance; - general condition of the plant; - pest and disease resistance; - degree of covering of branches with thorns; - fruit size, weight of 100 fruits; - biochemical composition of fruits; - quantity and consistency of productivity; Although the Rosa bushes are considered frost-resistant, in some years, due to a sudden drop in temperature in late autumn or early spring, the plant may show signs of frost damage of various degrees. Damage to vegetative and generative buds on more branches is noted. Frost damage to the bush is determined visually and is evaluated with the following points: 5 points - no signs of frost damage to the bush; 4 points - the damage is very slow, the tips of one-year branches (1/4 part) are damaged by frost; 3 points - slightly damaged, one-year branches, sometimes two-year branches are damaged by frost; 2 points - moderate damage, two-year, sometimes perennial branches are damaged by cold;

1 point - severe damage is noted, most of the perennial branches in the bush are damaged by frost, the regeneration of the bush takes place due to the growth of new branches from dormant buds in the root joint. Severe frost damage to the root system of the plant can occur only in the harsh winter season with little snow, due to deep freezing of the ground layer. The general condition of the Rosa bush reflects the adaptive flexibility of the form. It is determined visually and evaluated in points as follows: 5 points - excellent condition: the bush is healthy and the growth of annual branches is strong and the leaves are well developed, there are no signs of damage from frost, pests and diseases; 4 points - good condition: the bush is healthy and the growth of annual branches is

good, the color and size of the leaves are normal, there are small signs of damage from frost, pests and diseases; 3 points - average condition: the growth and development of annual branches is average, the bush has some signs of damage from frost, pests and diseases, the bush is weakened, its leaves are crushed; 2 points - weak condition: the growth of the branches is somewhat reduced, the bush is damaged by frost, pests and diseases, the annual growth of the branches is weak, it is not well covered with leaves, and the leaves are small, not typical leaves of the species; 1 point - the bush is very weakened, the annual growth in the branches is very slow, there are dry branches damaged by pests and diseases:

The root system of Rosas is considered to be the semi-underground part of this bush, which has been thickened for many years, and it ensures frequent renewal of the above-ground branches of the plant and constant yield. This feature is considered as a unique valuable biological feature of Rosa, formed during the evolutionary process of natural selection and struggle for survival in harsh climatic conditions. The flowering period of the Rosas mainly falls on April-May, they also depend on the height above the sea level, and as we go higher up the mountain, the flowering period is pushed towards May-June. The duration of the flowering period exceeds the vegetation period, depending on weather conditions, and averages 28-30 days. Under natural conditions, the period of yielding of the Rosa bush begins in 4-6 years, under cultural conditions, when they are well cared for, the seedlings planted in 2-3 years begin to harvest. It was noted that vegetatively propagated seedlings yield faster than seedlings grown from seeds. In particular, the seedlings grown by taking roots from the cuttings of the winter wooded branches were fully harvested in 2 years. Rosa bushes produce a crop every year, but its amount can change depending on the weather conditions during budding, flowering and fruiting.

References:

1. Negmatova S. T., Khalikov B. M., Izbasarov B. E. The Effectiveness Of Deep Processing Between Rows Of Cotton //European Journal of Molecular & Clinical Medicine. – 2020. – Т. 7. – №. 03. – С. 2020.
2. Babayeva Z., Negmatova S. IMPORTANCE OF NON-TRADITIONAL LEGUMINOUS PLANT CROTALARIA IN AGRICULTURE //Innovative research in modern education. – 2023. – Т. 1. – №. 3. – С. 11-14.
3. Negmatova S., Boboeva N. EFFECT OF AGROTECHNICAL MEASURES ON COTTON YIELD IN CULTIVATION OF MEDIUM-FIBER COTTON VARIETIES //Academic International Conference on Multi-Disciplinary Studies and Education. – 2023. – Т. 1. – №. 6. – С. 147-150.

4. Negmatova S. et al. EFFECT OF PLANTING PERIOD AND STANDARDS ON YIELD ELEMENTS AND WEIGHT OF 1000 GRAINS OF CROTALARIA //American Journal of Pedagogical and Educational Research. – 2023. – Т. 8. – С. 14-19.
5. Khalmuminova G. K. et al. Alternaria diseases of agricultural crops in Uzbekistan //GSC Biological and Pharmaceutical Sciences. – 2020. – Т. 13. – №. 2. – С. 062-067.
6. Kulmuminovna K. G., Kushakovna K. M., Yusupzhanovna K. F. The efficacy of seed protectants against alternariosis disease of vegetable crops //EPRA International Journal of Research & Development (IJRD). – 2020. – С. 218-221.
7. Khojanazarova M. K. et al. Investigating the cultural-morphological features of rhizobacteria and allocating it from the cotton plant (Gossýpium hirsútum): in the example of irrigated meadow soils of Uzbekistan //IOP Conference Series: Earth and Environmental Science. – IOP Publishing, 2021. – Т. 939. – №. 1. – С. 012045.
8. Халмуминова Г. К., Камилов Ш. Г., Аллаяров Н. Ж. Возбудители черной гнили моркови //Вестник Российского университета кооперации. – 2014. – №. 2 (16). – С. 137-140.
9. Khojanazarova M. et al. Spectrophotometric indicators of “Zamin-M” biopreparation immobilized with gypan flocculinate //E3S Web of Conferences. – EDP Sciences, 2023. – Т. 389. – С. 03076.
10. XALMUMINOVA G., SULAIMONOVA G. BULLETIN OF SCIENCE AND PRACTICE //BULLETIN OF SCIENCE AND PRACTICE Учредители: Овечкина Елена Сергеевна. – 2021. – Т. 7. – №. 11. – С. 138-141.
11. Данияров У. Т., Сохибова Н. С. ИСПОЛЬЗОВАНИЕ ПАРТЕНОГЕНЕТИЧЕСКИХ КЛОНОВ ДЛЯ ПОЛУЧЕНИЯ ТОНКОВОЛОКНИСТЫХ ГИБРИДОВ ТУТОВОГО ШЕЛКОПРЯДА //Life Sciences and Agriculture. – 2022. – №. 1 (9). – С. 2-6.
12. Ismailovich B. C. et al. Technology of Disease Removal, Processing and Treatment of Mulberries and Nutritional Mulberries in Spring //Eurasian Medical Research Periodical. – 2022. – Т. 7. – С. 96-98.
13. Daniyarov U., Suvonova A., Soxibova N. Creation of inbred systems with a choice of plus and minus on the viability of silkworms with the best combination value //Результаты научных исследований в условиях пандемии (COVID-19). – 2020. – Т. 1. – №. 06. – С. 22-28.
14. Mirzaeva Y., Khujamshukurov N., Sokhibova N. Efficiency and quality indicators of in vitro propagation of high-yielding mulberry varieties and

hybrids //Результаты научных исследований в условиях пандемии (COVID-19). – 2020. – Т. 1. – №. 06. – С. 50-56.