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PESTS AND HARM ON THE FAMILY OF CRUCIFEROUS (TURNIP AND RADISH)

Maripova Rukiyahon daughter Zokirjon
Independent researcher of the Andijan Institute of Agriculture and Agrotechnology
ruqiya91@mail.ru, 97 838 70 05

Anorbaev Azimkhon Ramkulovich
Professor of Agricultural Sciences, Tashkent State Agrarian University
biomarkaz@mail.ru, 91 136 62 77

ANNOTATION
In agriculture, the cluster method of production has been established, the volume of agricultural land allocated to clusters constitutes 7,5 foizni in fruit and vegetable production. Today, more than 80 types of agricultural products grown in our republic are sold in 66 countries of the world. Turnip and radish - from the sentence.

Keywords: turnip, radish, pest, generation, category

INTRODUCTION

The turnip is a two-year plant belonging to the family of cruciferous. The turnip still has long seeds in Central Asia, Egypt, Greece and Italy. It is also common in the USA, Japan, India. It is also grown in large quantities in Uzbekistan. The first year of the turnip is formed by leafy stems and root; In the second, the flowers are allowed and give seeds. Four-piece flower collected in stem, yellow-red, pollinated from the outside. The fruits are oblong, rounded, white, red, purple. Seeds are small, round, dark. 1000 pieces of seed is 1-4 grams. In Uzbekistan, it is planted at the end of July and in early August. Seeds germinate at a soil temperature of 2-3 °, develops well at 18-20 ° (in this case, the seed is completely sprouting for 2-4 days). The turnip is moisture, demanding of good soil and its mechanical composition. Frost resistant, (not damaged at a temperature -4 -5 °). The growing season is 60-80 days. The turnip is used throughout the year, due to the fact that the rootpode has a large amount of essential oil, and is also easily absorbed. The turnip is rich in ascorbic acids, vitamins, potassium, calcium, phosphorus, magnesium, gland salts, enzymes, phytoncides needed for the human body. In the leaves of the turnip more vitamins and ascorbic acid than in root.

Radish in accordance with its composition is very useful when filling out the place of vitamins and mineral salts in the body. It has strong features when combating microbes. Radish is one of the useful vegetables for human health. Her rootpode is rich in minerals. Radish, in its composition, during the end of the winter and early spring, in those days when our people say "Brain Sunday" is very useful for replenishing the missing vitamins and mineral salts in the body. It has strong features from microbes.

Andijan-9 varieties, Margilan local, Daikon or Japanese radish, Faithful and Summer gifts are recommended. Sowing seeds do not be pure, highly growing, should not be infected, medium size, entirely damaged. Seeds are cleaned of mixtures and seeds of other plants. Before planting radiation, this area is cleaned of grazing crops and weeds. 1 weaving of the earth is filled with 200 kg of rotten manure. The soil softens in mixing with rotten dung and mineral fertilizers at a depth of 20-25 cm. Large lumps of the earth are grinding, smoothed well and irrigation boards are done.

Radish is mostly sowing in summer. In areas located in the Central region, the seeds of radish can be planted on August 1-15, in the northern regions from July 25 to August 10, in the southern regions from August 20 to September 20 in the shot and in a row. Each method, the distance between the beds is 70 cm. Seeds fall manually. 50-60 g of radish seeds are consumed for each 1 weave of the area and is sitting at a depth of 1.5 cm. Soil is praised with robbles.

PEST

White butterfly, (*Pierza Rapae L*), from the Lepidoptera series, enters the white butterfly family. The butterfly is similar to white cabbage butterflies, but a little less: 35-40 mm when painting wings. On the top of the front wings, there are small gray or brown spots; The females beyond this, 2 and the males have one stain of the dark color. The length of the caterpillars is 25 mm, a homogeneous green velvet color, the length of the back is yellow lines. It is common everywhere. The pest in the period of the larvae winter in weeds, in the trees, in the wooden walls, in the bark of trees. Butterflies are taken off in May, on the back of the leaves lay on average 150, sometimes more than 500 eggs are in total. Eggs develop 7-10 days, caterpillar about 20 days. Eggs develop 7-10 days, caterpillar about 20 days. Among weeds in Kara and in the leaves turn into a cocoon.

Cocoons winter in stems of different plants, in wooden forests and beams. In the spring, the butterfly crashes earlier than the white butterfly cabbage. As soon as it feeds with juice of various colors, butterflies take off begin to lay eggs. Separately lay eggs on the back of the leaves, plants of the family of cruciferous. One butterfly can postpone an average of 150-300 eggs. After 3-5 days, caterpillars appear from eggs, and originally nibble leaves, and then damage them by doing the holes in them. The turnips plants where many pests remain without leaves and lose their shape. Caterpillars flutter 10-20 days, then turn into cocoons and after 8-12 days new batch of butterflies fly out. In Central Asia, this pest produces 4-5 parties per year, and in the northern regions 2-3 parties of pests. The number of rapid butterflies also sharply decrease as the butterflies of the cathedral with natural killers. In the caterpillars of the frozen white butterflies, Apantales glomeratus L., and in cocoons Pteromalus puparum L. parasites.

Harm. Caterpillars eat the leaves and harm all the plants of the family of cruciferous, including the turnip and radish.

The amount of chemical struggle against the refill white butterfly has criteria, from the presence of 2-3 caterpillars on the plant, it is revealed that after wasting cabbage in 15% of plants there are 1-2 tracks.

White butterfly kapuetrian - Pieris brassicae L., belongs to the family of white butterflies - Pieridae. White butterfly kapuetrian large insect - when the butterflies open the wings, then it is 55-60 mm. Бабочки, как правило, белые - со светло-желтым видом, а поверхность крыльев широкая, на переднем конце передних крыльев имеется широкое пятно, а на переднем крае задних крыльев находится одно черное пятно в виде точки. The female of the butterfly has two drops of black spots on the front wings. Mustache with weaving. It has eggs in the form of a bottle, a yellow color, size of 1.25 mm, the ribs located in length. The size of the mature caterpillar reaches 40 mm, the color of yellow-green, has a lot of warts and black spots in the body, which are covered with hairpins. Type of closed cocoon, yellow, green-eyed, angular, and has many stains and short tumors in the body. The cocoon of pests remains wintering in different trees, in wooden walls, in construction devices. In March-April (May-June in the northern regions), butterflies wake up and fly out. This insect is daytime, butterflies fly to roast, daytime. At night, under the leaves and in different places of shelter, folding the wings up, is motionless.

Butterflies will join a pair for egg deposition. Eggs with pile from 15-200 pcs (total on average 200-300 pcs), in the back of the leaf of the plant of the family of cruciferous. After a week caterpillars appear. Young caterpillars will first live with bouches, feed in the same place, and in 4-6 years they begin to diverge. During the movement, silk can be allocated and usually clinging for it can eat.

According to climatic conditions, the caterpillars stop the food in 15-30 days, (during this time they can eat the leaves of cruciferous plants, leaving only thick roots). In order to become a cocoon, he clings for a firm standing thing (stems, leaf roots, sticks, branches and so on) and winds themselves with silk. In the northern regions, overlooking in this position, it produces one generation per year. In Uzbekistan, as well as in other places, close by climatic conditions, the white butterfly cabbage can give 4 generations per year. In practice, the white butterfly cabbage reduces many predators, parasites of entomophages and diseases. Probably the reason for this is the relatively open existence of the pest.

White butterfly cabbage, can harm all plants family of cruciferous and weeds. In the context of Uzbekistan, this pest hurts the early and evening cabbage. The damage is especially large, the cabbage plants are created, in this case, the production of the crop can be absolutely impossible. In the context of Uzbekistan, if the summer cabbage is not protected, the yield may decrease by 60-70%.

You can extend the killers of trichograms against pest eggs, but it requires additional research. Chemical treatment is carried out if there is up to 5% damage to the period before the cabbage rounding, with the formation of eggs of white butterflies and young caterpillars in them during the cabbage rounding period, where they are damaged by 5-10%, and 5-10 caterpillars are in them.

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