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GROWING A LARGE WAX MOTH BUTTERFLY TECHNOLOGY AND AGROTECHNICS

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ABSTRACT:

It will be possible to acquire new scientific knowledge in order to further develop biological resources for the development of our society in line with modern requirements. In recent years, there has been a growing interest in the use of pests to protect pets and plants. One of the biological resources is the large wax moth (Galleria mellonella). It is present in the hive in accordance with its rare properties, and can fully absorb beeswax.

KEYWORDS. Wax moth, propeller, poacher, biological resource.

INTRODUCTION:

It will be possible to acquire new scientific knowledge in order to further develop biological resources for the development of our society in line with modern requirements. In recent years, there has been a growing interest in the use of pests to protect pets and plants. One of the biological resources is the large wax moth (Galleria mellonella). It is present in the beehive in accordance with its rare properties and can fully absorb beeswax.

The large wax moth is widely used for scientific production. Wax moth has been used as a host of free entomophagous plants in biological control of agricultural pests.

The large wax moth is a member of the family Lepidoplera, a family of moths (Pyralidae). Although this insect is called a propeller, shashen, shashel, in practice it is called a large wax propeller. The large wax moth is adapted to develop in the bee family. In that case, the nourishing environment for him will be in the hive of bees.

The large wax moth is in the beehive in the following order. Butterflies can be seen flying at night all summer long. He hides somewhere during the day. The developmental stage of this insect includes the following phases: eggs, larvae, pre-emergence of fungi, fungi (chrysanthemums), mature species (imago).

In many cases, a large wax moth is propagated in a laboratory under special heaters at a temperature of 28-30 oC and a relative humidity of 70-80% in artificial nutrient media. A variety of work tools, implements and utensils are used to store and reproduce the larvae.

Once the butterflies have appeared, a replacement paper is placed in the container to place the eggs. The temperature of the containers is 30 + 1 oC, relative humidity is 60 + 5% and constant light is generated.

The volume of the mesh prepared for mating consists of a 0.55 l plate cup, under which the fabric is placed. Sprinkle 10% sugar solution and powdered sugar into the plate. Females lay eggs in a solution of powdered sugar. Abiotic conditions, ie temperature 32+ 2 oC, relative humidity 70 + 10% and complete darkness.

The large wax moth is common in Central Asia, and although this insect is called a moth, in practice it is called a large wax moth.

Its two species, the large and the small wax moth (Achroea grisella), are common and cause some damage in beekeeping. Of these pests, the large wax moth is much more useful in the biological fight to propagate the poacher in its worms. The width of the large wax moth butterfly wings is 15-40mm. The color of the female is covered with light brown, grayish coins. Subsequent wings glow grayish-yellow. Lab lips are long, pointing forward and hanging forward. Male butterflies are slightly smaller and thinner, they do not have lip balms. The wingspan is 14-33mm and the body length is 11.3mm.

The size of a large wax moth egg is 0.5-0.6 mm, oval in color, whitish-yellow before the worms emerge. The worms of the first age are white, the head is pale yellow, the body is covered with sparse short yellow hairs. Adult worms are whitish-gray, the head and shoulders are browner, the anterior part of each joint has a dark chitinous shield, the worm reaches 3-4cm in its final age.

To get the eggs, 7-year-old worms are selected and each of them weighs 85 + 10mg and is placed in 150-200 pieces and 50-100 g of feed is put on the bottom of it. The worms turn into mushrooms here and butterflies start flying out of the mushrooms. Then imagos are used that have a 1-2 day physiological state and the same vitality and give a fast growing generation.

The following ingredients are provided in the preparation of feed for the reproduction of large wax moth moth worms. Jars made of 5 liter polypropylene housed an average of 20-25 female and male butterflies, and with the appearance of 4-5 butterflies, special plate sticks are used to lay butterflies eggs in each jar.

The sticks are kept in jars for 10-15 days for 2 days when the butterfly is 5-6 and 1-2 days when it is more, and the eggs are separated from the sticks, separated from the sticks and weighed on a scale weighing 0.5 g. Two-hour eggs (200pcs) in jars with 50–100 g of feed in the obtained eggs. For the worms to grow, the feed is poured in increments, and its thickness should not exceed 2–3 cm. Total feed weight requires 200g.

The practical use of 5-6 year old worms bred in cages reduces the number of worms that need to be used for poaching. Therefore, in order to breed a large wax moth during the season, 100 of the 2-year-old worms that are mass-bred in jars are separated and propagated in jars.

Table 1. Feeding indicators of large wax moth

№	Experience options	Worm length	color	weight	The number of worms in the jar
1	control	1мм	White	Middle	100
2	Bean	1,2 мм	White	active	100
3	Lentils	1 мм	Brown	satisfactory	100
4	corn	1 мм	white	middle	100

Table 2

№	Experience options	Worm length	color	weight	The number of worms in the jar
1	control	1,4	white	0,7	-
2	Bean	1,7	white	1,5	+ 0,8
3	Lentils	1,5	Brown	1,2	+ 0,5
4	corn	1,4	white	0,9	+ 0,2

Table 3

№	Experience options	Worm length, мм	color	weight	state	Room temperature	humidity
1	control	6	White	0,7	Middle	30◦ C	75%
2	Bean	1,7	White	1,3	good	30◦ C	75%
3	Lentils	1,3	Brown	1,1	satisfactory	30◦ C	75%
4	corn	0,8	white	0,8	Middle	30◦ C	75%

Various researchers at one time conducted an experiment to study the nutrient medium of large wax worms, where the technology of mass reproduction studies the effect of the extract of large wax moth larvae on the body of animals, but it was not regularly

divided into two parts. In addition, the biological potential of the coarse wax moth is not yet fully understood and a comprehensive review of the use of the coarse wax moth is required to meet current requirements.

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