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ACTIVITY AND THEIR IMPROVEMENT OF SPECIAL SMALL COMPLEX SLAUGHTERHOUSES

M. Bobomurodov
is a senior teacher at Termiz Institute of Agrotechnology and Innovative Development
M. Khushmurodov
is an assistant at Termiz Agrotechnologies and Innovative Development Institute
Mamatraimova Marifat Farkhod daughter
is a student at the Termiz Institute of Agrotechnology and Innovative Development
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ABSTRACT

In order to develop farms specializing in cocooning, to further increase the yield and quality of cocoons from silkworms, attention is being paid to feeding worms in special worm houses and building modern worm houses. In special worm houses, new technologies are used, such as rooms for rearing worms, preparation and storage of leaves, wrapping and sorting of cocoons, storage of equipment used in worm rearing, recreation and improvement of other rooms.

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In order to develop cocoon breeding in special worm houses, to further increase the yield and quality of cocoons from silkworms, attention is being paid to feeding worms in special worm houses and building modern worm houses. Because, in 2017, special decisions of the Cabinet of Ministers of the Republic were adopted in this regard.

Special worm houses can be widely used not only during the worm feeding period, but also after harvesting the cocoons, for storing products, feeding livestock, drying cotton, and storing grain products.

Special worm houses can have rooms for feeding worms, preparation and storage of leaves, cocoon wrapping and sorting, storage of equipment used in worm feeding, rest and other rooms.

It is better to build a worm house near the trees and near the main road. When choosing a building site, you should pay attention to the climatic conditions and

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which direction to build. 2-3 rows of trees are planted around the worm house to protect from wind and sunlight. When one box of worms is fed, about 285-300 kg of dung and about 600 kg of ghee are excreted as waste. To dispose of this waste, a deep trench of 1 m3 for 10 boxes of worms and about 30 m2 of space for storing ghana seeds is required at a distance of 150-200 m from the worm house. A natural water source should be available near the worm house, in the leaf storage room, and especially during the summer worm feeding period. During the construction of the cemetery 1 box of worms, following the rules of feeding worms and agrotechnics 60-70 m 2 for feeding, feeding, 18-20 meters additional area is necessary.

Worm rearing conditions and agrotechnical process in special worm houses.

In the Bukhara region, a special model worm house for 12 boxes was built. It consists of four worm rearing rooms with a size of 16x10.5 m and a height of 4 m. There are 1.3x1 m windows on each side of worm rearing room. The ground floor and the roof are covered with thatched clay. The wall is made of 1.5 raw bricks, well plastered and polished.

Each room is equipped with 2.5 m long, 3 m high coal or gas stoves with an outside opening. In the wall of the building there are 6 ventilation holes of 30x30 cm, in addition, there are 6 suction pipes.

In the worm house, 2 rows of 4-story racks were built for placing worms. The width of the racks is 2.25 m, the distance between the floors is 0.6 m, and the distance between the racks is 1.5 m.

Heating the toilet. It is necessary to provide heating and ventilation sources to create the required air temperature in the drying room. Heating sources meet the following requirements: 1. Uniform distribution of heat to all parts of the worm house; 2. Rapid rise in temperature; 3. Ability to maintain temperature for a long time; 4. It is necessary to ensure economical consumption of fuel. It is not recommended to use tunic stoves in worm houses, because they quickly give very high temperatures, dry the air and cool down

quickly. As a result, the temperature in the worm house changes dramatically. In special capital worm houses, special ovens made of baked or raw bricks are used to maintain a constant temperature. The body of the stove is placed in a vertical position, and the fire hole with a hermetically closed chimney door and vent is outside the room. 300-500 bricks depending on the size of the oven are enough to build such ovens. It can provide a room of about 200 cubic meters with 250 degrees of heat. In addition, stoves designed for heating incubators can be used. They are also made of brick, 160 cm high, 125 cm long, 50 cm wide, and the smoke outlet chimney is set with an elbow bend.

In rural areas with gas, water heaters, and electric heaters sources, it is possible to use these types of energy for heating systems for heating worm houses.

Ventilation. Ventilation of the worm house is carried out in order to remove excess moisture and polluted air from gaseous products released during the exchange of substances in worms. In addition, ventilation helps to control the temperature and humidity of the building.

The effect of ventilation on the productivity of silkworms was first studied by the Italian scientist Dandolo, who fed one batch of worms in a closed building, and the second batch under normal conditions with good ventilation. One box of worms fed in a closed room produced 1.2 kg, and well-ventilated worms - 48 kg. cocooned.

The carbon dioxide content of the greenhouse air should not exceed 0.2%. Mulberry leaves given to worms also brighten the water. Therefore, 1 box of five-year-old worms needs 10,000 cubic meters of air per day.

According to the conducted experiments, 1 kg of worms releases 0.87 g of carbon dioxide gas per hour. 1 g can contain approximately 2000-2500 worms, depending on the breed. 1 box of worms contains an average of 45,000 worms at 19 g. At the end of the fifth year, the weight of one worm is 5 g, so the weight of one box of worms is 45,000 x 5 x 225.4 kg.

It emits 22540 x 0.87 x 24 = 4698 g of carbon dioxide gas per day. 1 liter of gas weighs 1.976 grams. So, 1 box of worms emits 2377 liters of gas in 1 day. In order for the gas content of the air to not exceed 0.1-0.2 percent, 1 box of worms should receive 2377 cubic meters of air per day. In addition, it is necessary to take into account the servants involved in feeding worms. On average, one person needs 500 liters per hour, and 12 cubic meters of air per day. Therefore, a building with a volume of 100 cubic meters needs to be changed approximately 24 times in 1 day.

1 worm of the fifth instar shines 728 mg of water per day. So, 1 box of five-year-old worms emits 45,000 x 728 mg = 32.76 kg of water per day.

1 cubic meter of absolute dry air absorbs (absorbs) about 10 g of water vapor at 200 degrees. If we consider that the air entering the worm house contains about 50% moisture, then the air leaving the room the air is fully saturated, that is, every cubic meter of air takes 5 g of moisture out of the worm house. In this case, the air requirement of 1 box of worms per day is 31000:5 = 6200 cubic meters in the fifth year of the worm

The following amount of air should be supplied to the kennel every second:

10000 m^3 :24 x 60 x 60= 0,115 m^3 This amount of air should be passed through the ventilation hole. If the diameter of the

ventilation hole is large, the speed of wind movement will be low. Air movement per second at 0.5 m vent:

0,115:0,5 = 0,23 m^2 ya'ni har bir quti beshinchi yoshda boqilayotgan qurtlarga bitta 0,5 x 0,5=25 m^2 hajmda shamollantirib turish kerak.

0.115:0.5 = 0.23 m2, that is, each box should be ventilated in the volume of 0.5 x 0.5=25 m2 for the worms fed in the fifth year.

Electronic thermometer that measures the temperature of the wormhole

The frequency of complete air exchange in the nursery depends on the hygrothermal regime of the external environment and ventilation devices. The dependence of air exchange on the hygrothermal conditions of the external environment and the method of ventilation and air exchange in the worm house proved that it affects the biological indicators of the silkworm and the technological properties of the cocoon.

According to the rules of agrotechnics, the period of ventilation during complete air exchange of the worm house should be from 20 to 30 minutes, depending on the temperature of the outside environment. The duration of air exchange in an unheated worm house depends on the internal and external temperature and the method of ventilation. It is advisable to carry out ventilation with the help of special devices to ensure complete exchange of air in the nursery. The VK-3 electric fan, which pulls out 260 m3 of air per hour, was tested. As a result of observations, depending on the size, size and age of the worms, the air flow speed from 0.12-0.15 m/sec to 0.22-0.25 m/sec is normal for complete air exchange. it was found out.

Currently, silkworms are kept at 25-27°C in collective farms of our republic. The air in the worm house with a temperature of 26°C can be completely changed using a

VK-3 electric fan, with an air movement speed of 0.12-0.15 m/sec, for an average of 40 minutes. During the ventilation period, the temperature in the worm house drops by only 0.5-0.6°C, and it takes 21-22 minutes to bring it back to its previous state. It takes 25 minutes for complete air exchange when the air in the worm house is ventilated at a speed of 0.22-0.25 m/sec, and the temperature drops by 0.3°C and humidity by 2.5% during this period. It takes 25 minutes to restore it. In addition, it does not matter whether the temperature and humidity of the outside air is high or low here. When the air in the shelter was ventilated in a simple way, that is, by opening the door or window, it took 64 minutes for the air to be completely exchanged, and the temperature decreased by 2-3°C, humidity by 9-13%, bringing it back to its previous state. it takes 53-56 minutes to bring. The uniform distribution of temperature and humidity in the worm house depends on the type of worm house, heating and ventilation method. The temperature difference between the lower and upper floors of shelves is 1.5-2°C or 0.75-1.0°C per meter, 2-3°C horizontally in large rooms. The temperature changes are different in different places of worm houses, door, window, fan housing depends on the location of heating systems. Depending on the temperature and humidity level and where the worms are located in the worm house, their development and cocoon weight differed. The yield of cocoons for 1 box of worms was 69 kg in the lower layer, 74 kg in the middle layer, and 79 kg in the upper layer.

References:

1. Abdullaev U.A. Tutchilik, «Mexnat», Toshkent, 1991.
2. U. Khudayberdieva, S. Navruzov, N. Rajabov, O. Karimov and K.H. Fozilova Relationship between life of mate butterflies and leading selection characteristics E3S Web of Conferences 244, 02028 (2021)
3. Fozilova Khurshida Pardaevna Rajabov Narzulla Orolovich The impacts new mullberry varieties on the silk worm productivity and their technological indicators 2018 journal International journal for innovative research in multidisciplinary field (ijirmf).
4. N Rajabov Influence new varieties mulberry on the viability caterpillars and the performance of silkworms cocoons 2018 Juornal Bulletin of Science and Practice
5. Narzulla Orolovich Rajabov, Shavkat Ramazanovich Umarov, Bakhtiyor Ubaydullaevich Nasirillaev, Khurshida Pardaevna Fozilova The Importance of the New Selection System and Varieties of Tut in the Development of the Silk Industry of Uzbekistan Solid State Technology 150-159
6. Bobomurodov Murodjon Xojimurotovich, Sayfullayev Asror Anvar o'g'li. The Coefficient of Use of Mulberry Leaves in the Feeding of Mulberry Silkworms by Age JournalNX 161-162
7. Murodjon Bobomurodov The Coefficient Of Use Of Mulberry Leaves In The Feeding Of Mulberry Silkworms By Age Scienceweb academic papers collection

8. Khamzaev Temur Yigitalievich, Bobomurodov Murodjon Khojimurotovich, Mamatraimov Kamoliddin Turgun o'g'li Selection and preparation of arable land for the organization of intensive mulberry trees in the scheme of planting 0.9 x0. 2 m from mulberry seedlings in the climatic International Journal of Human Computing Studies