



COMPARATIVE ANALYSIS OF SILKWORM REARING CONDITIONS AND AGROTECHNICS IN SMALL COMPLEX SPECIAL WORM HOUSES.

Bobomurodov Murodjon Khojimurodovich¹

¹Senior teacher of Termiz Agrotechnologies and
Innovative Development Institute.

Khaitquloba Gulkhayo Iskandar's²

²daughter Student at the Termiz Institute of
Agrotechnologies and Innovative Development

Kurbanova Gulzoda Azamat's daughter³

³Student at the Termiz Institute of Agrotechnologies
and Innovative Development

<https://doi.org/10.5281/zenodo.7115941>

ARTICLE INFO

Received: 22nd September 2022

Accepted: 24th September 2022

Online: 27th September 2022

KEY WORDS

*Special worm house,
temperature, humidity, Silk
production, worm house, shelves.*

ABSTRACT

It is known that temperature plays a very important role in agrotechnics of silkworm feeding. Regardless of the weather, temperature and humidity are important. Therefore, it is important to have stoves in every worm house and to use them correctly.

Today, silkworms are cultivated in more than 20 countries around the world, 650,000 tons of live silkworm cocoons are grown in the People's Republic of China, 150,000 tons in India, and 24,000 tons in Uzbekistan.

In the cultivation of this cocoon product, mulberry leaves, which are the sole food of the mulberry silkworm, and special worm houses specialized in feeding the silkworm are important. In countries such as China, India, and Vietnam, which are the leaders in the field of cocooning in the world, special attention is paid to the establishment of high-yielding cocoons providing food and the construction of special worm houses.

Accordingly, as in every field, some shortcomings have been noticed in cocooning, and the fact that the main

cocoon product is grown in the households of the population is becoming an urgent problem.

In this regard, in order to further develop the cocooning industry in our Republic, in order to strengthen the feed base of the sericulture industry in our country, to establish new intensive farms and to increase its productivity, the President of the Republic of Uzbekistan dated August 20, 2018 "More than the existing opportunities in the cocooning industry in the Republic" Decision No. PQ3910 "On Measures for Effective Use" was adopted, in which the increase of the export potential of silk products due to the establishment of intensive traps, modernization of cocoon industry enterprises and "Silk in the cocoon



industry" dated January 17, 2020 In the decision PQ 4567 "On additional measures for the development of the worm feed base" to encourage the expansion of mulberry farms in the republic, the use of water-saving irrigation technologies in mulberry farming, and the effective implementation of agrotechnical activities, innovative ideas, scientific developments and scientific

achievements a number of tasks have been set to increase the production volume of the cocoon industry by widening its feed base.

It is known that temperature plays a very important role in agrotechnics of silkworm feeding. Regardless of the weather, temperature and humidity are important. Therefore, it is important to have stoves in every worm house and to use them correctly.

1- table

| The place where the temperature is measured | In a heated worm house (size 5x3 m, height 3 m) | | | In an unheated worm house (size 9x5 m, height 4 m) | | |
|---------------------------------------------|----------------------------------------------------|---------------------------------|----------------------|-------------------------------------------------------|---------------------------------|----------------------|
| | Downstairs temperature | Temperature on the middle floor | Temperature upstairs | Downstairs temperature | Temperature on the middle floor | Temperature upstairs |
| 1. At the entrance to the toilet | 23,0 ⁰ | 24,7 ⁰ | 24,8 ⁰ | 21,5 ⁰ | 22,2 ⁰ | 23 ⁰ |
| 2. In the middle part of the cemetery | 22,1 ⁰ | 23,0 ⁰ | 24,0 ⁰ | 20,4 ⁰ | 21,3 ⁰ | 22 ⁰ |
| 3. In the middle part of the cemetery | 21,1 ⁰ | 22,4 ⁰ | 23,0 ⁰ | 19,5 ⁰ | 20,3 ⁰ | 21,1 ⁰ |

2- table

The difference in cocoon weight depending on the location of worms in the wormery and temperature changes:

| The location of the worms in the wormery | Average cocoon weight (g) | | |
|------------------------------------------|---------------------------|---------------------|------------------|
| | Downstairs | On the middle floor | On the top floor |
| 1. At the entrance to the shelter | 2,55 | 2,86 | 3,11 |
| 2. In the middle of the worm house | 2,10 | 2,40 | 2,76 |
| 3. At the end of the wormhole | 1,81 | 2,00 | 2,31 |



According to the condition of construction and selection, worm houses used for worm breeding in our republic are divided into three categories.

1-Special capital buildings, i.e. buildings made of brick, which fully meet agrotechnical requirements. These include special (small and large complex) buildings built for worm houses - worm houses, farm buildings adapted to worm houses, clubs, palaces, school buildings. It is possible to create a complete hygrothermal regime in buildings of this type.

2-Buildings with pakhsadan or single walls. These include barns, stables, warehouses and other buildings.

3-Light-type facilities: fenced porches, sheds. Devices of this category are used only for feeding adult worms, depending on the weather conditions.

Hoists (special hoists). Removal of worms from one place, thinning, replacement of gnats is carried out with the help of leaves or branches. But applying such methods to worms of the first age creates difficulties. Therefore, in order to facilitate the work, hoists are used. It is easy to pick up the worms that have emerged on the paper trays with their food. Syomniks are made of thick wrapping paper 25 x 20 cm. The paper is perforated according to the size of the worm using special hole-forming machines. Paper lifters (screens) are usually used for worms of the first and second ages. Then it is removed together with the ghana.

Shelves. In order to protect silkworms from pests and ground (floor)

moisture, it is necessary to keep them in special cages. Shelves are made of various materials: boards, iron, beams, beams, rods, reeds, etc. is made. All types of racks are divided into two groups: sectional or collapsible racks and permanent racks. Collective trays are used for feeding worms of all ages. They can be made of 2, 3, 4 and 8-10 layers and installed in an upright position.

Permanent suri-etajerkas, usually 2, 3, 4 layers, are installed in some special worm houses.

Standard shelves. These are 2-3 stories long it is made of cut wood. The length of the shelf is 2 m, the width is 1 m, the floor space is 0.7-0.8 m. Such shelves can be used in different rooms. In addition, the number of these shelves is small, and in order to create more feeding space, they can be spaced at a distance of 2 m and connected to each other by racks or wires and ropes to create a worm feeding space along the length of the building. In this case, the shelves act as an intermediate support.

In the last period, standard and 3-layered iron racks divided into pieces are used in silk industry. The dimensions of these shelves are 2 x 1 m, height 1.95 m. The distance between floors is 0.4 m from the ground, and the distance between floors is 0.7-0.8 m. These shelves can be placed along the length of the worm house, and their intervals can be connected to each other with long branches or wires and ropes. These shelves can be used for several years.



References:

1. 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
2. Murodjon Bobomurodov The Coefficient Of Use Of Mulberry Leaves In The Feeding Of Mulberry Silkworms By Age Scienceweb academic papers collection
3. 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