

REARING PERFORMANCE OF *BOMBYX-MORI L.* SILKWARM IN MONSON SEASON OF NANDED, DISTRICT.

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Abstract

Farmers in Nanded district choose sericulture as secondary source of money. I visited several places of farmer which are installing their shade. Present investigation has been made to study the rearing performance of multivoltine Bombyx Mori L. Silkworm breed. It has been realized statistically for different traits in sericulture, which will help in selecting the alternate of mulberry silkworm, which is a more susceptible in monsoon season. The result obtained showed the Bombyx Mori L. Rearing can be most promising for the rainy season and it is very less susceptible to different silkworm disease also.

Key Wors: Nanded, Multivoltine, Breeds, *Bombyx Mori L.*

Introduction

To synthesis productive silkworm breeds is an important component in the development of sericulture, which is depend upon testing fairly large number of breeds/hybrids. Evaluation of different breeds is undoubtedly the most important method of identify their superiority. Silk is a natural fiber which although has claimed less than 1% of the world textile fiber, it total production is studied increase in spite of an increase in demand of manmade synthetic fibers, which texture tensile qualities, luster, comfort, adaptability to all climate condition and ability to take up dice and some of the natural qualities of silk. (Anonymous, 1981).

Silk gives a look of rugged yet smooth cotton, warmth of wool and subdued shine of silk which is much final and elastic than any other fiber. The cocoons of silk worm *Bombyx Mori L.* are being spun into thread like cotton and the weaving done in handloom under cottage industry, it has also medicinal value. Concentrated patches of plantation can be seen in Pawdewadi, Dhanaj, vishnupuri, mugut, Barad, Musalmanwadi and adjoining areas. By using this first time and attempt to check feasibility of rearing *Bombyx Mori L.* in Nanded climatic conditions with assessment of many parameters in monsoon seasons was attempted.

MATERIAL AND METHODS

The present study has been conducted in Nanded. *Bombyx Mori L* silkworm wear selected for the experiment to check their rearing performance in Nanded reason in monsoon season. The rearing was conducted in consecutive to monsoon seasons to analyze the various aspect of

silkworm i.e. hatching percentage, yield/10000 larvae (by number), yield/10000 larvae (by weight), cocoons weight, shell weight, shell ratio and pupation rate. Standard rearing method was adopted as recommended by Ueda. S etal (1962). During rearing other precautionary measures as use of disinfectant, removal of diseased silkworm larvae general cleanliness and sanitation were taken up proceed for the study of seasonal variation.

RESULT AND DISCUSSION

The silkworm *Bombyx Mori L* breed selected for experiment was subjected fluctuating agro-climatic conditions in monsoon season. On evaluation of results for the various rearing parameters viz. hatching %, yield/10000 larvae by number, by weight, cocoons weight, shell weight, cocoons shell% and pupation rate as shown in table 1. *Bombyx Mori L* silkworm should better results regarding yield/10000 larvae by number (8600), by weight (28.89), cocoons weight (2.34 g), shell weight (0.22 g), cocoons shell% (15.46) and pupation rate (90.56%). In Present study also same of the character like yield, by number and by weight, shell ratio, total days and pupation rate in % showed significant differences among the both monsoon seasons of year 2022 and 2023 and that adaptation is very important in silkworm. These characters are not only controlled by since and are known to be influenced by different climatic factors such as temperature, humidity, photoperiodic cycle, nutrition etc (Watanabe, 1928).

Table No.1. Performance of *Bombyx-Mori L* with different parameters in Monsoon season.

Generation	No. Of Eggs Per Laying	Date of hatching	Date of maturing	Total days	Weight of 10 grown worms(gm)	Weight of cocoons (gm)	Weight of 10 cocoons without pupa(gm)	Silk ratio	Larve by no.	EER yield by wt(Kg)	Pupation rate%
Monsoon 2021-2022	378	11 July	2 Aug.	23 days	85 gm	23.48	3.48	15.07	8650	28.59	88.49
Monsoon 2022-2023.	383	13 July	6 Aug.	25days	88 gm	24.22	3.51	15.53	8970	30.32	90.73

Table No.1. Performance of *Bombyx-Mori L* with different parameters in Monsoon season.

Months	Temperature °C		Humidity %		Rainy Days
	Maximum	Minimum	Maximum	Minimum	
July/ Aug. 2021-2022	31.7°C	24.6°C	93.01%	76.4%	Nil
July/ Aug. 2022-2023	31.3°C	30°C	73%	61.3%	7

The present City shows similar to several s in tropical country where they were succeed original repairing Mishra 1987, Devaiah et al., 1981 *Bombyx Mori L* silk worm bearing showed better results which support the monsoon climatic condition in Nanded district.

REFERENCES.

1. Ueda, S and Lizuka, H. 1962: studies on the effects of rearing temperature affecting the health of silkworm larvae upon the quality of cocoon-I. Effect of temperature in each instar. *Ata Sericologia*, 41(4): 6-21.
2. Anonymous, 1981: Handbook of Agriculture, India Council of Agriculture Research, New Delhi. 1303.
3. Anonymous, 1987 : Oil Seed Production, Agriculture situation in India, Directorate of Economics & Statistics, ministry of Agriculture, New Delhi -12:926-928.
4. Suresh Kumar, N.; Basvaraja, H.K.; Nanje Gowda, B.; Joge, P.G.; Kalpana GV.; Mal Reddy, N. and Kariappa, B.K. 2004a : effect of high temperature and high humidity on the post cocoon parameters of parents, foundation crosses, single and double hybrid of biovoltine silkworm, *Bombyx Mori L*. *Indian J Seric.*, 42(2):162-168.