APPENDIX - I. Mean larval size (g) of *P. mori* with reference to breed, instars and seasons (Mysore).

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### Appendix - I Contd.

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C.D. Season x instar x breeds = 0.04215
Season x instar = 0.01333
Season x breed = 0.01885
Appendix - II.  Mean larval size (g) of *P. mori* with reference to breed, instars and Seasons (mugur).

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C.D. Season x instars x breed: - 0.016965
Season x instars: - 0.005365
Season x breeds: - 0.006926

* Newly hatched larvae
## APENDIX - III

**ANALYSIS OF VARIANCE - Larval weight of B. mori as affected by different factors (Mysore).**

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**Error**  

| Total | 2397 | 0.00185026     |     |

**Note:**  * = Significant at - 0.05 level. ** = Significant at - 0.01 level.
N.S. = Not Significant.
## APPENDIX - IV

### ANALYSIS OF VARIANCE - LARVAL WEIGHT OF B. mori as affected by different factors (Mugur)

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## APPENDIX - VI

### ANALYSIS OF VARIANCE - SURVIVAL OF LARVAE (MUGUR)

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## APPENDIX - VII

### ANALYSIS OF VARIANCE - SINGLE COCOON WEIGHT (MYSORE)

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<td>&lt; N.S.</td>
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<tr>
<td>Total</td>
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### APPENDIX - VIII

#### ANALYSIS OF VARIANCE - SINGLE COCOON WEIGHT (MUGUR)

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<td>Breeds</td>
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### Appendix IX

**Analysis of Variance - Egg Production (Mysore)**

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<td>1708.24</td>
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<tr>
<td>Breeds</td>
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<td>936183.85</td>
<td>2235.13</td>
<td>7.09</td>
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<tr>
<td>Season x Level of population</td>
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<td>3825.58</td>
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<tr>
<td>Season x Breed</td>
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<td>Level of population x Breed</td>
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<td>Season x Level of population x Breed</td>
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**APPENDIX - X**

**ANALYSIS OF VARIANCE - EGG PRODUCTION (MUGUR)**

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<td>Breeds</td>
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<td>Season x Level of population</td>
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<td>5673.40</td>
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<td>18.566</td>
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<td>Season x Level of population x Breed</td>
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<td>1119.76</td>
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<td>4</td>
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**Total** | 659 |
Appendix - X - A. Analysis results of mulberry leaf, cultivated in two localities

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<th>Sl. No.</th>
<th>Variety</th>
<th>Locality</th>
<th>Moisture %</th>
<th>Crude Protein %</th>
<th>Total Minerals %</th>
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<td></td>
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<td>Tender</td>
<td>Medium</td>
<td>Tender</td>
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<tr>
<td>1.</td>
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<td>Mugurt</td>
<td>59.57</td>
<td>59.17</td>
<td>15.40</td>
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<td>Mysore</td>
<td>67.56</td>
<td>65.31</td>
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<tr>
<td>2.</td>
<td>Local Mugur</td>
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<td>54.43</td>
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<td></td>
<td>Local Mysore</td>
<td></td>
<td>65.55</td>
<td>58.09</td>
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* Cultivated under rainfall condition.
* Cultivated under irrigated condition.

* Data collected from the chemistry department of the institute.
Appendix - XI. Mean larval size (g) of different breeds of *B. mori* when reared on two varieties of mulberry grown under different agronomic treatments.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Instar</th>
<th>Breed</th>
<th>V1S1N1</th>
<th>V1S1N2</th>
<th>V1S2N1</th>
<th>V1S2N2</th>
<th>V2S1N1</th>
<th>V2S1N2</th>
<th>V2S2N1</th>
<th>V2S2N2</th>
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<td>0.0032</td>
<td>0.0031</td>
<td>0.0033</td>
<td>0.0035</td>
<td>0.0036</td>
<td>0.0034</td>
<td>0.0034</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kalimpong 'A'</td>
<td>0.0040</td>
<td>0.0042</td>
<td>0.0043</td>
<td>0.0043</td>
<td>0.0045</td>
<td>0.0047</td>
<td>0.0044</td>
<td>0.0045</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pure Mysore x HS6</td>
<td>0.0034</td>
<td>0.0029</td>
<td>0.0041</td>
<td>0.0041</td>
<td>0.0043</td>
<td>0.0043</td>
<td>0.0042</td>
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<tr>
<td></td>
<td></td>
<td>Pure Mysore x Kalimpong 'A'</td>
<td>0.0036</td>
<td>0.0041</td>
<td>0.0039</td>
<td>0.0042</td>
<td>0.0043</td>
<td>0.0044</td>
<td>0.0042</td>
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<tr>
<td>II</td>
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<td>Pure Mysore</td>
<td>0.015</td>
<td>0.018</td>
<td>0.017</td>
<td>0.019</td>
<td>0.023</td>
<td>0.026</td>
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<td></td>
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<td>Kalimpong 'A'</td>
<td>0.033</td>
<td>0.035</td>
<td>0.039</td>
<td>0.041</td>
<td>0.046</td>
<td>0.056</td>
<td>0.043</td>
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<td>Pure Mysore x HS6</td>
<td>0.018</td>
<td>0.020</td>
<td>0.022</td>
<td>0.023</td>
<td>0.031</td>
<td>0.046</td>
<td>0.041</td>
<td>0.046</td>
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<tr>
<td></td>
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<td>Pure Mysore x Kalimpong 'A'</td>
<td>0.026</td>
<td>0.022</td>
<td>0.024</td>
<td>0.026</td>
<td>0.047</td>
<td>0.051</td>
<td>0.041</td>
<td>0.048</td>
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<tr>
<td>III</td>
<td>III</td>
<td>Pure Mysore</td>
<td>0.065</td>
<td>0.090</td>
<td>0.089</td>
<td>0.087</td>
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<td>0.117</td>
<td>0.102</td>
<td>0.102</td>
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<tr>
<td></td>
<td></td>
<td>Kalimpong 'A'</td>
<td>0.132</td>
<td>0.147</td>
<td>0.149</td>
<td>0.150</td>
<td>0.159</td>
<td>0.169</td>
<td>0.172</td>
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<td>Pure Mysore x HS6</td>
<td>0.084</td>
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<td>0.123</td>
<td>0.121</td>
<td>0.123</td>
<td>0.151</td>
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<td>0.132</td>
<td>0.155</td>
<td>0.166</td>
<td>0.154</td>
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(Contd.)
### Treatment

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<th>V1S2N1</th>
<th>V1S2N2</th>
<th>V2S1N1</th>
<th>V2S1N2</th>
<th>V2S2N1</th>
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<td>IV</td>
<td>Pure Mysore</td>
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<td>0.465</td>
<td>0.446</td>
<td>0.446</td>
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<td>0.495</td>
<td>0.441</td>
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<tr>
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<td>Kalimpong 'A'</td>
<td>0.623</td>
<td>0.571</td>
<td>0.591</td>
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<td>0.579</td>
<td>0.637</td>
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<td>Pure Mysore x HS6</td>
<td>0.411</td>
<td>0.447</td>
<td>0.455</td>
<td>0.461</td>
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<td>0.558</td>
<td>0.553</td>
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<td>Pure Mysore x Kalimpong 'A'</td>
<td>0.462</td>
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<td>0.557</td>
<td>0.543</td>
<td>0.564</td>
<td>0.580</td>
<td>0.548</td>
<td>0.556</td>
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<td>V</td>
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<td>2.556</td>
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<td>2.764</td>
<td>2.955</td>
<td>3.098</td>
<td>2.987</td>
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C.D. Agronomic treatment x Breed = 0.015
Agronomic treatment x instars = 0.0169
Breed x Instars = 0.0120
### APPENDIX - XII

#### ANALYSIS OF VARIANCE - LARVAL WEIGHT OF SILKWORM

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<td>0.00361569</td>
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<tr>
<td>Control Vs rest</td>
<td>1</td>
<td>8.81645760</td>
<td>2954.355</td>
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<tr>
<td>Breeds</td>
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<td>Treatments (Agronomic)</td>
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<td>0.00392431</td>
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<tr>
<td>Instars x Breeds</td>
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<td>23.65966323</td>
<td>9603.737</td>
<td>0.0120</td>
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<td>Instars x Treatments (Agr.)</td>
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<td>0.41327865</td>
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<tr>
<td>Instars x Breeds x Treatments</td>
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<td>0.02432104</td>
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<td>0.0339</td>
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<td>Season x Instars x Control Vs rest</td>
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<td>183.331</td>
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<td>Season x instars x breed x treatment (Agronomic)</td>
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<td>Error</td>
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<td>0.00283422</td>
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<td>Total</td>
<td>3299</td>
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Appendix - XIII. Mean larval duration of different breeds of *B. mori* reared during different seasons on 2 varieties of mulberry grown under different agronomic treatments.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Breed</th>
<th>Season</th>
<th>V1S1N1</th>
<th>V1S1N2</th>
<th>V1S2N1</th>
<th>V1S2N2</th>
<th>V2S1N1</th>
<th>V2S1N2</th>
<th>V2S2N1</th>
<th>V2S2N2</th>
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<tbody>
<tr>
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<td>Jul-Aug '70</td>
<td>31.67</td>
<td>31.63</td>
<td>31.50</td>
<td>31.25</td>
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<td>29.79</td>
<td>31.08</td>
<td>30.75</td>
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### APPENDIX - XIV

#### ANALYSIS OF VARIANCE - LARVAL DURATION

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Appendix - XV. Mean survival of larvae (per 10,000) of different breeds of *B. mori* reared on mulberry grown under different agronomic treatments.

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## APPENDIX - XVI

**ANALYSIS OF VARIANCE - SURVIVAL RATE (Per 10,000 Larvae)**

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### APPENDIX - XVII

**ANALYSIS OF VARIANCE - COCOON YIELD BY WEIGHT**

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## APPENDIX - XIX

### ANALYSIS OF VARIANCE - SINGLE COCOON WEIGHT

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# APPENDIX - XX

## ANALYSIS OF VARIANCE - SINGLE SHELL WEIGHT

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### ANALYSIS OF VARIANCE - PUPAL WEIGHT

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## APPENDIX - XXV

### ANALYSIS OF VARIANCE - LARVAL WEIGHT OF SILKWORM

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## Appendix - XXVII.

Mean survival rate, single cocoon weight and eggs - produced by different breeds of *B. mori* when reared in different generations on different levels of different varieties of mulberry.

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### Appendix - XXVII. (Contd.) Variety : Local.

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**ANALYSIS OF VARIANCE - SINGLE COCOON WEIGHT OF SILKWORM**

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#### ANALYSIS OF VARIANCE - FILAMENT LENGTH OF SILKWORM

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Appendix - XXXIII. Mean survival of larvae * (per 10,000) of different breeds of *R. mori* at different temperatures and relative humidities.

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C.D. Temperature x R/H x Breed 116.86 Breed 29.22 R/H 16.87 Temperature - 33.73

* Average of five seasons.
## APPENDIX - XXXIV

### ANALYSIS OF VARIANCE - SURVIVAL RATE OF SILKWORM

<table>
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Appendix - XXXVI. Mean cocoon weight (g) of different breeds of *B. mori* at different temperatures and relative humidities.

Mean cocoon weight in grammes in different breeds.

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<tr>
<th>Temperature (°C)</th>
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<th>Hosa Mysore</th>
<th>Kalimpong 'A'</th>
<th>J 122</th>
<th>Pure Mysore x J 122</th>
<th>Hosa Mysore x Kalimpong 'A'</th>
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**APPENDIX - XXXVI**

**ANALYSIS OF VARIANCE - SINGLE COCOON WEIGHT**

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### Appendix XXXVII. Mean single cocoon shell weight (g) of different breeds of *B. mori* at different temperature and humidities.

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<th>Hosa Mysore</th>
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### Appendix - XXXVIII

**Analysis of Variance - Single Shell Weight of Silkworm**

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Appendix XXXIX. Mean number of eggs laid by different breeds of *B. mori* at different temperature and relative humidities.

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<th>Temperature (°C)</th>
<th>Humidity %</th>
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<th>Hosa</th>
<th>Kalimpong 'A'</th>
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<th>Pure Mysore x J 122</th>
<th>Hosa Mysore x Kalimpong A</th>
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## APPENDIX - XL

### ANALYSIS OF VARIANCE - EGG PRODUCTION

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CONCLUSION

The following overall conclusions can be drawn from the studies presented herein.

1. Crowding of the larvae of Bombyx mori (L) during rearing affects the silk yield adversely and hence may be avoided. However, optimum levels may have to be worked out for the younger and late stages of the silkworm.

2. As different breeds of silkworm have different capacities for silk-production and egg-production it is necessary that the most suitable breeds are selected for commercial rearing purposes and suitable for the different locations. The four breeds which have emerged out in the present studies as the most suitable for commercial rearing namely, Kalimpong 'A' x Nan Nung 6 D, Kalimpong 'A', Pure Mysore x Kalimpong 'A' and J 122 may be used for further trials at different locations and seasons.

3. The March-April season is found to be a lean period for the production of silk by the silkworms. It will be worth while to select out breeds which are suitable for this season.
4. The variety of mulberry used for rearing has considerable influence on the ultimate silk-production. Kanva-2 for instance has been found to be the best in the present studies. This indicates that further improvement in silk-production is possible with better varieties of mulberry.

5. Nitrogen fertilization has been seen to be advantageous and the optimum level of N P K in total has to be worked out. Closer spacing of mulberry is seen to be not advantageous and may have to be discouraged.

6. From the view point of silk-production, reduction in the quantity of leaf used for feeding is highly detrimental. However, under-nutrition has been found to be not affecting adversely the production capacities of the insect.

7. Maintaining the silkwork at 26°C and 70% R.H. and permitting them to spin the cocoons at 22°C and 70% R.H. give the maximum cocoon production.
8. The present studies have revealed that improved methods of rearing and management can help in establishing the silkworm survival rate and cocoon qualities even under adverse climatic condition and localities. Though until recently there has been a feeling that improved breeds, especially those of bivoltines cannot give good results under the Indian climatic condition, the improved method of rearing with proper spacing, feeding and other care given to the larvae have been shown to result in better results with the cocoons crop.

9. Further, the present studies have shown that the areas like Mugur with rainfed conditions which have been so far considered unsuitable for introduction of new races of silkworm, especially bivoltines, can be utilized for economic production of silk with appropriate care with regard to choice of breeds and rearing practices.
PLATE 1

Cardboard cellular mountages arranged for cocoon spinning of silkworm *B. mori*.

A - Mature larvae kept on the cellular mountage for cocoon formation

M - Mountage

L - Mature larvae

B - Cocoons completed in the cellular mountage

C - Cocoons formed
Leaf preservation box - for storing the leaf for longer duration

g.c. - Gunny cloth covered on various sides and over the box

m.l. - Mulberry leaf
PLATE 3

Mulberry varieties used for the various feeding level trials

A - Local variety

B - Kanza 2 variety

C - Koosen variety
PLATE 4

Silkworms reared under different population levels

A - Second instar larvae
   i) 200 larvae/area
   ii) 400 larvae/area

B - Fourth instar larvae
   i) 200 larvae/area
   ii) 400 larvae/area
PLATE 5

Improved rearing arrangements for maintaining early instar silkworms

1. Open tray to show various arrangements
   a) Paraffin paper lined in the bottom of the tray
   b) Foam pads
   c) Silkworms
   d) Paraffin paper for covering the tray

2. Trays piled up in the form of boxes over the rearing stand
Fifth instar larvae of various breeds of *Bombyx mori* reared under two population levels

I. Fifth instar larvae reared at Mugur (Under 200 larvae/area)

a) Kalimpong 'A'
b) A4e
c) Kolar Gold
d) Nistari
e) Kalimpong 'A' x Nan Nung 6D
f) Nan Nung 6D
g) C 108
h) J 122

II. Fifth instar larvae reared at Mysore

A - 200 larvae/area
B - 400 larvae/area

1. Kalimpong 'A' x Nan Nung 6D
2. J 122
3. Kalimpong 'A'
4. Nistari
5. J 122
6. Pure Mysore x J 122
PLATE 7

Cocoon of various breeds of *Bombyx mori* reared under two population levels (Mysore)

A - Pure Mysore x J 122 breed

4 - 400 larvae/area
5 - 200 larvae/area

B - Kalimpong 'A' x Nan Nung 6D breed

4 - 400 larvae/area
5 - 200 larvae/area
PLATE 8

Cocoons of various breeds of *Bombyx mori* reared under different population levels (Mysore)

C - Kalimpong 'A' breed

4 - 400 larvae/area
5 - 200 larvae/area

D - J 122 breed

4 - 400 larvae/area
5 - 200 larvae/area
PLATE 9

Cocoons of different breeds of *Bombyx mori* reared under two population levels (Field station)

C - Kalimpong 'A'

4 - 200 larvae/area
5 - 400 larvae/area

D - J 122

4 - 200 larvae/area
5 - 400 larvae/area
PLATE 10

Cocoons of various breeds of *Bombyx mori* reared under two population levels (Main station)

E - Nan Nung 6D

4 - 400 larvae/area
5 - 200 larvae/area

F - C 108

4 - 400 larvae/area
5 - 200 larvae/area
PLATE 11

Cocoons of different breeds of *Bombyx mori* reared under two population levels (Field station)

E - Nan Nung 6D

4 - 400 larvae/area
5 - 200 larvae/area

F - C'108

4 - 400 larvae/area
5 - 200 larvae/area
PLATE 12

Cocoons of Pure Mysore breed reared under two population levels

G1 - Reared at Mysore
   4 - 400 larvae/area
   5 - 200 larvae/area

G2 - Reared at Mugur
   4 - 400 larvae/area
   5 - 200 larvae/area
PLATE 13

Fifth instar larvae of *Bombyx mori* reared with the leaves of mulberry grown under various cultivation methods

A - Larvae of Kalimpong 'A' reared with Kanva 2 grown under various treatments

1. 45 x 45 cm spacing + 900 kg N/ha
2. 45 x 8 cm spacing + 900 kg N/ha
3. 45 x 45 cm spacing + 100 kg N/ha
4. 45 x 8 cm spacing + 100 kg N/ha

B - Larvae of Kalimpong 'A' reared with Local variety grown under various treatments

1. 45 x 45 cm spacing + 900 kg N/ha
2. 45 x 8 cm spacing + 900 kg N/ha
3. 45 x 45 cm spacing + 100 kg N/ha
4. 45 x 8 cm spacing + 100 kg N/ha
Fifth instar larvae of *Bombyx mori* reared with leaf of mulberry grown under different cultivation methods

I - Larvae of Pure Mysore x Kalimpong 'A' reared with Kanva 2 variety

A - 45 x 45 cm spacing + 900 kg N/ha
B - 45 x 8 cm spacing + 900 kg N/ha
C - 45 x 45 cm spacing + 100 kg N/ha
D - 45 x 8 cm spacing + 100 kg N/ha

II - Larvae of Pure Mysore x H.S.6 reared with Kanva 2 variety

A - 45 x 45 cm spacing + 900 kg N/ha
B - 45 x 8 cm spacing + 900 kg N/ha
C - 45 x 45 cm spacing + 100 kg N/ha
D - 45 x 8 cm spacing + 100 kg N/ha
PLATE 15

Cocoons of various breeds Bombyx mori reared with leaves of mulberry grown under different cultivation methods

A - Reared with Kanva 2 under 45 x 45 cm spacing and 900 kg N/ha

1. Kalimpong 'A'
2. Pure Mysore x Kalimpong 'A'
3. Pure Mysore x H.S.6

B - Reared with Local variety under 45 x 45 cm spacing and 900 kg N/ha

1. Kalimpong 'A'
2. Pure Mysore x Kalimpong 'A'
3. Pure Mysore x H.S.6
PLATE 16

Cocoons of various breeds of *Bombyx mori* reared with leaves of mulberry grown under different cultivation methods

A1 - Reared with Kanva 2 under 45 x 45 cm spacing + 100 kg N/ha

1. Kalimpong 'A'
2. Pure Mysore x Kalimpong 'A'
3. Pure Mysore x H.S.6

A2 - Reared with Kanva 2 under 45 x 8 cm spacing + 100 kg N/ha

1. Kalimpong 'A'
2. Pure Mysore x Kalimpong 'A'
3. Pure Mysore x H.S.6
PLATE 17

Cocoons of various breeds of *Bombyx mori* reared with leaves of mulberry leaf grown under different cultivation methods

C1 - Reared with Local variety grown under 45 x 45 cm spacing + 100 kg N/ha

1. Kalimpong 'A'
2. Pure Mysore x Kalimpong 'A'
3. Pure Mysore x H.S.6

C2 - Reared with Local variety grown under 45 x 8 cm spacing + 100 kg N/ha

1. Kalimpong 'A'
2. Pure Mysore x Kalimpong 'A'
3. Pure Mysore x H.S.6
PLATE 18

Silk filament of various breeds of *Bombyx mori* reared with leaves of mulberry grown under different cultivation methods

A - Reared with the leaves of Kanva 2, 45 x 45 cm spacing + 900 kg N/ha

1. Pure Mysore
2. Kalimpong 'A'
3. Pure Mysore x H.S.6
4. Pure Mysore x Kalimpong 'A'

B - Reared with leaves of Local variety, 45 x 45 cm spacing + 100 kg N/ha

1. Pure Mysore
2. Kalimpong 'A'
3. Pure Mysore x H.S.6
4. Pure Mysore x Kalimpong 'A'
PLATE 19

I - Silkworms reared with different quantities of Kanva 2 mulberry leaf

1. 5th instar larvae of Kalimpong 'A'
2. 5th instar larvae of J 122

   A. Full feeding (120 gr/feeding)
   B. Half feeding (60 gr/feeding)
   C. Low feeding (40 gr/feeding)

II - Fifth instar larvae of Kalimpong 'A' reared with Koosen and Local variety leaves

1. Reared with Koosen variety
2. Reared with Local variety

   A. Full feeding (120 gr/feeding)
   B. Half feeding (60 gr/feeding)
   C. Low feeding (40 gr/feeding)
Fifth instar larvae of C 108 breed under various feeding levels

I - Reared with Kanva 2 variety

A. Full feeding (120 gr/feeding)
B. Half feeding (60 gr/feeding)
C. Low feeding (40 gr/feeding)

II - Reared with Koosen and Local varieties

1. Koosen variety
2. Local variety

A. Full feeding (120 gr/feeding)
B. Half feeding (60 gr/feeding)
C. Low feeding (40 gr/feeding)
Cocoons of Kalimpong 'A' reared under different feeding levels of various mulberry varieties

A - Reared with Kanva 2 variety

1. Full feeding (120 gr/feeding)
2. Half feeding (60 gr/feeding)
3. Low feeding (40 gr/feeding)

B - Reared with Local variety

C. Low feeding (40 gr/feeding)
D. Half feeding (60 gr/feeding)
E. Full feeding (120 gr/feeding)
PLATE 22

Cocoons of J 122 reared under different feeding levels of various mulberry varieties

C - Reared with Kanva 2 variety

1. Full feeding (120 gr/feeding)
2. Half feeding (60 gr/feeding)
3. Low feeding (40 gr/feeding)

D - Reared with Local variety

3. Half feeding (60 gr/feeding)
4. Full feeding (120 gr/feeding)
5. Low feeding (40 gr/feeding)
PLATE 23

Cocoons of Rosa Mysore breed reared under various feeding levels of different mulberry varieties

E - Reared with Kanva 2 variety

1. Full feeding (120 gr/feeding)
2. Half feeding (60 gr/feeding)
3. Low feeding (40 gr/feeding)

F - Reared with Local variety

C. Low feeding (40 gr/feeding)
D. Half feeding (60 gr/feeding)
E. Full feeding (120 gr/feeding)
PLATE 24

Cocoons of different breeds reared under full feeding levels of Kanva 2 during 6th generation

1 - Cocoons of Kalimpong 'A'

C. From low feeding to full feeding  
(40 gr - 120 gr/feeding)
D. From half feeding to full feeding  
(60 gr - 120 gr/feeding)
E. From full feeding (120 gr/feeding)

2 - Cocoons of C 108

C. From low feeding to full feeding  
(40 gr - 120 gr/feeding)
D. From half feeding to full feeding  
(60 gr - 120 gr/feeding)
E. Full feeding (120 gr/feeding)
3 - Cocoons of Hosa Mysore breed reared with full feeding of various varieties during 6th generation

C. with Local leaf
D. with Koosen leaf
E. with Kanva 2 leaf

4 - Cocoons of J 122 breed fed with full feeding level of various varieties during 6th generation

C. with Local leaf
D. with Koosen leaf
E. with Kanva 2 leaf
PLATE 26

Cocoons of Pure Mysore breed fed with full feeding level of various varieties during 6th generation

1. with Kanva 2 leaf
2. with Koosen leaf
3. with Local leaf
PLATE 27

A - Silk filament of various breeds of *Bombyx mori* reared with full feeding level (120 g) of Kanva 2 variety

B - With low feeding level (40 g) of Kanva 2

1. Pure Mysore
2. Hosa Mysore
3. Kalimpong 'A'
4. C 108
5. J 122
PLATE 28

Silk filament of various breeds of *Bombyx mori* reared with full feeding levels

C - With Local variety

D - With Koosen variety

1. Pure Mysore breed
2. Hosa Mysore breed
3. Kalimpong 'A' breed
4. J 122 breed
5. C 103 breed
PLATE 29

Cocoons of Kalimpong 'A' breed spun under different temperature levels

A - Under constant temperature

4. 22°C
5. 26°C

B - Under alternating temperature

F. 32°C to 26°C
G. 22°C to 32°C
H. 32°C to 22°C
KA. 28 to 32°C
PLATE 30

Cocoons of Hosa Mysore x Kalimpong 'A' hybrid formed under different temperature levels

A - Under alternating temperature
   F. 32 to 26°C
   G. 22 to 32°C
   H. 32 to 22°C

B - Under constant temperature
   2. 26°C
   3. 22°C
   4. 30°C
   5. 32°C
PLATE 31

Cocoons of different breeds of *Bombyx mori* formed under constant temperature levels combined with 70% R.H.

A - Cocoons of Hosa Mysore

2. under 30°C
3. under 32°C
4. under 26°C
5. under 22°C

B - Cocoons of J 122

2. 22°C
3. 26°C
4. 30°C
5. 32°C