1. The silk worm of the genus Antheraea of which there are eight important species in India: Antheraea mylitta, A. roylei, A. frithii, A. knyvetii, A. helferi, A. andamana, A. givalike and A. assamensis, is of considerable importance, providing scope for industrial development.

Antheraea proylei, which is a newly synthesised strain between the indigenous Antheraea roylei and Antheraea pernyi of Chinese origin, appears to be suitable for Manipur in view of the following observations:

(a) Antheraea proylei as also other Tasar worms feed on a variety of plants some of which may be "primary" while some others may be "secondary".

(b) Tasar worms fed on oak foliage yield fine silk.

(c) Manipur is rich in oak belonging to eleven different species. Besides oak, there are other possible sources of food plants of Tasar silk worms in Manipur.

2. The effects of feeding of Quercus serrata, Quercus dealbata and Quercus pachyphylla (Fagaceae) foliage have been tested on growth and development of Antheraea proylei and cocoons and silk qualities.

3. The feeding experiments and changes in developmental morphology and internal organ systems of the silk worm have been described.

4. Linear, width-wise and ponderal growth rates of the worms have been considered through indoor rearing under 'new technique', and data statistically analysed.
5. Increase in fecundity of the worms was observed from the fourth larval instar onwards equally for the three host plants. There were low rates of mortality.

The three host plants do not show significant effects concerning the growth characters of the worms.

6. Principal constituents of the leaves of Quercus serrata, Q. dealbata and Q. pauchyphylla have been determined, and the physiological implications involved are discussed.

7. The cocoons and silk, produced by the worms of Antheraea pseudep. have been described in relation to the more important commercial qualities.