Concise account of ERI silkworm

Eri Silkworm(*Philosamia ricini*) is a multivoltine sericigeneous insect and largely reared by the farmers of NE India, particularly in Assam. In recent years the farmers of several states namely Andhra Pradesh, Madhya Pradesh, TN, Karnataka, Maharashtra, Uttaranchal, UP,Jharkhand, Bihar, WB, Orissa and Sikkim have taken up eri culture.

The eri culture is being carried out throughout the year in traditional areas because of the abundant availability of castor plants in the rural areas.It is an ideal subsidiary occupation for a large number of rural and tribal population in India. The eri silkworm are Hardy and less susceptible for disease. The ideal range of temperature for the growth of eri silkworm is 20 degree Celsius 20 degree Celsius to 40 degrees celsius. However, Increase in temperature beyond 35 degree celsius years causes Les spinning, mortality of laba and Pupa and for emergence and sterility. Among the non Mulberry silkworm species only eri silkworm is completely domesticated and reared indoors. It is a multivoltine Insect completing at least 6 to seven generations in a year.

The word Eri is derived from the Sanskrit term “Erranda” which refers to the Castor plants. *Ricinus communis L*, Which is the primary host plant. Eri silkworm is known two feed on more than 30 host plant species(Arora and Gupta,1979).

Uses of Eri

mainly two types of eri products are made in North East India.

1. Eri Chaddars for gents
2. Eri scarfs with small motifs for ladies as winter clothing eri Silk causes excellent thermal properties.
3. The loose fibres can be used as a filling material in quilts and winter clothing due to its thermal properties.
4. it can be used for diversified and specialised items like_____ ladies garments, chaddars, dokhanas,skirts ,children garments,kurtas,jackets, cross stitches,embroidery work, fashion accessories like ties,scarves,handkerchiefs ,bags,wallets,file folder etc.

Eri silkworm and its diversity

The structure of the genitalia, green pattern and chromosome number demonstrate that *Samia ricini* (Donovan) 2n= 40 is derived from its wild form *Samia canningi*(Hutton).

The cultivated variety of Samia ricini does not occur in the wild. the taxonomic position of eri silkworm is as follows:

Phylum- Arthropoda
Class- Insecta
Order- Lepidoptera
Family-Saturniidae
Tribe-Attacini
genus-Samia
Species-ricini

Strains:

Six homozygous strains were isolated on the basis of larval colour and marking.

1.Yellow plain(YP)
2. yellow spotted(YS)
3. yellow zebra(YZ)
4.Greenish blue plain(GBP)
5.Greenish blue spotted(GBS)
6. Greenish blue zebra (GBZ)

Food plants of Eri silkworm

Primary food plants

1. Castor(*Ricinus Communis*)

Secondary food plants

1.Tapioca(*Manihot esculenta)*
2.Kesseru (*Heteropanax fragrans*)
3.Payam(*Evodia flaxinifolia*)
4.Borpat(*Ailanthus grandis*)
5. Borkesseru *Ailanthus excelsa*
6. *Ailanthus altissima*.