## AIB-3578: EVALUATION OF EXOTIC BIVOLTINE BREEDS TO IDENTIFY PROMISING PARENTAL GENETIC RESOURCES

**Period** : June 2016 – September 2019

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**Introduction :**

Selection of parents as resource material is a prerequisite contributing to the success of breeding to produce potential breeds / hybrids. Thorough and proper evaluation of the genetic resources and utilization of the native breeds of potential nature will help the breeder to select most effective genotypes before choosing the materials for breeding. The study has been taken up to utilize the promising exotic bivoltine breeds shortlisted from bivoltine germplasm resources for preparing hybrids by crossing with CSR2/CSR4 to evaluate their performance. The identified potential exotic bivoltine parental breeds can be utilized in breeding and hybrid seed production for commercial exploitation.

**Objective:**

- To identify bivoltine silkworm germplasm for specific qualitative and quantitative traits.

**Outcome:**

- Region specific better performing parental combination of exotic bivoltine silkworm accessions were identified through field trials conducted at CSR&TI-Mysuru, Berhampore, Pampore& CSGRC-Hosur.

| CSGRC, Hosur | CSRTI, Mysore | CSRTI, Berhampore | CSRTI, Pampore |
|---|---|---|---|
| BBE-0266 x CSR2<br>BBE-0329 x CSR2<br>BBE-0197 x CSR4 | BBE-0201 x CSR2<br>BBE-0169 x CSR4<br>BBE-0197 x CSR4 | BBE-0163 x CSR2<br>BBE-0169 x CSR4<br>BBE-0197 x CSR4 | BBE-0197 x CSR4<br>BBE-0267 x CSR4 |

CSB CSGRC, HOSUR


**Recommendations/Utilization:**

- ✓ Identification of top performing region specific breeds for respective Institutes which can be recommended for large scale trial so as to exploit commercially for enhanced cocoon production in these regions.

CSB-CSGRC, HSR