## CENTRAL SERICULTURAL RESEARCH & TRAINING INSTITUTE BERHAMPORE, WEST BENGAL

## 1. LIST OF TECHNOLOGIES DEVELOPED / BEING DEVELOPED DURING XI PLAN (2007-2012) FOR THE EASTERN & NORTH-EASTERN REGION:

## A. LIST OF TECHNOLOGIES DEVELOPED: 25 Nos.

SI.	Project outcome	No. of
1 1	New Mulberry genotype <b>C-2038</b> for irrigated condition is under AICEM trial	1 1
2	New Mulberry genotype Tr-23 for acid soil is under AICEM trial	1
3	Mulberry genotype <b>C-2028</b> has been identified as flood tolerant in the low land at farmers' field. The genotype will be released for large-scale trial.	1
4	MULTI X MULTI hybrid: <b>N x M.Con4</b> for unfavourable seasons (Jaistha[May-June); Shravani[June-July];Bhaduri[July-August];Aswina[August-September]	1
5	MULTI X MULTI hybrid: <b>M.Con1 x M.Con4</b> for unfavourable seasons(Jaistha[May-June); Shravani[June-July];Bhaduri[July-August];Aswina[August-September]	1
6	<i>MULTI X BI</i> hybrid: <b>M.Con1 x B.Con4</b> for favourable seasons (Agrahayani[October-November];Falguni[January-February];Baishaki[March-April]	1
7	<i>MULTI X BI</i> hybrid: <b>M. Con4 x B.Con4</b> for favourable seasons(Agrahayani [October-November]; Falguni [January-February]; Baishaki [March-April]	1
8	B x Bi Foundation hybrid <b>SK6 x SK7</b> as male component for preparation of Multi x Bi hybrid for unfavourable seasons. (Authorized PRAP)	1
9	Multi x Bi hybrid: <b>M6D(P)C x [SK6 x SK7]</b> for favourable seasons. (Agrahayani [October-November]; Falguni[January-February];Baishaki [March-April] (Under Authorization trial)	1
10	Multi x Bi. Hybrid: <b>N x (SK6 x SK7)</b> for favourable seasons (Agrahayani [October- November]; Falguni[January-February];Baishaki [March-April]. (Authorized during 2013)	1
11	Multi x Bi. Hybrid: <b>M6DP (C) x SK4 (C)</b> for favourable seasons Agrahayani [October- November]; Falguni[January-February];Baishaki [March-April]. (Authorized during 2013).	1
12	Season specific Rearing Package was developed for sericulture farmers of West Bengal to enhance their cocoon productivity in all the commercial crop seasons.	1

13	Mulberry based parallel cropping system, mulberry in combination with green gram, cowpea, mustard and amaranth during March-May, June-Aug, Sept-Nov and Dec-Feb seasons have been identified to fetch additional income by the farmers.	1
14	Three botanicals (Neem oil, Pongamia oil and Nicotine formulations) were identified for effective management of mulberry pests viz. Thrips, Mealy bug and Whitefly.	1
15	Sericillin as new bed disinfectant for control of major silkworm diseases over the Labex.	1
16	Use of Vermicompost @ 30 mt/ha/yr for enhancing mulberry leaf yield and quality as an eco-friendly approach.	1
17	Ready reckoner for soil Test-based NPK application for irrigated and rainfed conditions.	1
18	The sulphur application package developed as a balanced use of fertilizer based on nutrient removal pattern to optimize the quality mulberry leaf production per unit area and to maintain the soil fertility as well.	1
19	Paired Row System of mulberry plantation was found better for leaf production & additional income through intercropping.	1
20	Application of antitranspirants KCI (1%) for increasing mulberry leaf yield under rainfed condition.	1
21	Package for increasing mulberry yield through Integrated Nutrient Management for the farmers of rainfed areas of Jharkhand has been developed.	1
22	For <i>IN SITU</i> soil moisture conservation, Napier grass mulch was found effective in soil moisture conservation with higher mulberry leaf production in Odisha condition.	1
23	Application of recommended doses of lime has increased leaf yield under rainfed condition of Odisha state. [Application of lime @ 1.67 mt/ha (0.125 LR) to bring soil pH from 4.5 to 7, in split doses spread over 8 years].	1
24	Shoot rearing technology was found adventitious for silkworm rearing as labour saving approach at farmers' level at North-Eastern region.	1
25	Application of growth promoter, Kinetin + KCl for mulberry growth and leaf yield.	1
	Total	25 Nos.

## B. TECHNOLOGIES IN PIPE LINE: 7 NOS.

SI. No.	Project outcome	No. of Technologies
1	New Mulberry genotype <b>Gen-1</b> identified as cold tolerant genotype	1
2	B. Con1 x B. Con4 (Bi x Bi) all seasons except May to June in West Bengal	1
3	<b>D6(P)N x SK4(C)</b> (Bi x Bi) for spring/falguni (January February) and Autumn/ Agrahayani seasons( Under Authorization trial)	1
4	<b>M6DP (C) x D6(P)N</b> (Multi x Bi) for favourable seasons (Agrahayani [October- November]; Falguni[January-February];Baishaki [March-April].	1
5	<b>M6DP(C) x [D6(P)N x SK4 (C)]</b> (Multi x Bi) for favourable seasons (Agrahayani [October-November]; Falguni[January-February];Baishaki [March-April]. (Authorized during 2013)	1
6	Integrated package for raising chawki leaves and young age silkworm rearing has been developed.	1
7	Effective concentration of new insecticide was identified for control of whitefly.	1
	Total	7 Nos.