Rearing Performance

Characteristics	Hills	Foot-Hills
Larval Weight 10 Nos- [g]	43.08	27.76
Cocoon Weight [g]	1.990	1.280
Shell Weight [g]	0.380	0.170
Shell Ratio [%]	18.90	13.31
Survival [%]	80.00	81.00
Cocoon Yield/ 100 dfls [Kg]	60.80	38.00

Package of Practices

Practices	Hills	Foot-Hills
Crown height [cm]	60	30
Spacing [cm]	90 × 90	90 × 90
Manure (FYM)	10 t/ha in one time	10 t/ha in one time
Fertilizer (N:P:K kg/ha/y)	150:50:50	150:50:50
Crops/Year (No.)	3 - 4	3
Harvesting Method	Leaf Harvest	Shoot & Leaf Harvest

ADVANTAGES OF $BC_2$59

- ✓ Higher leaf yield
- ✓ Nutritive leaves & high vigour
- ✓ Tolerant to acidic stress of hilly regions
- ✓ Suitable for bivoltine silkworm rearing
- ✓ Quick regeneration
- ✓ Good propagation through cuttings
- ✓ Moderately tolerant to foliar diseases & sucking pests
- ✓ Suitable for growing as medium & high bush or small trees
- ✓ Suitable for rainfed hills & foot-hills of Eastern & North-Eastern India

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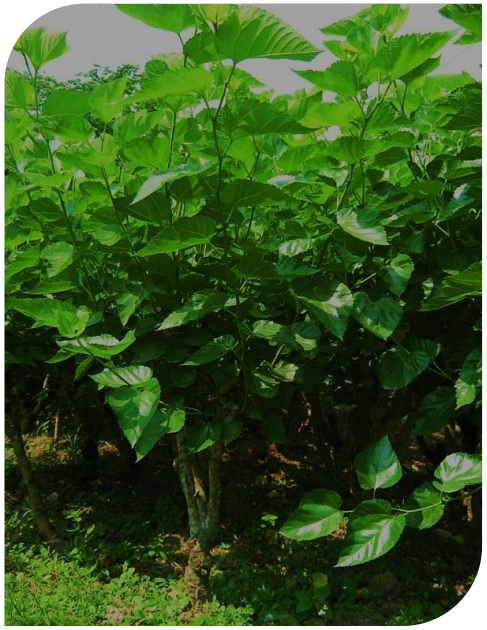
$BC_2$59

Suitable Mulberry Variety for Hilly Regions



CSRTI

Central Sericulutral Research & Training Institute
Central Silk Board, Ministry of Textiles
Govt. of India, Berhampore, West Bengal

$BC_2$59

Suitable Mulberry Variety for Hilly Regions

Hilly regions are characterized by sandy loam brown forest soils with poor water holding capacity and strong to moderately acidic in reaction (pH 4.2-5.8). Productive acidity tolerant mulberry varieties with high nutritive foliage are most suitable for cultivation. Several high yielding varieties *viz.*, Kosen, Tr-10, $BC_2$59, S-146 and Tr-23 are recommended for cultivation with standard package of practices. $BC_2$59 was authorized for cultivation in 2000 in Eastern & North Eastern states. It is the popular variety preferred for bivoltine silkworm rearing in Hills & Foot hills of Eastern Zone. 4% (8117 ha) of mulberry plantation in Hilly region under $BC_2$59.

$BC_2$59 is a diploid variety developed by backcrossing technique from Kosen with local Matigara in 1985. It is characterized by semi erect growth with slightly spreading branches bearing large thick smooth dark-green leaves with high moisture [78%] and protein [21%]. The foliage is of excellent quality and ideal for bivoltine silkworm rearing. The leaf yield potential is 9-10 t/ha/year (Hills) and 15-16 t/ha/year (foot hills) under three crop schedule of leaf harvest under rainfed conditions of Eastern & North Eastern states.

$BC_2$59 Characteristics

Trait	Hills	Foot-Hills
Leaf Yield [t/ ha/y]	9 - 10	15 - 16
Inter-nodal distance [cm]	3.92	3.65
Shoots/Plant [Number]	5.86	5.34
Total Shoot Length / plant [cm]	538	512
Net photo-synthetic rate [μ mol m^2 s^1]	8.26	10.79
Leaf	Smooth; large; greenish with serrate margin; stipulate; acute apex	
Plant	Semi erect growth with slightly curved grey colour stem with few secondary branches	
Regeneration	12 - 15 days after pruning	10 - 12 days after pruning
Rooting of Cuttings (%)	55.75	68.50
Resistance to Pest & Diseases	Moderately resistant to leaf spot diseases & sucking pests	

Leaf Nutrition

High Nutritive mulberry leaves effectively increase the cocoon yield and quality silk production. $BC_2$59 produces highly palatable and nutritive leaves for obtaining good quality cocoons.

Characteristics	Hills	Foot-Hills
Total Soluble Protein [mg g^{-1}fw]	21.29	20.86
Total Soluble Sugar [mg g^{1}fw]	28.16	25.49
Total Chlorophyll [mg g^{-1}fw]	1.10	1.36
Fresh Leaf Moisture [%]	78.14	77.65
Moisture Retention Capacity- after 6hrs [%]	83.01	82.60