

Package of Practices under Irrigated conditions

Spacing	(150 + 90) x 60 cm
Manure (FYM)	25 MT/ha/year
Chemical fertilizer (N:P:K kg/ha/year)	350:140:100
Form of chemical fertilizer	Straight
Irrigation	1.5 acre-inch at an interval of 6-7 days
No. of crops/year	Five

Advantages

- Suitable for late-age bivoltine silkworm rearing
- Higher root biomass, root proliferation results in higher water use efficiency
- Higher feed efficiency (better PECS values over V1)
- Moderately tolerant to pest and diseases

G4 is a highly productive mulberry variety and is being recommended to farmers in south zone after elaborate evaluation trials (AICEM) conducted by Central Silk Board. CSRTI-Mysuru has already established seed gardens of G4 variety and all geared up to supply the new variety to farmers for the benefit of sericulturists in South India.



For further details Contact:

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G4 AN IMPROVED MULBERRY VARIETY



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G4 AN IMPROVED MULBERRY VARIETY

G4 is a high yielding mulberry variety with a leaf yield of about 65 MT/ha/year under irrigated conditions following recommended package of practices. The variety is a hybrid of *M. multicaulis* and S13, developed at Central Sericultural Research and Training Institute (CSRTI), Mysuru. G4 performs on-par with V1, a popular mulberry variety in south India. The foliage of G4 is of excellent quality and ideally suited for rearing late-age silkworms. The variety is characterized by erect branches, thick dark-green leaves and short inter-nodal distance. It is a diploid variety (2n=28) with high rooting ability (>90%) and survival rate.

The variety yields about 65 MT/ha/year leaves in a 5 crop schedule under irrigated conditions under the spacing (150 + 90) x 60 cm and an input of N:PK @ 350:140:100 kg/ha/year and FYM 25 MT/ha/year. The leaves are entire, glossy and smooth with wavy surface, large leaf area (280 cm²) and thick lamina (155 - 160 μm). The variety is moderately resistant to major foliar disease like leaf rust and leaf spot.



Agronomical Descriptions

Parameters	G4	V1
Leaf yield (mt/ha/yr)	65	61.7
No. of shoots/plant	10-12	10-12
Total shoot length (cm)	1200	1280
Inter-nodal distance	3.9 cm	5.2 cm
Leaf area (cm ²)	280	290
Length (cm)	19-21	20-23
Breadth (cm)	15-17	13-15
Leaf thickness	155 - 160 μm	160 - 175 μm
Shape	Entire, cordate	Entire, Ovate
Leaf surface	Smooth, glossy	Smooth, glossy
Weight of 100 leaf (g)	416-425	530-560
Resistance to diseases	Moderately resistant to leaf spot, resistant to leaf rust	Tolerant to leaf spot & leaf rust; Moderately tolerant to leaf blight
Regeneration (days after pruning)	11-13 [winter] 9-10 days	12-14 [winter] 10-11 days
Sprouting (30 th day)	96%	90%
Rooting (at 90 th days)	92%	94%



Leaf quality parameters

Variety	G4	V1
Nitrogen (%)	3.94	3.98
Phosphorus (%)	0.375	0.333
Potassium (%)	1.64	1.79
Crude Protein (%)	24.63	24.88
Total Sugars (%)	16.34	16.48
Moisture content (%)	75.3	75.8
Moisture Retention Capacity after 6 hours of harvest (%)	78.6	80.2

Rearing Performance

Variety	G4	V1
ERR by number/ 10000 larvae*	9722	9688
ERR by weight (kg)	18.40	18.81
Single cocoon weight (g)	1.93	1.95
Single shell weight (g)	0.478	0.477
Shell (%)	24.44	24.40

