

the labour requirement in cultivation as the inputs are applied in 2 splits whereas in conventional method fertilizers are applied in 5 equal doses.

Organic Package

Inputs	Quantity /ha/yr
FYM (2 equal splits)	25MT
Sericompost/ Vermicompost (2 equal splits)	20 MT
Sowing Green manure seeds (2 equal splits - during monsoon)	50 kg
Bio-fertilizer (Azotobacter) (2 equal splits)	25 kg
Bio-fertilizer (PSB) (2 equal splits)	05 kg
Neem cake (One time)	1000 kg

Conventional package

Inputs	Quantity /ha/yr
FYM (2 equal splits)	25 MT
Ammonium Sulphate (N) (5 equal splits)	1750 kg
Single Super Phosphate (P) (5 equal splits)	875 kg
Muriate of Potash (K) (5 equal splits)	233 kg

Adoption of this package revealed that the soil fertility can be maintained for long run by which sustainable quality leaf production can be achieved.

Benefits of the organic package over conventional package

- Enhances the mulberry growth
- Higher mulberry leaf yield
- Sustainable leaf production
- Improved the soil fertility
- Maintenance of soil health
- Low cost of cultivation



For further details contact:

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Organic package for Mulberry for higher growth and yield



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Organic farming

Organic farming is a system which avoids or largely excludes the use of synthetic inputs (such as fertilizers, pesticides, hormones, feed additives *etc.*) and to the maximum extent feasible rely upon crop rotations, crop residues, animal manures, off-farm organic waste, mineral grade rock additives and biological system of nutrient mobilization and plant protection.

Sericulture is a highly remunerative enterprise commonly practiced in most of the southern part of India in which mulberry is cultivated as the food plant for the silkworm. Like other agricultural crop, mulberry needs proper cultivation package as the foliage is used as the sole food for silkworm. The quality of mulberry leaf is directly reflects on the quality of cocoons. Large quantity of leaf biomass is produced by the ruling variety, V1 to the tune of 55-60MT/ha/year. The requirement of macronutrients *viz.*, NPK is also set to the tune of 350:140:140 kg/ha/year for the variety to



explore its full yield potential. Supplementation of such high quantity of nutrients in terms of chemical fertilizers not only affected the soil health but also developed pressure on the farmers to face the increased cost of cultivation.

Need of Organic farming

Due to the escalation price on fertilizers and its large quantity requirement, farmers face problems to maintain the sustainable quality leaf production. In addition to this, the soil health has deteriorated gradually at great extent due to high application of chemicals and fertilizers in the mulberry field. Organic farming is a concept by which the required quantity of nutrients is being supplemented through different naturally available resources. In mulberry high quantity of leaf biomass is produced and being utilized as feed to silkworm for the production of quality cocoons. It is imperative to adopt such an alternate system of cultivation without chemicals and fertilizers for mulberry which



can only address to the above problem and maintain the sustainable production. Hence, an organic package has been developed by the Institute as an alternate means for supplementing the required quantity of nutrients to the mulberry replacing the chemical fertilizers. As such, in the package, different sources organic and biological inputs are used to compensate the high quantity of NPK for the growth and yield in mulberry. It has been observed that 58 MT mulberry leaf can be produced per hectare per year under the organic package which is on par with that of conventional package in terms of quality and quantity. It further saves

