

Organic production of cassava

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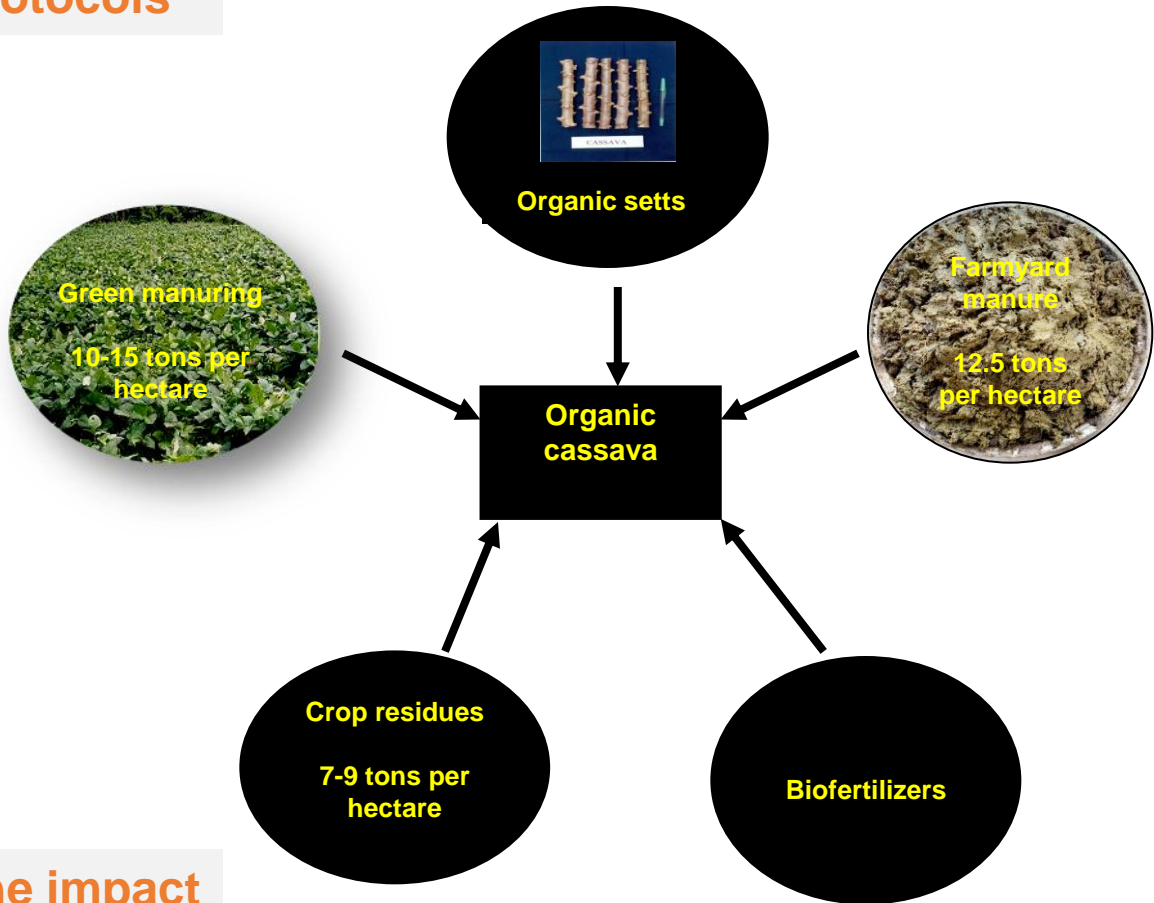


CASSAVA, an important tropical tuber crop with high biological efficiency, plays a significant role in the food and nutrition security in rural livelihoods. It serves as a raw material for starch, sago, alcohol and animal feed. The cassava starch has wide applications in textile, pharmaceutical, paper and food industries. A climate-ready crop, cassava is adapted to marginal environments, low input management, adverse soil and climatic conditions, particularly drought and acidic soil conditions and thus exhibits a great flexibility to thrive under different systems. There is a great demand for organically-produced foods due to the considerable concern regarding food safety and security, environmental protection, biodiversity and human well-being. The protocols for organic production of cassava are briefed in this leaflet.

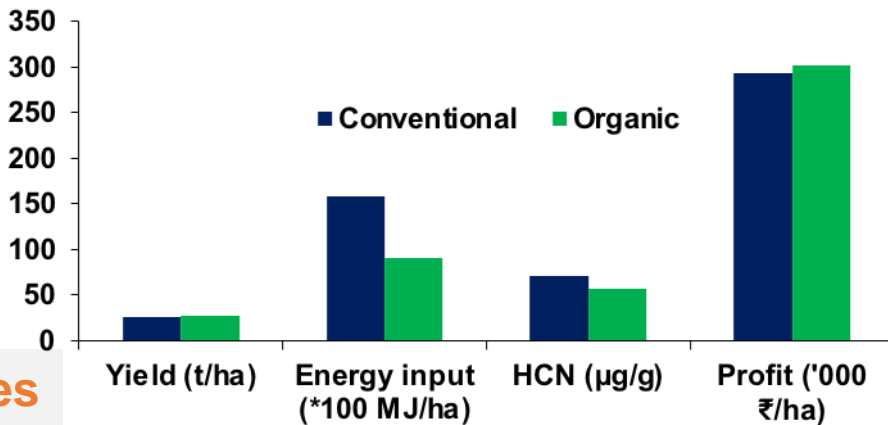
Incorporate fresh cassava crop residue at the rate of 7-9 tons per hectare (generates dry biomass at the rate of 2-3 tons per hectare) at the time of harvest of the previous season crop. Plant cassava mosaic disease resistant (CMD) varieties viz., Sree Reksha, Sree Sakthi and Sree Suvarna. Use of pest- and disease-free healthy planting materials of cassava variety Sree Pavithra is also recommended. Plant setts of 15-20 cm length from organically produced stems of cassava. Apply farmyard manure at the rate of 12.5 tons per hectare (1 kilogram per plant) at the time of planting. Apply biofertilizers, *Azospirillum*, phosphobacteria and K solubilizer at the rate of 3 kilograms per hectare at the time of planting. Inter-sow green manure cowpea at the rate of 20 kilograms per hectare between the plants and incorporate green matter at 45-60 days. The green matter addition from the green manure will be 10-15 tons per hectare.



Protocols



The impact



Advantages

- Sustainable yield (26.19 tons per hectare)
- Safe and quality tubers (+ 2.72% dry matter, + 8.60% starch, + 7.72% crude protein, -19.60% HCN, + P, +K, +Ca, +Mg, +Fe, +Mn and +Zn over conventional)
- Higher soil quality index (0.94)
- Higher energy use efficiency (+ 72.61% over conventional)
- Better net income (Rupees 286,664 per hectare)

Crop Production Technical Leaflet

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