

ORGANIC TEA CULTIVATION

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Organic agriculture could be broadly defined as a sustainable farming system where the cultivation is carried out without the use of chemically synthesized products such as urea, ammonium sulphate, pesticides, herbicides, hormones, activators, etc.

In this farming system, the soil fertility is maintained and improved using natural resources and organic by products. It is not a system, which merely withholds application of chemically synthesized products but sustain crop by providing its nutrient requirements through organic inputs and protecting it through biological control methods.

The permitted organic inputs are as follows:

Farmyard manure of cattle, goats, poultry, etc.
The slurry from the animal sheds
Green manure and crop residues on the farm
Straw, grass and other mulches produced on the farm
Compost made from organic residues
Saw dust, wood shavings from untreated wood
Fish meal
Blood meal and bone meal

Basically any material that is of organic could be used, provided the material has not been treated with chemicals.

While naturally occurring minerals such as limestone, dolomite, rock phosphate, etc., are permitted, biological control methods and organic pesticides such as neem, pyrethrum, etc., could be used for the control of pests and diseases.

Exceptionally, copper is permitted for the control of Blister Blight in tea, but its use should be confined to only when necessary.

Compost

As far as possible compost should be made in the farm itself.

Generally for compost making cowdung and green materials are used in the ratio 1:3. It is convenient to make them in stacks, which should be turned over periodically. It is preferable if the stack is watered during the dry weather and kept covered during the rains.

Best results are obtained if compost is buried around the tea bush, but this practice is possible only on pruned field.

If surface application is made, it is preferable to cover it with green material.

It is important to remember that compost alone does not provide the nitrogen requirements of the tea plant. What compost does mostly is to improve the soil conditions such as the soil micro organic activity, aeration, water and nutrient retentivity.

Green manure

Green materials particularly from leguminous plants are rich in nitrogen and become available to the plants when used as a mulch.

It is therefore of paramount importance to raise a large number of leguminous shade trees and cover crops to meet the high nitrogen demands of the tea plant.

The shade trees should be lopped regularly and in a system of organic farming the loppings could be chopped and used in compost making.

Other Nitrogen inputs

Oil cakes which are the residues obtained after extracting oil from copra, rubber seed, neem seed, etc., are rich in nitrogen, and could be applied to the soil as organic fertilizers.

Similarly fish meal, blood meal, bone meal, etc., also could be used as organic fertilizer.

Minerals

Naturally occurring minerals such as limestones, dolomite, rock phosphate, etc., which are mined can be applied to the soil to meet the calcium, magnesium and phosphate requirements.

Small amounts of potassium could be made available to the plants by incorporating wood ash into the compost.

Burying of prunings helps to recycle the nutrients, particularly potassium.

Pest and Disease Control

Naturally occurring pesticides such as neem extract, pyrethrum extract, would find favour in a system of organic agriculture for the control of insects and pests.

A management strategy such as, adjusting the time of pruning to avoid the susceptible period of attack of a pest like the shot-hole borer would prevent the dependence on chemical control.

Processing

It is desirable that organic tea should be processed in a factory exclusively reserved for the purpose.

If this is not possible due to various reasons then there should be a very clear and strict procedure laid down at the factory for the processing of organic tea, as well as for its storing and packing which would ensure that organic tea is not contaminated with other teas.

Since no chemical is used in tea processing there is no change in the manufacturing procedure of tea.

Marketing

There is definitely a market for organic tea but it is a limited market. There are several who producing organic tea not only in Sri Lanka but in almost all the tea producing countries including China. At the same time there are many who are unable to sell their products as organic tea due to the lack of buyers.

It is very important that the marketing aspects is sorted out before embarking on organic tea production.

Organically produced tea entails high cost of production as it is highly labour intensive to make and apply compost as well as in other practices like manual weeding etc. Thus, if hired labourer is used the cost of production would be much higher.

Having cultivated the tea organically the farmer should be able to sell the green leaf to a factory processing organic tea to obtain a premium price, otherwise he will have to sell the leaf to a conventional factory at the same prices as the conventional tea.

Certification

If one intends to sell organic tea in the international market, then one must get the organic tea garden inspected and certified every year.

To obtain organic certification the tea garden has to go through a period of conversion. In the case of tea the minimum period of conversion is three years from the last date of application of chemical fertilizer or any other chemical inputs.

In order to obtain certification the following requirements must be fulfilled:

- * The entire estate must be organic
- * A map of the estate indicating the different fields must be available
- * The yield and input data of fertilizer, etc., for the last three years should be available
- * A conversion plan or programme of work for the organic practices such as compost making, growing of shade trees, terracing, growing of cover crop, etc., should be prepared and implemented

General book keeping of farm inputs, crop harvested, made tea production, packing, storage, sales, balance stock, etc., should be maintained meticulously.

Socio Economic Aspects of Workers

It is now part of the IFOAM organic standards and inspection procedure to check whether the basic welfare requirements of the workers are met, in the field of housing, food, education, transport, health facilities and general condition of life on the estate. At the time of conversion to organic, a plan for improvement of the basic welfare requirements must be provided.