

Gliricidia as a plant nutrient

This commonly found leguminous plant that fixes nitrogen from the atmosphere through root-nodular bacteria is widely used to enrich the soil in different ways.

***In-situ* Compost**

The gliricidia leaves could be used for *in-situ* production of compost. The leaves, either green or dry, could be mixed with paddy straw and retained in the soil which can be quickly converted to compost by adding cow dung slurry and mixing using a hoe.

Liquid-fertilizer

The following preparation is sufficient to supply nutrients for one acre of vegetable plants:

- 100 litre of water
- 10 kg of wet cow dung
- 25 kg of green gliricidia leaves
- 5 kg of *Baloliya*, *Higuru* or *Gandapana* leaves
- ½ kg of *Murunga* leaves
- A handful of fresh soil from the surface layer (ideally from forest)

The mixture must be kept in a vessel and mixed well with a piece of stick for five minutes everyday for about 14 days. Mixture would start fermenting from the first day and eventually the stench would reduce. At the end of the 14 days, stop the mixing and let undigested pieces come to the surface. Remove the material that comes to the surface and strain the remaining liquid and diluted that with three parts of water to one part of the liquid.

Add 100 grams of soap to 10 litres of the prepared liquid, mix well and sprinkle plants every seven days in the evening when it is not raining as a foliage fertilizer.

***Jeewamrutha* (a microbial culture)**

The following preparation is sufficient for application to one acre of vegetable plants:

- 200 litre of water
- 10 kg cow dung from indigenous cattle
- 4-5 liter of cow urine

- 2 kg of jaggery (*Sakkara* – cane-sugar jaggery)
(*Alternative* – use 4 litre of coconut water or 2-3 kg of ripe fruit)
- 2 kg of flour of a pulse such as cowpea, green-gram or black-gram
(*Alternative* - use 6 -8 kg of gliricidia leaves dried for two days and shredded)
- A handful of fresh soil from the top surface (ideally from forest)

Prepare the mixture in a barrel and stir vigorously three times a day for five minutes for 5-6 days. Please make sure to stir it in only one direction. The filtered solution must be used within two days by sprinkling on the plants. As it is a microbial culture, it cannot be kept too long unlike the liquid-fertilizer.

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