

The Multipurpose Mouse Killer

Gliricidia sepium. The very name has a musical lilt that makes one want to wax lyrical about it. But the attraction doesn't end with the name. *Gliricidia* is a fast-growing, tropical, leguminous tree that one scarcely notices. Yet it is ubiquitous. One passes it on highways and back roads. It is found in just about any patch of wild trees and bushes.

The benefits of *Gliricidia*, a native of Central America, have been known for years. Although the tree was introduced into South India in the 1930s when it was grown as a shade tree in coffee and tea estates, Indian scientists only began to pay attention to it in the 1950s.

What is so special about *Gliricidia*? The most obvious benefit is that it is a legume and thus useful for fixing nitrogen in the soil (about 30 kg/ha/year). Also, this adaptable tree can grow in a wide range of soils – acidic, sandy, heavy clay, calcareous limestone and alkaline



Interestingly, *Gliricidia* means mouse or rat killer. This part of the name is derived from its bark and leaves, which when cooked with grains can be used as poisonous bait for rodents. Though poisonous to rodents and insects, the leaves contain 3-4% dry weight of nitrogen (and small amounts of phosphorus, potassium, calcium and magnesium), so they can be used as excellent green manure and fodder for farmyard animals.

At ICRISAT *Gliricidia* was part of an agroforestry project in the 1980s, but from 1996 onwards soil scientists began to draw the full benefits from this amazing tree. Its role in soil management is invaluable. Also, the roots stabilize sloping lands and reduce soil erosion. (Below right, spreading green manure)

All farmers should be encouraged to grow *Gliricidia* on their farm bunds and borders of fields – not only would they be improving their soil quality, increasing crop yields and sequestering carbon for the organic matter hungry tropical soils, but the tree could also be used for timber, firewood, hedges, plantation shade and poles. Above all, propagating and sustaining *Gliricidia* is easy and inexpensive. Seed propagation is convenient for a large number of plants, but the tree re-sprouts quickly after pruning or even a fire, and the cuttings root very easily. No wonder they call it “quick stick” in Jamaica!

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