

GREEN MANURE CROPS (Ad hoc recommendation)

Suoo hemp (*Crotalariajuncea*)

It is a vigorous growing green manure crop, which can be incorporated at 10 weeks after sowing. It does not withstand waterlogging. The seed rate is 25-35 kg/ha. The green matter yield is 15-20 t/ha. Quantity of nitrogen fixed by the crop is 75-80 kg/ha.

Daiocha (*Sesbania aculeata* and *S. rostrata*)

Sesbania aculeata

It is a quick growing succulent green manure crop, which can be incorporated at about 8 to 10 weeks after sowing. This crop adapts to varying conditions of soil and climate. It can be grown even under adverse conditions of drought, waterlogging, salinity etc. Recommended seed rate is 20 to 25 kg per ha. The green matter yield is 10-20 tonnes per ha. Quantity of nitrogen fixed is 75 to 80 kg per ha.

Sesbania rostrata

It is a green manure crop, which has nodules both on the stem and root. It thrives well

under waterlogged condition. The normal seed rate is 30 to 40 kg per ha. To get early, uniform germination and vigorous seedlings, seeds have to be scarified with concentrated sulphuric acid for 15 minutes and then washed thoroughly with fresh water and sown immediately. A green matter yield of 15 to 20 t/ha equivalent to 150-180 kg N/ha is obtained within a period of 8 to 10 weeks.

Wild indigo or kolingi (*Tephrosia purpurea*)

It is a slow growing green manure crop. It is not grazed by cattle and is suitable for light soils. It resists drought but does not withstand water stagnation. The seed have a waxy, impermeable hard seed coat and do not quickly germinate. To hasten germination, the seeds are to be abraded with sand or steeped in hot water at 55°C for two to three minutes. The seed rate is 20-25 kg/ha and the green matter yield varies from 8 to 10 t/ha. When kolingi is sown in an area for two or three seasons continuously, scattered seeds will give rise to volunteer plants and there is no need for further sowing.

Indigo / Bengal indigo (*Indigofera tinctoria*)

Indigo resembles kolingi, but has a more leafy habit. It shows resistance to drought.

Better yield is obtained when two irrigations are given and when grown in clayey soil. Seed rate is 20 kg/ha. Green matter production is 8-10 t/ha.

GREEN LEA_ MANURE CROPS (Ad hoc recommendation)

Gliricidia (*Gliricidia maculata*)

It is a shrub, which takes up a tree habit under favourable conditions of soil and climate. For green leaf purposes, the shrub should be kept low by pruning or lopping at a height of 2-3 m. The shrub can be pruned two or three times a year and it withstands repeated lopping. Within two years after planting, the plants are ready for lopping. Each plant gives five to ten kg of green leaves annually.

Snbabnl (*Leucaena leucocephala*)

This species, a native of Central America, occurs as a branched shrub. It is a promising forage tree crop, the leaves of which contain about 3-4% of N. *Leucaena* fixes about 500-600 kg N / ha per year.

Cassia (*Cassia auriculata*)

Propagated by seeds. During flowering tree is topped (stem and branches cut) and loppings used for green leaf manuring.