



Green Manures No. TGM4

Sunhemp, *Crotalaria juncea*

Green manures are plants which are grown mainly for the benefit of the soil. They can be grown as part of a rotation or in an intercropping system to build soil fertility, or as a cover crop to protect bare soil from erosion. Full details on the benefits and practice of using green manures can be found in HDRA's booklet 'Green manures/Cover crops'.

Crotalaria juncea is also known as indian hemp, brown hemp and sannhemp

Growing conditions

- Annual rainfall: Sunhemp can tolerate high rainfall, from 500mm upwards.
- Altitude: It grows best at altitudes up to 700 metres.
- Temperature: It grows best between 9° C and 28° C. It is not frost tolerant.
- Soil type: Sunhemp can grown in a soil type from pH 5.0 to 8.4 and does not tolerate saline soil.

Nitrogen fixation

Sunhemp is a legume. This means that it has nodules on its roots which contain bacteria. These bacteria take nitrogen from the air. This is known as nitrogen fixation. The plant uses this to grow and when the legume is dug into the soil, the extra nitrogen is made available to the next crop.

Cultivation

Sow sunhemp at a rate of 12 to 24 kg of seed per hectare. Alternatively broadcast sow the seeds. Excess moisture is harmful during the first 2 weeks after germination.

Growth form

Sunhemp is a tall shrubby annual, which can reach 1 to 3 meters tall.

Recommended application

Grown as a green manure in rotation with other crops. Sunhemp is particularly useful for suppressing weeds as it is very fast growing. It also helps increase soil fertility and control erosion.

Plough under or dig in at any time up to flowering (60 days) as it is able to rot down at this stage.

Human food

Sunhemp is not suitable for human consumption.

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