

Green Manures No. TGM9

Grasspea, *Lathyrus sativus*

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'.

Lathyrus sativus is also known as chickling vetch or khesari



Growing conditions

- Annual rainfall: Grasspea requires 300mm to 1300mm rain. It is useful for very wet and very dry areas.
- Temperature: It grows at 4.5° C to 27.5° C, and does well in colder areas.
- Soil type: It tolerates almost all types of soil from pH 4.5 to 8.3. It does best on clay soils.

Nitrogen fixation

Grasspea 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

Broadcast grasspea seeds at 55 to 60kg/hal or sow in furrows 3cm apart.

Growth form

Grasspea is a straggling or climbing annual.

Recommended application

Use grasspea as a cover crop/green manure to suppress weeds, add fertility and control erosion in rotation with crops.

Dig in any time up to flowering.

Human food

Leaves and immature pods may be boiled and eaten as vegetables, but see warning below.

Grasspea can also be consumed by animals although fed alone it is reported to be harmful to horses. Cattle, rabbits and sheep can consume large amounts with no ill effect.

Warning

Do not eat the mature or dried peas from Grasspea (*Lathyrus sativa*). The mature peas may be toxic and their consumption can cause serious health problems.

Produced by the Tropical Advisory Service, December 2001

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