Horse Gram

Madras gram, Kulthi bean

Macrotyloma uniflorum — *Fabaceae, Legumininosae* family

ECHO PLANT INFORMATION SHEET

ORIGIN- This legume plant is native to tropical Africa and So. East Asia. It is now grown in the drier areas of Australia and Asia.

USES- At all stages of its growth the stems, leaves and young pods of horse gram can be used as a fodder plant for animals. As a legume, it fixes atmospheric nitrogen in a form usable by plants therefore reducing the need for nitrogen fertilizer. The protein content of the seeds in the red-seeded variety is as high as 25% and 18% in the foliage of mature plants. The seeds are used for their medicinal properties as a diuretic and astringent. The rapidly growing vines form a dense mat from 30-60 cm high and prevent soil erosion.

CULTIVATION – Horse gram is a valuable crop for sloping land that is poor in mineral content either in hot, moist areas or semi-arid up to 5,000′ (1500 m.). It will tolerate some salinity but not water logged soil. The plant needs short days to flower and optimum temperatures of 20-30°C.

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HARVESTING & SEED PRODUCTION – In 40-50 days, horse gram can be pastured and in 120-180 days, the seed is mature. The black seeded types form seeds in a shorter amount of time. Pods are formed from the ground to the tips of the vines. When the leaves shrivel and pods are light brown, the plants can be uprooted, dried in the field or under cover and threshed to remove the pods. The yield from one acre can be 600-900 lbs. of seed.

DISEASES AND PESTS- This plant is mostly pest-free though occasionally some rust and leaf spot will appear but they do no significant damage.

COOKING AND NUTRITION- In all cases the mature seeds of the horse gram should be cooked before humans or cattle consume them. They can be boiled and fried or after boiling can be pounded, fermented and used as a sauce like soy sauce.

ECHO 17391 Durrance Rd., N. Ft. Myers, FL 33917-2239 USA
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