

TEFF

Love Grass, Annual Bunch Grass

Eragrostis tef

Gramineae

ECHO® PLANT INFORMATION SHEET

Origin

Teff was domesticated in the relatively dry environment of Ethiopia between 4000-1000 B.C. as an annual grass that could be harvested for grain at maturity.

Uses

Teff is grown as a cereal crop primarily in Ethiopia. The grain is ground into flour, fermented and made into Injera, a sourdough-type flat bread. Teff can also be eaten as porridge or used for home-brewed alcoholic drinks. Teff straw from threshed grain is considered to be excellent forage, superior to straw from other cereal grains. The straw is also utilized to reinforce mud or plaster in the construction of buildings. Teff can serve as a temporary ground cover and a non-weedy, annual grass for erosion control.

Cultivation

In Ethiopia, Teff is grown at elevations as high as 2800 m. Its prospect is good in countries with dry seasons of unpredictable occurrence and length such as Mexico, Bolivia, Peru, Ecuador, India, Pakistan, Nepal and Australia. It can grow at elevations up to 2800 m (9100 ft.) Prospects for a successful crop in humid areas are low. Its rapid maturity and inherent cold tolerance hold promise for Canada, Alaska, Russia and northern China. Once it is established, Teff requires little care and its rapid growth shades out most weeds. It is tolerant of various soil types and can withstand wet conditions better than any cereal except rice. Teff resists moderate drought but most cultivars require three good rains during early growth for a total of 200 to 300 mm of water. Teff is said to produce without added nutrients but growth is improved by enriching the soil with organic matter or adding fertilizers.

Harvesting and Seed Production

Teff threshes with standard methods and equipment. Very early types are ready to harvest in 45-60 days, average types in 60-120 days, and late types in 120-60 days. With good soil, moisture and warmth, yields of 2,000 – 2,200 kg per hectare are attainable. The grain is easy to store and will survive for many years in traditional storehouses making it a valuable safeguard against famine. Sowing methods may require special attention because the seeds are so small. In Ethiopia, fields are plowed three to five times. Sometimes herds of animals are repeatedly driven back and forth across the field to crush any big clumps of soil. Planting is at the very end of the dry season but not before the rains end.

Pests and Diseases

Teff's rapid growth shades out most weeds. Few diseases or pests attack it.

Cooking and Nutrition

Teff has as much or more food value than the major grains of wheat, barley and maize. This is probably because being a small grain; it is normally used in the whole grain form, which retains the germ and bran covering. Samples tested have shown protein levels between 14-15%. The iron (11-33 mg) and calcium (100-150 mg) contents are also higher than most grains. The relative absence of anemia in Ethiopia is presumed to be due to the grain's high content of iron. Teff flour contains little or no gluten therefore it cannot be used alone in baked products that require rising as in yeast breads. The most popular use of Teff is in the making of Injera, a sourdough type of flat bread. It is recommended as a good thickener for soups, stews, and gravies, and its mild, molasses-like sweetness makes Teff easy to include in porridge, pancakes, biscuits, cakes, stir fry dishes and soups. Persons with severe allergies to wheat gluten should try to use Teff as it contains no gluten, or at least none of the type found in wheat.

References

Heuzé V., Thiollet H., Tran G., Lebas F., 2017. *Tef (Eragrostis tef) straw*. Feedipedia, a programme by INRA, CIRAD, AFZ and FAO. <https://www.feedipedia.org/node/22033> Last updated on March 6, 2017, 17:55

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