

PROSO MILLET

Common Millet, Hog Millet, Broomcorn Millet

Panicum miliaceum

Gramineae

ECHO® PLANT INFORMATION SHEET

Description

Proso Millet was one of the earliest cultivated grains in the world in Central and Eastern Asia. The production of Proso Millet is declining and the crop is being replaced in the human diet by other cereals, especially rice, wheat and maize. However, it will continue to be an important staple in semi-arid areas where hardly any other cereal can be grown. Proso Millet is considered a useful quick-maturing crop for the drier regions of tropical Africa, to fill the hunger gap before the main cereals are harvested.

Uses

Currently, the greatest use of Proso Millet is in birdseed, but it is a beneficial grain and forage crop for many other ruminant animals. As a cattle feed, Proso Millet straw exceeds wheat, barley and oats in its protein content. It is distinctly lacking in lysine, an essential amino-acid needed by bodies for protein synthesis. So, it is supplemented by blending it with barley when feeding non-ruminants. The forage quality of the straw is poor, and in India it is more often used for bedding for cattle. The straw is also made into brooms. Starch from the grains has been used for sizing textiles. The seeds are used as a demulcent and as a treatment for abscesses and boils. Stem and root decoctions are taken against haematuria. Its value lies in its low water requirement, as it is a short season crop maturing in 60-90 days. It can serve as an emergency cash crop or a "catch" crop after others have failed.

Cultivation

- Elevation: 0-3500 m (11,500 ft)
- Rainfall: 200-450 mm (8-18 in)
- Temperature: 17° C (62° F)
- Soil: prefers drier, less fertile soil.

Proso Millet is an erect annual, growing 30-100 cm. tall. It can be grown at more northerly latitudes, (54°) than most other grains. It is shallow-rooted and does not compete well with weeds, as its initial two weeks of growth are slow. Cultivate often or plant thickly to shade out weed competition.

Harvesting and Seed Production

The seed heads of Proso Millet tend to shatter when dry so harvesting should take place when most of the seed head has lost its green color but the stem and leaves can still be green. Harvesting by cutting and binding is the method least likely to lose seed. Store seed in an area of low humidity (below 13%) and out of direct sun.

Pests and Diseases

Very few diseases attack Proso Millet and it is immune to the wheat curl mite that is a carrier for the virus causing wheat streak disease. Rodents, birds and grasshoppers can be enemies of millet in some places. Wild Proso Millet has naturalized and become a pesky weed in areas of certain countries. Its persistence is due to the viability of its seed which can stay in the ground for 4-5 years waiting for optimum conditions for germination.

Cooking and Nutrition

The husked grains of Proso Millet are eaten whole, boiled like rice or roasted. They are also cooked into porridge, or baked into flat bread or chapatti. Only the flour of gluten-rich types can be used for leavened bread and cakes; the flour of other types has to be mixed with wheat flour. In Russia, Proso Millet grain is made into a thick porridge called "kasha". The grain can be ground into flour for baking or a beverage base, roasted or boiled in water until soft. Its protein content is similar to many other cereal grains, about 12% and is relied upon primarily as an energy source.

References

Tran G., 2015. Proso millet (*Panicum miliaceum*), grain. Feedipedia, a programme by INRA, CIRAD, AFZ and FAO. <https://www.feedipedia.org/node/722>
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<http://ecocrop.fao.org/ecocrop/srv/en/cropView?id=8280>