

Pearl Millet

Pearl Millet, locally known as 'Bajra', is a nutritious coarse grain cereal. In Ethiopia, pearl millet is often used as replacement for maize and sorghum in dry areas, because it is suitable on a wide range of soils and in harsh production environments. It is mainly grown for human consumption serving as staple food and as fodder. The grain is among the most nutritious of the major cereal grains and has also a high nutritious value for poultry and livestock.

LAND PREPARATION

Pearl millet is a suitable crop to grow in the drier parts of semi-arid tropics and withstands harsh environments. Grows well on low moisture and fertile soils with a low pH.

WATER MANAGEMENT

- ✓ Pearl millet is very drought tolerant and therefore produced in semi-dry areas. It withstands drought better than sorghum and maize.
- ✓ Pearl millet has a high water use efficiency.
- ✓ Suitable in areas with rainfall of 250 mm or higher.
- ✓ Soil bunds can be made to ensure that soil, seeds and fertilizer are not washed away.

VARIETIES

The following varieties are common in Ethiopia:
Kolla-1, Kako-1, Tessema, Gudeta, Mecha, Necho, Debatsi, Bareda, Gute, Wama, Baruda, Degu, Boneya, Padet, Tadesse.

SEED MANAGEMENT

- ✓ Seed rate: 3 kg/ha
- ✓ It is best to sow pearl millet 5 cm from each other and 50 to 60 cm between the rows.
- ✓ 180.000 plants per hectare. On highly productive soils or under high levels of management, up to 225.000 plants per hectare are possible. On extremely sandy, drought soils up to 90.000 plants per hectare.

CROP PROTECTION

- ✓ Intercropping with sunflower and pigeon pea reduces white grub (pest)
- ✓ Mixing of Carbofuran 3G 12 kg/ha with the pearl millet seed
- ✓ In case of heavy incidence of shoot fly, spray the crop with 0.07% Endosulfan at day 10 and 20 after germination.
- ✓ Weeding should be done at day 15 and 30 after sowing.
- ✓ Application of NPS and urea at a rate of 121 and 39 kg / ha respectively.

CROP PLANNING

- ✓ Pearl millet can be intercropped with cow pea, pigeon pea, sunflower
- ✓ Pearl millet has a growing season of 75 up to 240 days, depending on the water availability.
- ✓ Crop rotation with wheat, soybean and potato helps to avoid those crops from nematode problems.

HARVEST & POSTHARVEST

- ✓ Best stage to harvest pearl millet is when the plants reach physiological maturity determined by the black spot at the bottom of the grain. When the crop matures, the leaves turn yellowish and present a nearly dried up appearance. The grains are hard and firm.
- ✓ The usual practice of harvesting pearl millet is cutting the earheads first and the stalks later. The stalks are cut after a week, allowed to dry and then stacked.
- ✓ Grains that have a moisture of 14% or lower are considered 'dry'.
- ✓ Grains that are stored for more than 6 months, should have a moisture content of less than 12%.

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Registered offices Bonn and Eschborn, Germany
GIZ SDR-ASAL
GIZ Office
P.O. Box 100009, Addis Ababa, Ethiopia
T +251 11 6629 9 83
F +251 11 5540 7 64
giz-aethiopia@giz.de
www.giz.de

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