

Seed production for pasture and forage crops

Adaptability of the technology

Seed production for forage and pasture crops is best used in areas with a pronounced dry season during seed ripening. Seed should not be harvested during heavy rainfall, or when the humidity is high.

Effectiveness of the technology

It is easier and cheaper to establish pasture and forage crops by using seeds than by using vegetative planting materials. Production of pasture and forage seed crops is comparable with other crops in terms of return on economic investment.

Preparing the site

Choose areas with well-drained soil of moderate fertility to prevent problems with weeds. Thoroughly prepare seedbeds to kill existing vegetation.

Sowing the seed

Sow seeds in rows 0.74 - 1.0 m apart. For broadcast sowing, use 3-5 kg pure live seeds (PSL)/ha for small seeds; for large seeds, use 6-10 kg PSL/ha. Spray with preemergence herbicide.



Fig. 1. Harvesting Napier grass in cut-and-carry system

Food and Fertilizer Technology Center (FFTC)
14 Wenchow St., Taipei, Taiwan ROC
Tel.: (886 2) 2362 6239 Fax: (886 2) 2362 0478
E-mail: fftcc@agnet.org Website: www.fftcc.agnet.org

*FFTC: An international information center for
small-scale farmers in Asia*

Cooperating agency for this topic:

The Philippine Council for Agriculture,
Forestry and Natural Resources Research and
Development

E-mail: pcarrd@ultra.pcarrd.dost.gov.ph

Fax: 63-49-536-0016

Fertilizer applications

Fertilize grasses with 50 kg N/ha. Apply phosphorus and potassium as required.

For legumes, fertilize with 30-60 kg P_2O_5 /ha. Add lime if needed.

Managing the pasture

Hand weed during the first 60 days after sowing legumes. Control insects and diseases by the judicious use of insecticides and by crop hygiene.

Encourage dense tillering by early mowing or grazing, and by careful use of nitrogen fertilizer to promote the development of reproductive shoots. Remove early seed heads and reduce peak flowering in grasses.

Harvesting the seed

Harvest manually during dry months. With Centro, Siratro, Leucaena and gliricidia, place pods

in net bags and sun dry. Sun-dry Stylo to let seeds or pods fall. Tie seed heads of grasses into sheaves. Stack with the heads turned inwards, and cover with plastic for three days for seeds to separate. Clean by winnowing, or by using wire mesh screen to separate seeds from debris. Remove damaged seeds by hand. Sun dry legume seeds for 2-3 days. In the case of grasses, dry seeds in the shade to protect embryos. Pack seeds in airtight containers, such as polyethylene bags or jute sacks lined with plastic.

Store the seeds in a cool, dry place.

Precaution

Commercial seed production requires a substantial investment. Seed volume should be big enough to recover the investment cost. The demand for pasture seeds is unpredictable. In most Asian countries, only large-scale farmers are able to invest in pasture improvement, for which grass seed is needed.



Fig. 2. Good stand of Napier grass