Saving Seeds of Bean

Production

Seed production of French or common bean (*Phaseolus vulgaris*) is possible in the tropics as long as the maximum day temperature does not exceed 30 °C at the time of flowering. For best results, French bean should be grown during a season where temperatures begin warm but then gradually decrease. Under these conditions, seeds will germinate well in the warm soil and set pods as temperatures decrease. Dry weather is preferred while pods mature.

Isolation

French bean is a self-pollinating crop and no isolation is required.

Selection

Harvest seeds that grew on healthy, vigorous growing, high yielding plants. Avoid harvesting seed from off-type plants as well as plants affected by diseases.

Harvesting

Pods are harvested when they have turned yellow but are not yet completely dry. The inner seeds will be firm, well developed, and beginning to loosen inside the pods. Harvesting is often done in the morning to avoid losses due to shattering.

Processing

Dry the pods in the sun and then place in a shelter for 1–2 weeks of curing. Pods are threshed by hand, being careful not to injure or split the seeds (injured seeds will germinate without primary leaves and grow poorly). Seed is further cleaned and dried after threshing.

Storage

Dried seeds can be safely stored for at least three years. Place seeds in jars, manila envelopes, cloth or mesh bags, plastic containers, or foil envelopes. The best containers are air-tight, such as a sealed glass jar, metal can, or foil envelope. Protect seed from sunlight.

Store seeds in a cool (below 15 °C is ideal), dry location. Place the seeds in a refrigerator for long-term storage. For short-term storage, keep the seeds in a cool, shady and dry place.



Maturing bean pods

References

Kelly, A.F. and R.A.T. George. 1998. Encyclopaedia of seed production of world crops. New York: John Wiley & Sons

Rashid, M.A. and D.P. Singh. 2000. Amanual of seed production in Bangladesh. AVRDC-USAID-Bangladesh Project. Joydebpur, Gazipur, Bangladesh.