



AVRDC - The World Vegetable Center

Fact Sheet

Saving Seeds of Radish

Production

Radish (*Raphanus sativus*) is a member of the cabbage family and grown worldwide. The harvested roots, prized for their pungent taste, come in a wide variety of colors, shapes and sizes. There are two major types. First, there are the biennials of temperate origin that require a cold period for flowering. These include the Japanese, American and European radishes. Second, there are radishes of tropical origin that do not require a cold period for flowering.

Radish grows best in a cool dry climate. Temperatures above 32 °C cause the stigma to drop and the pollen may fail to germinate. Two methods are used to produce seed:

Root-to-seed. Fully mature roots are harvested and selected for type (Fig. 1). The upper one-third of the root is cut and replanted at a spacing of 45 × 30 cm.

Seed-to-seed. Fall-winter plantings are allowed to go to seed naturally. Plants are carefully thinned to stand 45 × 45 cm apart.



Fig. 1. Radish roots

Isolation

Radish flowers are cross-pollinated by insects, primarily honeybees. Isolation distances of 1000 m or more are recommended. Related weeds, notably wild radish, wild turnip and wild mustard, must be removed to prevent cross-pollination.

Selection

In the root-to-seed method, foliar characteristics, root shape, size, skin and flesh colors, pungency, pithiness and bolting behavior are considered. Hairy or forked roots and early bolting plants are removed.

Selection is more difficult in the seed-to-seed method because one cannot see the entire root. Nevertheless, growers using this method should aggressively rogue out undesirable plants taking into consideration the same factors as with the root-to-seed method.

Harvesting

Threshing seeds from pods are difficult. Allow the plants to mature



Fig. 2. Ripening seed pods

fully; then bring them to the threshing floor for drying.

Processing

Threshing is done by hand-beating with sticks. The seed is then dried further.

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.

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. A manual of seed production in Bangladesh. AVRDC-USAID-Bangladesh Project. Joydebpur, Gazipur, Bangladesh.