



AVRDC - The World Vegetable Center

# Fact Sheet

## Saving Seeds of Pepper

### Production

Pepper (*Capsicum annuum*) grows best in the dry season with temperatures in the range of 21–33 °C. The night temperature is especially critical; generally, plants will not set fruits if night temperatures remain above 30 °C. Ideally, select a field where the previous crop was a legume or a cereal. Avoid fields where the previous crop was sweet potato or a solanaceous crop (tomato, pepper, eggplant, and white potato). This prevents the build-up of diseases and insects.

### Isolation

Peppers produce perfect, mostly self-pollinating flowers. Solitary bees will pollinate if other more desirable pollen is not available in the area. Most growers will get satisfactory results if different varieties are separated by 20 m or with another

tall, wind breaking crop. Closing the flower bud with a cotton ball when the distance of isolation is not sufficient is an ideal method to prevent cross-pollination.

### Selection

The earliest maturing and more attractive plants should be marked and inspected during growth. Select healthy, attractive fruits for seed saving. Seeds from off-type plants or fruits should not be saved.

### Harvesting

Harvest mature, fully-ripe peppers for seed. Most peppers turn red when fully mature.

### Processing

Pepper seeds may be extracted from fresh fruits (Fig. 1) or from fruits that have been dried in the sun for a few days (Fig. 2). Seeds may be

removed by hand or extracted by grinding the fruits and separating the seeds from fruits with a series of water rinses. Spread the seeds on a screen for drying under shade for 2–3 days but bring them inside every evening.

### 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

- Berke, T.G. 2000. Multiplying seed of pepper lines. AVRDC International Cooperators' Guide. Asian Vegetable Research and Development Center, Shanhua, Taiwan.
- 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.



Fig. 1. Sweet pepper cut for fresh seed extraction by hand



Fig. 2. Chili pepper prepared for dry seed extraction