

Seed Saving Guideline No. 11

Radishes

Raphanus sativus

Family: *Brassicaceae*

There are three types of radish. Small annual varieties, often red and white, are the **Radiculata** group; long white types, sometimes called mooli or daikon, are the **Longipinnatus** group and those grown specifically for their fleshy, edible seed pods are the **Caudatum** group.

Radishes are easy to save seed from in small quantities, but cross-pollination can be a problem. Flowers are perfect, but self-incompatible.

Growing & Roguing

- Start off the plants as you would for an edible crop, making sure you are growing them in the correct season for that variety.
- As the plants grow, discard any that look unhealthy or that have foliage very different from the rest. Remove any wild radish types.
- Spring and summer radishes are annuals and will produce seed the same year as you sow them. You can leave spring and summer radishes to go straight to seed or you can lift the roots once they have reached the edible stage to select the healthiest and most typical of the variety in size, shape and colour for seed saving. Replant them immediately, 45cm apart, firming in and watering well.
- Autumn and winter radishes should be treated as biennials to give seed in the summer after sowing. They must be lifted in winter and stored like other root vegetables, then replanted in spring spaced 45cm apart.
- There is no need to lift and replant varieties that are grown for their edible pods; sow them as early as possible in spring and space the plants 45cm apart.
- As radishes are strong outbreeders the more plants you grow for seed saving the better, preferably 15-20, in order to preserve the health and diversity of the variety.
- Radish seed stalks can grow surprisingly large and bushy (over a metre tall), so allow at least 45cm between plants – be prepared to stake the flower stalks.

Pollination & Isolation

Radish flowers are pollinated by insects including bees and flies. Pollen must be moved from plant to plant as well as from flower to flower or pods will not form. All radish varieties can cross with one another and with wild radish *R. raphanistrum*, but they will not cross with other brassicas. Because of this, and the need to have insect pollination of several plants, it is best to grow just one variety for seed each year. An isolation distance of 1000m is recommended to maintain varietal purity.

If you are growing more than one variety for seed, or if there are other radishes or wild radish flowering nearby, plants can be isolated in a mesh cage and blowflies introduced for pollination. Buy from an angling shop as maggots (buy 'whites') and put them somewhere to encourage pupation (become castors). Transfer them to your cage before they hatch into flies. Put them into a margarine tub with a hole cut into the side to protect them from the rain and allow them to fly out when they hatch. Make sure that the shop knows how you intend to use the maggots as some are treated to prevent them hatching. When introducing them in to the cage take care to prevent other insects entering.

Harvesting & Cleaning

The seed pods dry to a pale brown and the stalks should be cut when the pods and stems are dry and crispy or hard.

For small quantities of seed

Pods can be picked off the stems individually when dry and crispy, cracked open by hand or crushed individually, and the seeds picked out.

For larger quantities of seed

Cut down the dry stalks and store in a dry place. When you are ready to clean the seed, pick off the pods and grate them through a strong, wide-mesh sieve, or put them into a pillowslip and beat them. Seeds threshed this way will need additional cleaning by winnowing.

Winnowing is best done outside in a stiff breeze. Pour the seed steadily from one container to another, allowing the wind to blow the chaff away. Do this over a tarpaulin, in case a sudden gust wafts away the seed. Repeat until all the chaff has gone and only seeds remain.

Another technique is to place the dry crushed pods on a flat board and slowly tilt the board, perhaps vibrating slightly. The seeds should roll to the bottom of the board.

Storage

Ripe radish seeds will store in a cool, dry place for at least five years.

Returning Seed to HSL

It is vital that seed returned to HSL is not cross-pollinated. So not send seed to us that you suspect might have crossed.

Seed must be completely dry and fully cleaned. Seed that retains moisture can go mouldy in transit and will have to be discarded. It can take a few days for seed to get to us in the post so pack seed in breathable material, e.g. a paper envelope or cotton bag, and place it in a padded envelope or stout box to protect the delicate seed from impact damage.