

Seed Saving Guideline No. 5

Lettuce

Lactuca sativa

Family: *Compositae*

Six different groups of lettuce are generally recognised: crisphead, butterhead, cos, leaf, stem and Latin. All will interbreed.

The flowers are perfect and self-compatible. Each 'flower' head contains 10 to 25 florets, all of which open on the same day, usually in the morning. The anthers form a tube, through which the style grows, picking up pollen grains to fertilise the single seed. The florets then quickly close, never to open again.

Growing & Roguing

Most lettuce varieties are annual, growing and flowering the same year. However, the main problem when producing seed is the length of time taken for seed heads to form. Some will not produce their flower stalks early enough, not giving adequate time for the seeds to ripen properly.



- Sow lettuce varieties that will over-winter in late summer (usually the last week in August or the first week in September) under the protection of cloches. 'Bronze Arrow' and 'Stoke', are hardy enough to over-winter with minimum protection from the elements.
 - Alternatively, sow early in the season, allowing maximum time for seed to ripen.
 - Allow 45cm between plants, they can be prone to *Botrytis* (a fungal disease) and plenty of air circulation will reduce this risk.
 - Start with at least 10 plants, allowing for rotting, roguing and other mishaps. A variety can be maintained with only 1 or 2 plants.
 - Lettuce plants in flower can grow to a height of 1.5m so will require adequate supports.
 - In some 'head' lettuces the flower stalk has difficulty in pushing through the leaves; help it by slicing through the top of the head or peel back the leaves, taking care not to damage the developing stalk.
 - Remove any damaged lower leaves as the inflorescence develops, this will help to prevent fungal diseases such as *Botrytis*.
 - Take care not to save seeds from plants that bolt (go to seed) too early.
 - Rogue out plants that are atypical for any reason.
 - Remember, always save seeds from the best specimens.
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Pollination & Isolation

The flowers are perfect and self-compatible, so good seed set is always assured. However, insects do visit the flowers and can cause some crossing between varieties. An isolation distance of 8m is considered adequate. If you must grow two varieties side by side you can wrap spun fleece around one variety just before its flowers start to open. Cultivated lettuce will also occasionally cross with wild lettuce (*Lactuca serriola*).



Harvesting

Like dandelions, lettuce seeds have 'parachute' plumes when the seed is ready. Seed will ripen irregularly, 12 to 24 days after flowering. Harvesting should take place on a dry afternoon. For maximum yield harvest every day during this period by gently bending the flower stalks over and shaking them into a large paper bag (a potato storage sack is ideal), or pick off the individual white fluffy seed heads as they are ready and place in a paper bag. Alternatively, cut the whole

stalk about three weeks after the peak of flowering and place on a large paper or cloth bag to dry. Leave the seed heads to dry in the bags for at least a couple of weeks in the bags, the seeds will then be easier to clean.

Cleaning

When completely dry, shake the flower stems in the bag. Rub the seed heads between your hands to release more seeds. Put the seed through a fine mesh sieve that allows the seeds through but retains the chaff and plumes. Winnowing is difficult because seeds and chaff are about the same size and weight.

The dust produced during cleaning causes irritation to the lungs and eyes. If cleaning large amounts use a mask and goggles or clean outdoors

Storage

Seeds can be stored in a cool, dry place for up to seven years, after which germination will drop off very rapidly.

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.