

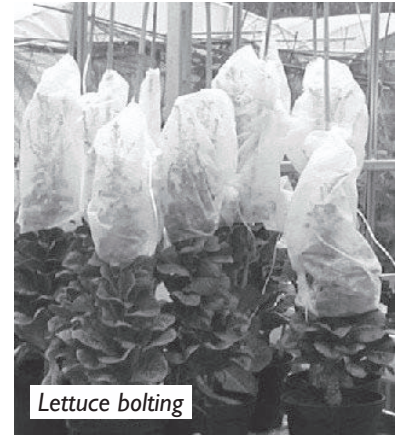
Lettuce

Lactuca sativa

Family: *Compositae*

Six different groups of lettuce are generally recognised: crisphead, butterhead, cos, leaf, stem and Latin. All can interbreed if visited by insects.

The flowers are perfect and self-compatible. Each 'flower' head is a head that contains 10-25 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 and 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 enough time for the seeds to ripen properly.

- Sow lettuce varieties that will overwinter in late summer (usually the last week in August or the first week in September) and under the protection of cloches. 'Bronze Arrow' and 'Stoke' are hardy enough to overwinter with minimum protection from the elements.
- Alternatively sow early in the season, allowing maximum time for seed to ripen.
- Allow 45cm between plants. Lettuce can be prone to *Botrytis* (a fungal disease); plenty of air circulation will reduce this risk.
- Start with at least ten plants, allowing for rotting, roguing and other mishaps. A variety can be maintained with only one or two plants.
- Lettuce plants in flower can grow to a height of 1.5m and will need adequate support.
- 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 peeling back the leaves, taking care not to damage the developing stalk.
- Remove any lower leaves which are damaged as the inflorescence develops. This will help to avoid 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.

Pollination and Isolation

As the flowers are perfect and self-compatible a good seed set is always assured. However, insects do visit the flowers and may 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 occasionally cross with wild lettuce (*lactuca serriola*).

Harvesting

Like dandelions, lettuce seeds have 'parachute' plumes when the seed is ready. Seed will ripen irregularly, becoming ready 12-24 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 seed heads as they are ready and place in a paper bag. Alternatively, you can get a reasonable harvest by cutting the whole stalk about three weeks after the peak of flowering and placing it in a large paper or cloth bag to dry. Leave the seed heads to dry in the bags for at least a couple of weeks. The seeds will then be fairly easy to clean.

Cleaning

Cleaning refers to the removal of chaff and debris leaving only seed. Cleaned seed keeps better.

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; this will give relatively clean seed. Winnowing is difficult because seeds and chaff are about the same size and weight. For extra cleaning use reverse screening, with a smaller mesh that retains the seed but lets small pieces of chaff and plume through.

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



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