Growing Lettuce Around Alice Springs

Horticulture Division, Alice Springs

VARIETIES

There are four major types of lettuce:

1. Hearting or crisp-head type, which is the traditional salad lettuce. These are basically a cool climate lettuce, but varieties have been bred for hotter conditions. Great Lakes Original, Great Lakes, Marion and Cabrillo are suitable for the warmer months, although tip burn and bolting (going to seed early) will still be a problem in mid summer. Imperial Triumph, Imperial D, Winter Lake and Black Velvet are suitable for the cooler months of April, May and June.

2. Leaf or bunching lettuce. These have loose crinkly leaves and do not form a head. Black-seeded Simpsons is a common variety.

3. Cos lettuce has an upright growth habit with stiffer relatively un-crinkled leaves. It is usually sold simply as Cos lettuce.

4. Butterhead lettuce forms a soft central head or heart. The leaves, which are smooth, have a golden tinge or reddish, brown edges on some varieties. Butter-crunch, Brown Mignonette and Mignonette Green are the common varieties.

Leaf, cos and butter-head lettuce are easier to grow than the traditional hearting lettuce, plus they are more resistant to tip burn. These are the traditional lettuce for warmer months and can be sown from July to March. Most varieties take 8 to 10 weeks to mature.
SOIL PREPARATION

Dig the soil as deeply as possible and mix in any available compost or well rotted animal manure. The area should be raked to a fine seed-bed to ensure an even sowing depth of up to 10 mm for even germination. The seed-bed should be moist at sowing time, while the surface soil should be kept moist until seedling emergence.

FERTILISER

Apply superphosphate at the rate of 50 g/m of row, plus 5 g/m of row of urea prior to sowing. These can be applied in bands to one side of and deeper than the seed. In areas that have been fertilised with superphosphate previously, you can apply less superphosphate.

After 4 weeks of growth apply a further 5 g/m of row of urea and then again when hearting begins.

Do not let the fertiliser come into contact with the leaves as this can cause leaf burn.

PLANTING

Seed can be sown direct in groups of about 3 seeds at 20 cm spacing for smaller varieties and 30 cm spacing for the larger varieties. Rows should be 30 cm apart. Alternatively seedlings can be raised in seedling trays or individually in peat pots, cell-trays, or pellets and planted out after two or three weeks.

When direct planting, the thinnings can be used as transplants. These will take a few weeks longer to mature. Seeds can be sown up to 10 mm deep.

WATERING

Water should be applied frequently to direct sown areas and seed-beds until the seedlings are established, while transplanted seedlings will need frequent watering until they are established. In warm weather transplanted seedlings will need to be covered for two to three days after transplanting. In hot weather they may need shade for five days or more. White or light coloured plant pots, or milk and fruit juice cartons with air vents can be used as covers.

Shade cloth of a density to suit the particular climate is the best cover to prevent transplanting shock.

Once the seedlings are established the frequency of watering can be gradually reduced to once each four or five days. If drip irrigation is used, a daily application is recommended. As a rule of thumb approximately 11 mm of water is needed daily in summer. This is equivalent to 11 L/m² per day or 55 L/m² every five days. Drip irrigation will use less if managed carefully.

Avoid sprinkler irrigation in the heat of the day; try to avoid sprinkler irrigation altogether if the water is over 500 mg/L T.D.S. as lettuce have a low salt tolerance. Alice Springs town water is satisfactory for spray irrigations. If spray irrigating with water over 500 mg/L T.D.S. use continuous wetting sprinklers and not the type that revolve causing a wetting - drying cycle on the plants.
MANAGEMENT

Apart from the management aspects mentioned above the area should be kept weed free and insects and diseases should be controlled.

Mulching between plants is strongly recommended to conserve moisture, keep the soil cool, suppress weed growth and encourage worm and other desirable soil organisms to work close to the soil surface. Mulching also reduces soil splashing during spray irrigation. In the home garden some shade can be provided in mid summer to reduce tip burn and bolting (early flowering).

INSECT CONTROL

The major insect pests of lettuce in the Alice Springs district are caterpillars, grubs or other leaf eating insects red spider or mite, aphids and other sap sucking insects.

The use of pesticides is restricted. For current recommendation please ring Alice Springs DBIRD office 8918111.

DISEASE CONTROL

Lettuce can be infected by a number of viruses. Many garden weeds are host to these viruses, while some are transmitted by aphids. If insects and weeds are controlled, and obvious infected plants removed and destroyed, viruses will present little problem.

Lettuce is subject to Downy Mildew and some fungi. Specific fungicides can be recommended after positive identification of the disease.

HARVESTING

Harvesting usually commences from 8 weeks after planting and can continue for 2 to 4 weeks. Regular planting at fortnightly intervals is suggested to ensure a continuous supply.

Please visit us on our website at www.primaryindustry.nt.gov.au

Published: Monday 15 June 1998.

While all care has been taken to ensure that information contained in this Agnote is true and correct at the time of publication, the Northern Territory of Australia gives no warranty or assurance, and makes no representation as to the accuracy of any information or advice contained in this publication, or that it is suitable for your intended use. No serious, business or investment decisions should be made in reliance on this information without obtaining independent/or professional advice in relation to your particular situation.