



Campaign for School Gardening



Crop Sheet: Lettuce & Salad Leaves

Description

Lactuca sativa = Lettuce, *lactuca* is latin for milk (milky, white sap), *sativa* = cultivated.

There is a wide range of leafy crops that can be grown to be eaten in salads. With so many types to choose from there is one for every season. Even in the winter months, hardy leaves such as rocket, mizuna, red mustard, spinach, sorrel and land cress can be grown and harvested.

They are short-lived, annual plants, which will set seed (bolt) within one year

Lettuces are grouped into different types including: butterhead, cabbage, cos, crisphead and loose leaf.

A good way to grow salad in schools is to choose a cut-and-come-again salad mix. These leaves can be cut when young, and will re-grow, providing two or three harvests before going to seed.



History

Wild lettuce (*Lactuca serriola*) is native to Europe, Asia and North Africa. It is from this wild species that all cultivated varieties (*Lactuca sativa*) originate.

The Ancient Egyptians were the first to cultivate lettuce as far back as 4500BC. They used it in their herbal medicines, such as one recipe that included mixing it with fresh beef, frankincense, juniper berries, bread and beer, straining and then drinking for four days to treat stomach ache!

The Romans thought lettuce had medicinal properties and were also responsible for its introduction to the UK.

The ancient world could not quite decide when was the best time to eat lettuce, either at the beginning of a meal to stimulate the appetite or at the end to induce sleep.

Interesting Facts About Lettuce & Salad Leaves

Salad crops are mainly used fresh. They are grown throughout the world and a particularly important crop in Europe and North America.

Salad leaves are not suitable for freezing owing to their high water content (they just disintegrate into a mush when defrosted). Ninety-five percent of a lettuce is water.

Whilst salad leaves are usually eaten raw, they can also be lightly cooked and added to dishes.

Lettuce contains tiny amounts of lactucarium, an appetite enhancer and mild sedative: if you ate lots of lettuce before you go to bed it might help you sleep well!

(Sources: 'RHS Fruit & Vegetable Gardening' by Michael Pollock; 'Food Plants of the World' by Ben-Erik van Wyk; 'Cabbages & Kings: the origins of fruit & vegetables' by Jonathon Roberts; The Complete Book of Vegetables, Herbs and Fruit by Matthew Biggs, Jekka McVicar & Bob Flowerdew; The Complete Vegetable and Herb Expert by Dr Hessayon & RHS Website 'Grow Your Own Veg': www.rhs.org.uk/vegetables/crops/index.asp).

(Photographs: Taken by & copyright RHS/ Open Future growit project. Thanks to Chyngton, The Glade and Petersgate Infant Schools).



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How to Grow Lettuce and Salad Leaves

Growing conditions

Salad leaves are very easy to cultivate and can be grown in good quality soil either in the ground or in containers. The soil needs to be very finely raked before planting (fine tilth) as the seeds are very small. Salad crops grow best in open sunny sites but can tolerate light shade. Lettuce need plenty of water especially through the summer months or if grown in containers.

When to grow

Outside (March – September): Early and late sowings would benefit from being protected by cloches or a layer of fleece. Lettuces do not like transplanting so it is preferable to sow direct in the ground when possible.

Indoors (February – September): Indoor sowings can be useful if no outdoor protection is available for young seedlings.

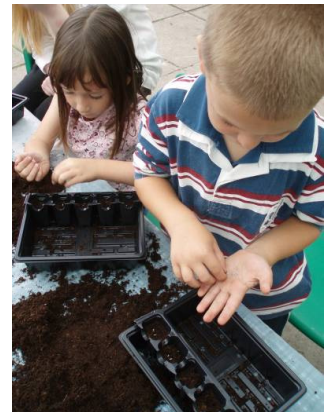
How to grow

Outside: Sow the small seeds in rows (drills) 1cm deep, in rows 20-30cm apart (spacing depends on type grown so check your packets). Where the soil is dry, water the drill before sowing the seeds. Sow thinly, scattering the seeds along the length of the row. Protect with cloches if planting earlier. Thin seedlings once true leaves appear to about 15cm spacing. Some leaf crops such as cut-and-come-again, rocket and mizuna can be planted slightly closer together at 10cm apart.

Indoors: Sow in seed trays or containers and thin seedlings when first true leaves appear. In module trays sow only 2-3 seeds per module. Transplant to eventual growing position or suitable container once plants appear sturdy (5cm+ with handful of leaves).

Most lettuce varieties are not hardy so protect with cloches or grow in a greenhouse if any chance of frost.

Lettuce need minimal care once planted. Remove outer leaves if wilting or damaged.



Harvesting

Salad crops can be ready to harvest 6-14 weeks after sowing depending on variety. Lettuce is ready to be picked as soon as a firm heart is formed, approx 8 weeks after planting.

With some types of salad leaf you do not have to pick the whole plant, but can just pick off a number of leaves that you need and they will grow again (cut-and-come-again and oriental-type salad leaves in particular).

Pest and Disease Problems

Slugs and snails cause the majority of damage to lettuce plants but aphids can also cause problems.

Bolting – when a plant puts out a tall flowering stem before the lettuce is ready to harvest caused by delayed transplanting, lack of water or overcrowding. Remove affected plants.

Downy mildew is common in wet weather. Throw away infected leaves – new ones are quickly formed.

(Refer to RHS website gardening advice for examples of pests and diseases).

Varieties to try: Lettuce: 'Little Gem' AGM: 'Lobjoits Green Cos' AGM, 'Pandro' AGM red cos, 'Nymans' AGM red cos, 'Salad Bowl' AGM and cut-and-come-again salad mixes. Other leaves: rocket, sorrel, mizuna, mibuna, oriental salad mixes, lambs lettuce, land cress.

(Sources: see overleaf).



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How to grow Salad in the Classroom (Micro Greens)

Micro Greens are harvested when seeds have sprouted and formed their first leaves, these tender seedlings bring variety to the salad bowl, have intense flavours and can also be grown indoors year round

Getting started

The method of growing micro leaves is similar to childhood projects of germinating mustard and cress seed. Recycle a food tub or use a seed tray as a container and lay a medium for the seeds to grow on. Felt or kitchen roll, cut to the tray's dimensions, holds water well. High sowing rates are the norm as cropping is done at such an early stage. After sowing, place on a warm windowsill or in a glasshouse to germinate. As seeds germinate ensure a constant supply of moisture by misting or watering daily - this is particularly important in summer. Sample sprouted seeds as they grow as flavours develop over time.



Ideal temperatures for germination and rapid growth are 18-22°C (65-72°F). In summer this is easy, and crops can be ready in seven to 10 days, but as days shorten and temperatures drop, germination slows; extra light is needed to prevent etiolated or 'drawn'

seedlings.

Some varieties to try:

Fenugreek had a pleasant crunchy texture. It produced little initial flavour, but had a distinct curry-like, peppery aftertaste. Leaves were light green in colour; took 10 days to crop.

Coriander, with its thin stems, had a soft texture and a more subtle, yet distinct flavour compared with mature leaves. Stems and leaves were light green; took 10 days to crop.

Red-stemmed radish had a mild initial taste but with an extremely pungent and peppery aftertaste. Purple leaves had highly attractive, bright red stems; seven days to crop.

Greek cress was immediately pungent and mustardy, so use sparingly. Deep green feathery leaves; cropped in seven days.

There are many others to try, including: amaranth, Thai basil, beetroot 'Bull's Blood', green broccoli, salad rocket 'Dentellata' and kale. Mix fiery subjects with milder ones or simply sow one at a time.

Edible stages of development

Sprouts: eaten when the seed case has split and shoot is still white. Must be soaked, and then washed twice daily.

Ready to eat: two to six days. Examples: alfalfa, mung beans.

Micro greens: eaten at seedling stage when first leaves develop. No soaking is required. An easy technique. Ready to eat: seven to 14 days. Examples: radishes, green broccoli, beetroot.

Baby leaves: used in salad bags by supermarkets and are the most tender of leaves. Raise from modules, or direct sow into soil, harvest leaves when small. Ready to eat: three to four weeks. Examples: red mustard, pak choi, rocket, lettuce, chard.

Teen leaf: term used in the salad-growing industry for leaves larger than baby and yet not fully mature. They are still deliciously tender. Ready to eat: four weeks onwards.

Mature leaf: the final stage. Fully-grown leaves are usually ready in eight weeks

(Article and photographs taken from the RHS magazine The Garden, January 2007 p20 -21).