

Allium Species - the Perennial Onions

This genus contains a number of species that are commonly cultivated as food plants. Most people who grow their own vegetables will grow onions and leeks, they will often also grow garlic, shallots and chives, whilst those who are more adventurous might be growing garlic chives, tree onions, everlasting onions and welsh onions. These are all very worthwhile and productive crops but there are also many other members of this genus that are more than worthy of a place in the food garden. Many of these alternative species are also very ornamental and are often grown in the flower garden.



Edible Uses

All members of this genus are, at least theoretically, edible. Their flavours range from mild onions and leeks right through to strong onion and garlic. All parts of the plants are edible - we normally confine ourselves to the leaves and the flowers, but many species produce bulbs and these can also be eaten, though they will be much smaller than cultivated onion bulbs. The flowers tend to have a stronger flavour than the leaves and the young developing seed-heads are even stronger.

We eat the leaves and flowers mainly in salads, and normally have a plentiful supply all through the year. The leaves can also be cooked as a flavouring with other vegetables in soups etc. or

they can be used as a cooked green, though this is probably too much of a good thing for most people. A little tends to go a long way, though if you are like us then the quantity you use may well increase with the passage of time!

Other uses

There is plenty of evidence to demonstrate the health benefits of including Alliums in the diet. Garlic, for example, has a very long folk history of use in the treatment of a wide range of diseases, particularly ailments such as ringworm, candida and vaginitis where its fungicidal, antiseptic, tonic and parasitocidal properties have proved of benefit. It is also said to have anticancer activity and demographic studies suggest that garlic is responsible for the low incidence of arteriosclerosis in areas of Italy and Spain where consumption of the bulb is heavy.

The compounds that make garlic so medically potent (and give it its distinct flavour) can also be found in most other members of the genus, though usually in rather lower concentrations. These same compounds, in large concentrations can actually be harmful to the health. It would take an awful lot of onions to cause problems for most people, though cases are occasionally recorded. Most mammals can be affected by them and, for some reason, dogs seem to be more susceptible than most.

As well as being beneficial for our health, alliums are also good companion plants to grow in the garden. They grow well with most plants, especially roses, carrots, beet and camomile, but they inhibit

the growth of legumes. When grown close to other plants they tend to increase that plants resistance to disease and reduce insect infestation. For example, many gardeners grow onions with carrots in order to reduce damage by the carrot root fly. By no means 100% effective, it reduces carrot fly attacks because the smell of the onions masks the carrot smell. Any carrot flies that come within viewing range of the carrots, however, will not be fooled. Alliums are also said to deter rabbits and moles, but this has certainly not been the case with us. Indeed, we have had moles making their hills right under onion plants!

You can make a very good tonic spray from onion or garlic bulbs that will also increase the resistance of plants to pests and diseases, whilst garlic bulbs have in the past been used as a fungicide. Simply chop up the bulbs and soak them overnight in cold water. We tend to put a few cloves in a pint of water, I'm not really one for measuring out exact quantities. We also often add some camomile flowers since this seems to increase the effectiveness.

The juice of the common onion is used as a moth repellent. It can also be used as a rust preventative on metals and as a polish for copper and glass. I can see no reason why other members of the genus cannot also be used in the same way, but have not experimented with this as yet.

Cultivation

Most members of the genus prefer a sunny but sheltered position in a light well-drained soil, though they are surprisingly tolerant of other conditions. Many species will thrive in quite heavy soils, so long as they are broken up by the addition of plenty of organic matter. In theory at least, most species do not grow well in areas with heavy rainfall. Therefore you are more likely to be successful if you garden on the eastern side of Britain. In practice, this is by no means always the case. There is an excellent collection of Allium species growing in Cumbria, for example, where the annual rainfall should really spell the death of most of them. The trick is to make sure that the soil is very well-drained, if you get standing water then the plants will rot. There are exceptions to every rule and, of the species mentioned later in this article, *A. ursinum* is a native woodland species that will often be found in quite wet soils.

Plants are generally quite free from pests and diseases. the only real problem we have had over the years has been with slugs. In our experience it is only the onion-flavoured species that are badly attacked, but in our wet Cornish climate we have sometimes lost literally hundreds of plants. Of those species we grow, the Welsh onion (*A. fistulosum*) and varieties of the common onion (*A. cepa*) have been worst affected. We do not use pesticides, but are gradually developing a balanced eco-system on the land by measures such as encouraging hedgehogs and building ponds to encourage frogs. This is gradually having an affect, but it is a slow process.

Unless the text says otherwise, all of the species mentioned below should be hardy in most parts of the country, so long as their cultivation needs are taken care of.

The majority of species in this genus come from areas with quite distinct seasons and a dry spell for at least part of the year when they and most other plants become dormant. In the wetter climate of Britain, where weeds tend to grow all year round, the Alliums do not compete well and most of the plants mentioned below will quietly disappear in the course of a year or so if they are not weeded occasionally. Exceptions to this include *A. ursinum* which was mentioned earlier and can form a large carpet of plants in a woodland. Our native *A. ampeloprasum* and the naturalised *A. triquetrum* grow wild in hedgerows and they will also tolerate quite a lot of weed competition.

Propagation

Propagation is quite a simple matter. If seed is the method used, then this should be sown in late winter or in early spring in a cold greenhouse - sow thinly and only cover the seed lightly. Germination is normally quite quick and good. So long as you do not sow the seed too thickly, it should be possible to grow the seedlings on without transplanting for the first season. Apply a liquid feed occasionally to make sure that the plants don't get hungry. We usually pot the seedlings up as soon as they are large

enough to handle, putting three plants in a three inch pot. Although this is more work, you usually end up with larger plants at the end of the season. A number of species from Mediterranean-type climates usually come into growth in the autumn, flower in the spring and then die down for the summer. We usually sow the seed of these species in the early autumn and grow them on over the winter. You do have to be careful that they don't damp off. *A. neapolitanum*, mentioned below, is a good example of this.

Some species grow very vigorously from seed and can be planted out in the summer of their first year. Most of the species that we grow, however, are a bit slower and appreciate at least their first year in a greenhouse. These will be planted out in late spring of their second year of growth, or sometimes a year later if the plants are still small.

Alliums are very easy to divide. This can be carried out in the spring for the winter-dormant species, or in the late summer for the summer-dormant species. The evergreen species can be divided at almost any time of the year, though spring is probably best. The method of division depends largely on the growth habit of the plant. In some species, like chives, the bulb is constantly dividing and a clump of bulbs is formed. It is a simple matter to dig up this clump, break it into smaller sections (which can be as small as one bulb) and then replant. In other species, a number of small bulbs, or offsets, are produced at the base of the parent bulb. For rapid increase, it is possible to dig up these plants every year to plant out these offsets - if they are rather small then you will probably have better results if you pot them up at least until they are growing away well. Alternatively, you can leave the plants for a number of years to let a large clump develop, digging them up and dividing them when the fancy takes you or if they seem to be losing vigour. Any spare bulbs can, of course, be eaten.

A number of species do not form clearly defined bulbs, but form a clump of rhizome-like roots. In this case you dig up the clump in the spring, cut it into sections with a sharp knife (making sure that there is at least one leaf- growing point on each section) and replant in situ.

A number of species also produce small bulbs, or bulbils, at the top of the flowering stem. Sometimes these are produced together with flowers, sometimes instead of flowers. Possibly the best known example of this is the tree onion (*A. cepa proliferum*) though many gardeners will have also seen bulbils on garlic plants. These bulbils afford a very easy means of increase - merely pot them up or plant them out as soon as they part easily from the flowering stem. A word of warning here. Some allium species can become noxious weeds and it is usually those with bulbils that are the culprits. You need have no fears about tree onions or garlic going on the rampage, but if you grow a species that forms bulbils then do view it with some caution.

The Species

Let us look now at a few of the species that we are growing. This is by no means an exhaustive list, but does include those species that have performed best for us. There is nothing to prevent you experimenting with other species.

Allium ampeloprasum: The wild leek is a native of Britain, growing in hedgerows. The leaves are a bit on the tough side, but the plants come into growth in the autumn and can therefore be harvested in the winter and spring. There are two forms of the wild leek that are probably of more interest to the food grower. Elephant garlic looks like a gigantic garlic bulb with four huge cloves. It is much milder in flavour than the true garlic, you might be relieved to hear, and makes a nice flavouring in food. The cultivar 'Perlzwiebel' is grown in Germany for the bulbils it produces instead of flowers. These bulbils are solid rather than made up of layers and are popularly used for making pickles. This cultivar is not currently available in Britain, though we are hoping to secure a supply in the near future.

Allium canadense : Called wild garlic in N. America, though not to be confused with our native wild garlic, *A. ursinum*. This species grows about 18 inches tall and can spread quite freely when well sited. There is a form that produces bulbils and this is a pernicious weed in America. The form available in this country, however, is much better behaved. Both leaves and flowers have a delicious mild flavour whilst the bulb is crisp and mild with a pleasant flavour that is a leek or garlic substitute according to whose taste buds you believe.

Allium cepa: As well as the common onion and the shallot, this species also includes a number of other interesting forms. *Allium cepa* 'Perutile' is the everlasting onion, an evergreen form that is capable of supplying fresh leaves all winter. These taste much like spring onions. *Allium cepa proliferum* is the tree onion, it produces bulbils instead of flowers, these bulbils have a nice onion flavour and can be used raw, cooked or pickled.

Allium cernuum: The nodding onion grows about 18 inches tall and is one of my very favourite species. Not only is it an exceedingly beautiful plant, but both flowers and leaves have a delicious strong onion flavour - the flowers look especially attractive in a mixed salad. The leaves are available from quite early in the spring until late autumn, and the flowers in mid-summer. The cultivar 'Major' is a more vigorous form with larger flower clusters.

Allium fistulosum: The welsh onion is a very hardy species that is sometimes cultivated in the garden for its edible leaves and small bulbs. These are used as a spring onion and can be produced throughout the winter if the weather is not too severe. This is a very popular cultivated vegetable in the Orient, the forms grown there are known as bunching onions and tend to be hardier and more robust than the welsh onion.

Allium moly: This bulb grows about 1ft tall and is often grown in the flower garden. It is probably not hardy in the colder parts of the country, though the dormant bulbs will withstand soil temperatures down to at least -10 c. The bulbs are rather small but are very freely produced and have a pleasant mild garlic flavour. Some forms of this species, especially *A. moly bulbiferum*, produce bulbils in the flowering head and can be invasive. The species type is sometimes also considered to be invasive, though it has not proved so with most people and in at least one wet garden has proved to be useful for naturalising between shrubs and also grows well at the base of a beech hedge.

Allium neapolitanum: Daffodil garlic is only hardy in the milder parts of the country, tolerating temperatures down to somewhere between -5 and -10 c. This bulb grows about 1ft tall, coming into growth in the autumn and providing edible leaves all through the winter so long as you do not over-crop it. A pleasant mild garlic flavour, the flowers are produced in the spring and have a stronger flavour. The plant has been increasing very freely with us, both by bulbs and by seed. Indeed, when well suited it can self-sow to the point of nuisance.

Allium sativum: Garlic is fairly well known so I do not want to say much about it here. However, it is not only the bulbs that can be used. The Chinese often cultivate garlic especially for the leaves, which can be produced in the middle of winter in mild winters and have a mild garlic flavour. The flowering stems can also be used as a flavouring, whilst the sprouted seed can be added to salads. Some of the plants non-edible uses include the juice from the bulb, which is used as an insect repellent. This does have a very strong smell and some people might prefer to be bitten! If you do get bitten, then the juice can also be applied to any stings in order to ease the pain. In the past, 3 - 4 tablespoons of chopped garlic and 2 tablespoons of grated soap were infused in 2 pints of boiling water, allowed to cool and then used as an insecticide. An excellent glue can be made from the juice, which is used in mending glass and china.

Allium schoenoprasum: Chives are another well-known plant that do not really require much information from me. We grow a lot of this plant, plus the more vigorous sub-species *A. schoenoprasum sibiricum*. These plants provide us with an abundance of leaves from early spring right round to late autumn.

Allium triquetrum: The three-cornered leek grows about 1ft tall and is naturalised in hedgerows and woodland edges in parts of Britain. It provides us with a very good source of edible leaves from October round to April, plus its flowers in the spring and its small bulbs at almost any time of the year. The plant is not hardy in the colder areas of Britain, tolerating temperatures down to about -10 c.

Allium tuberosum: Garlic chives is widely grown in the East for its leaves and flowering stems, there are many named varieties. It is becoming more widely known in Britain, but is still not grown anywhere near as widely as it should be. A very adaptable plant, garlic chives succeeds in tropical and in temperate climates - it appears to be fully hardy in Britain. Plants remain green until temperatures

fall below 4 - 5 c, then they die down and come into new growth in spring when temperatures go above 2 - 3 c. Here in Cornwall that means that we can often harvest the leaves for 10 - 11 months of the year.

Allium ursinum: Wild garlic, or ramsons, is a native woodland plant growing about 1ft tall that often forms large dense green carpets of growth in the early spring. We have encouraged this plant to naturalise along our hedgerows, where it is beginning to increase nicely. You do not normally need to cultivate it - give it the right conditions and it can more than look after itself. The leaves form a very welcome addition to our diets when they appear in late winter. We eat them in quantity both raw or cooked and enjoy their mild garlic flavour. As they grow old in April then we move onto the flowers and end up eating the much hotter young seed-pods as spring turns into summer. (See our leaflet on [Wild garlic](#) for more information about this plant.)

These species are just a few of the many alliums we eat each year. They are very enjoyable both raw or cooked and are generally easily grown. They also have many health benefits both for ourselves and for our gardens. Why don't you try growing some of them, and perhaps also experimenting with some of the several hundred other species in the genus.

Database

The database has more details on these plants: [Allium ampeloprasum](#), [Allium ampeloprasum porrum](#), [Allium canadense](#), [Allium cepa](#), [Allium cepa aggregatum](#), [Allium cepa ascalonicum](#), [Allium cepa proliferum](#), [Allium cernuum](#), [Allium fistulosum](#), [Allium moly](#), [Allium neapolitanum](#), [Allium sativum](#), [Allium schoenoprasum](#), [Allium schoenoprasum sibiricum](#), [Allium triquetrum](#), [Allium tuberosum](#), [Allium ursinum](#).

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