

Species guide

These species, which appear in The Great Plant Hunt Identikits, include familiar, widely distributed common plants. See Identikits or go to www.greatplanthunt.org for images.

They are easy to collect, not toxic or irritant and their seeds are of suitable size for children to handle. Most species are found on waste ground, pastures and playing fields. There is a mix of early and late flowering species for collecting in the spring, summer or autumn term.

The list also covers a variety of habitats so that every school in the UK should have a few species available in their area. A large number are also easy to grow from collected seed.

This guide gives background information on these plants and some of their traditional uses.

Key

- * Seed suitable for collecting, processing, storage (in the mini seed bank) and germination in the classroom or outside.
- ** Suitable for seed collecting, processing, and storage but may be difficult to germinate.
- *** Suitable for collecting specimens for identification, and learning about their uses, but will be difficult to process and very difficult to germinate.

Scientific name: *Gallium aparine**

Common names: Cleavers, clivers, goosegrass, stickyweed.

Where found: Very common throughout the UK and most of Europe in hedges, disturbed ground and at the edges of woodland. It is also found around shingle in coastal areas. It is considered to be a tiresome weed in gardens and crop fields.

Flowering season: June to September.

Fruiting season: Likely to fruit between July and November. Seed is best collected between July and October.

Dispersal method: Seeds carried by animals.

Germination: This seed may require chilling. Sow seeds on a wetted tissue, cover with cling film and place in a fridge for two to three months. Afterwards, move into the classroom - seeds should then germinate quickly. Try sowing seeds and incubating in the classroom without chilling first as a control. Alternatively, try sowing directly outdoors in pots or in the ground from mid spring to mid summer (15-20°C). Sow on the compost or soil surface with a thin (2-5mm) covering layer of soil.

Uses:

- Cleavers is related to the dye plant madder. Cleaver roots also contain a red dye.
- Cleaver fruits can be dried and ground up to use as a coffee substitute.
- Cleavers can be boiled and eaten as a vegetable.

Description: This is a bristly 'clinging' plant that scrambles everywhere through hedges

and over other plants. The long narrow leaves are ranged along the four-angled stem in whorls of six to nine. The tiny flowers are rather few and inconspicuous – with four white petals. The leaves, stems and rounded two-lobed fruits of the plant are covered with backward pointing prickles that help the plant hook a ride on passing animals or humans.

Fun facts:

- If you go out for a walk in the countryside you often come back with these stems or fruits clinging to your clothing like velcro.
- The name goosegrass was given as it is a favourite food of geese, and is often fed to goslings.

Scientific name: *Tussilago farfara**

Common names: Coltsfoot, coughwort.

Where found: Commonly found across the UK and the rest of Europe on waste ground, road verges, sea cliffs, dunes and along the banks of rivers and streams.

Flowering season: February to April.

Fruiting season: Likely to fruit between April and June.

Dispersal method: Seeds carried by wind (parachute).

Germination: This seed is easy to germinate and prefers light for germination. Sow outdoors in pots or in the ground from early to mid spring (10°C). Sow on the compost or soil surface with a thin (2-5mm) covering layer of soil.

Uses:

- Coltsfoot has been used as a natural food flavouring.

Description: Coltsfoot flowers are sometimes mistaken for dandelions. Unlike dandelion however, this plant has stems that are purplish, and covered with white woolly hairs. Along the upright stem there are overlapping fleshy brownish-purple scales. The flowering heads, when looked at closely, are more like the daisy, with long yellow petal-like florets around the edge and many tiny yellow florets grouped across the flat disc-like centre. The leaves appear at the base of the stem after the flower. They are heart-shaped with a long stem and are often coated with white felt-like hairs.

Fun facts:

- The fruiting head is a fluffy ball like a dandelion 'clock'.
- The flower is much loved by honey bees as it flowers early in the year
- The name *Tussilago* means 'cough suppressant'. It has been used in Chinese medicine for over 2000 years to treat wheezing and coughing.
- The following recipe is from the 13th century: Grind equal amounts of coltsfoot flowers and lily bulbs into a fine powder and mix with honey to make pills the size of marbles. The pill can be chewed and swallowed with ginger tea or left in the mouth to dissolve slowly by itself.
- In Paris, pharmacies used to have a picture of a coltsfoot above their doors.
- Coltsfoot's silky seeds were once used as a stuffing for mattresses.
- Before matches were invented the soft down from the leaves were wrapped in a rag, dipped in saltpetre, dried and used as tinder.

Scientific name: *Bellis perennis**

Common names: Daisy, common daisy, lawn daisy, English daisy.

Where found: This plant is often found in lawns, by roadsides and on the edges of paths. It is common throughout the UK and many other parts of Europe.

Flowering season: March to October.

Fruiting season: Daisy is likely to fruit between June and October, however, it is best to collect fruit between June and July. It is often difficult to spot fruiting daisies. This is because they are mostly found in lawns which are mown regularly, cutting off the flowering head before it gets a chance to develop into fruits. See Activity 1 for Ages 9-10 on how to make sure you can collect daisy fruits by managing your own school plot or quadrat.

Dispersal method: Seed carried by a combination of wind, animals, and rainwater. Seed also disperses unassisted - it just drops off.

Germination: This seed is easy to germinate. Sow outdoors in pots or in the ground in mid spring (10-15°C). Sow on the compost or soil surface with a thin (2-5mm) covering layer of soil.

Uses:

- Daisies were once used to treat bruises and grazes but there is a lack of clinical evidence to support these uses.
- Some say that the Latin name *Bellis* comes from 'bellum' meaning war, because the plants were gathered from the battlefield to treat wounds immediately.

Description: Often considered a weed, particularly in lawns, this short plant with a tight rosette of leaves at the base and pretty flower heads spreads quickly. The 'flower-like' structure is actually a head made up of lots of little flowers – with many individual white flowers around the rim called ray florets (they look like petals) and a large number of small yellow flowers grouped across the flattish middle section (disc florets) . The ray florets can be quite variable – ranging from completely white to heavily tipped with a pink flush.

Fun facts:

- Over 1200 children gathered in Salzburg, Austria on 13th April 2008, to build the 'longest friendship bracelet in the world' – a record-breaking daisy chain measuring 4kms.
- Their name may also come from the Saxon 'daeges-eage' which means 'day's eye' because the whole flower opens in the morning to get the sunlight and closes again in the evening.
- The scientific (Latin) name means 'pretty plant that is a perennial'
- Daisy belongs to the daisy family – called Asteraceae (formerly Compositae) – which includes ragwort, thistles, marigolds, lettuce, cornflowers and many of our later flowering garden plants in Britain. It is one of the biggest families of plants in the world with over 25,000 different species.

Scientific name: *Taraxacum officinale**

Common names: Dandelion, lion's tooth, blowball.

Where found: Native to Europe. Found in lawns, gardens, roadsides, waste ground and any other grassy places.

Flowering season: March to October.

Fruiting season: Likely to fruit between April and October, but seed is best collected from May to July.

Dispersal method: Seed carried by wind (parachute).

Germination: This seed is easy to germinate but prefers light for germination. Sow indoors at any time or outdoors from early spring to late summer (10-25°C). Sow on the compost or soil surface with a thin (2-5mm) covering layer of soil.

Uses

- Dandelion can be used as a food: young dandelion leaves make a good vegetable green, either cooked or in salads. The roots can be roasted and ground and used as a coffee substitute. The soft drink 'dandelion and burdock' used to be very popular. Wine can also be made from the flowers.
- Dandelion flowers have been used as an ingredient of a herbal compost activator which contains the dried and powdered mixture of several herbs that can be added to a compost heap in order to speed up bacterial activity and shorten the time needed to make compost. A liquid plant feed can be made from the root and leaves.
- The milky latex was used in the past as a mosquito repellent. The 'milk' has also been used to treat warts and stings.
- Dandelion root and leaf are used widely in Europe for gastrointestinal ailments. It also has a long tradition of use as a diuretic. There is a lack of clinical research evidence that support its use as a diuretic. Traditionally dandelions are associated with bed wetting!

Description: Dandelion is a small rosette plant with a long, thin tap root. The flower-like structure is made up of lots of little flowers. The yellow petal-like structures are in fact ray florets. The seed head is a round ball (dandelion clock) of seeds each with a parachute. Dandelion is often considered to be a weed when it pops up in formal lawns.

Fun facts:

- The flower is open in the daytime but closes at night.
- The seed head 'clock' is also known as a 'wishie'
- The English name dandelion comes from the French 'dent de lion' meaning lion's tooth, referring to the coarsely-toothed leaves.
- In modern French the plant is named pissenlit, which translates as 'piss in bed', supposedly referring to diuretic properties. 'Pissabeds' is an English folkname for this plant.
- The plant name *officinale* means having medicinal properties.

Scientific name: *Sambucus nigra****

Common names: Elder, Judas tree, pipe tree, black elder.

Where found: Elder is widespread and very common. It is found in woods and on scrub or waste ground.

Flowering season: May to July.

Fruiting season: Likely to fruit between September and October.

Dispersal method: Seed carried by animals, especially birds.

Germination: Suitable for collecting specimens for identification and learning about their uses. Germination is very difficult - seeds require multiple treatments and take more than 100 days to germinate.

Uses:

- Elderberries are used to make wine and the flowers to make cordial and elderflower champagne.
- Elder has a long history of use as a medicinal herb. The leaves have been used as an insect repellent simply by rubbing them onto the skin.
- In the past, it has been used in the treatment of constipation and arthritic conditions, although the mechanism is not clear.

Description: Elder is a shrub or tree with flat-topped clusters of tiny scented white flowers. The bark is corky and fissured. The dark purple berries hang in large clusters. The leaves are made up of five leaflets.

Fun facts:

- Traditional folklore has it that burning elder would allow bad spirits to enter a house, however placing it by the front door prevents witches coming in.
- It was also believed that elder is a favourite form for a witch to take and if its branches were cut the witches would bleed.
- Elder stems can easily be hollowed out by removing the soft pith inside. In the past, the hollowed-out stems were used to make whistles.
- The word elder comes from an Anglo-Saxon word 'æld', meaning fire or kindling a fire. Hollowed out stems of elder were used to blow onto and stoke fires.

Scientific name: *Alliaria petiolata***

Common names: Garlic mustard, Jack by the hedge, poor man's mustard.

Where found: A common spring hedgerow plant throughout lowland Britain and much of Europe, garlic mustard is often found in hedgerows or light shade at the edges of woods or in scrubland. Garlic mustard particularly likes chalky soils.

Flowering season: April to July.

Fruiting season: Likely to fruit between June and November. Seed is best collected between July and November.

Dispersal method: Scientists are still not sure how these seeds disperse.

Germination: May be hard to germinate. Seeds may require chilling. Sow seeds on a wetted tissue, cover with cling film and place in a fridge for two to three months. Afterwards, move into the classroom - seeds should then germinate quickly. Some germination may be achieved by sowing outdoors in pots or in the ground in autumn. Germination should then take place in spring. Sow on the compost or soil surface with a thin (2-5mm) covering layer of soil.

Uses:

- This plant is edible. When crushed, the leaves smell of garlic. Chopped leaves can be used in cooking to flavour fish and meat in the same way as chives. It has also been used as a salad vegetable.
- Traditionally people have used garlic mustard to clear infection. Roots were once chopped up and heated in oil to make an ointment to rub on the chest to treat the symptoms of bronchitis. Garlic mustard is not used for that now.
- In the past, the seeds were also used as snuff.

Description: Garlic mustard is a tall plant with heart-shaped leaves and little white flowers with four petals. The heart-shaped leaves have a toothed edge and are deeply veined. The plant can grow quite tall - up to a metre high. It smells strongly of garlic.

Fun facts:

- This is not related to garlic at all but belongs to the cabbage family – the Brassicaceae or Cruciferae.
- The name Cruciferae refers to the petals of this group that are always four in number and arranged in a cross shape.
- The caterpillars of the orange-tipped butterfly love to eat the young pods of this plant.

Scientific name: *Crataegus monogyna****

Common names: Hawthorn, May blossom, whitethorn.

Where found: This shrub or small tree is widespread across the UK in hedges, at the edges of woods and in scrubland.

Flowering season: May to June.

Fruiting season: Likely to fruit between September and November.

Dispersal method: Seed carried by animals.

Germination: Suitable for collecting specimens for identification, and learning about their uses, but will be difficult to process and very difficult to germinate. Fruit must first be removed from seed for germination to take place. The seeds take over a hundred days to germinate.

Uses:

- Hawthorn can be used as a hedge, and is used extensively to make traditional hedges outlining agricultural fields. Hawthorn spines and close branching make it very effective.

Description: This pretty, small tree or hedgerow plant has white five-petalled flowers with pink or purple anthers. The branches have long narrow thorns and carry dark green glossy leaves that are deeply lobed. The fruits resemble small rose hips and are dark red and fleshy. They are called 'haws'.

Fun facts:

- This plant belongs to the Rose family.
- One of the oldest hawthorn trees is reputed to have been planted in the 13th century, so it is more 700 years old. It is called the 'Hethel Old Thorn' and grows in a churchyard near Norwich.
- Hawthorn berries are still used to make a jelly.
- It is supposedly unlucky to cut the hawthorn unless it is in flower.
- It is often used in festivals and is a traditional garland flower in May Day celebrations.
- Serbian folklore mentions that hawthorn is deadly to vampires!

Scientific name: *Malva sylvestris***

Common name: Mallow, high mallow, pancake plant, cheese flower.

Where found: Mallow is found on waste ground and roadside verges in the UK and most of Europe.

Flowering season: June to September.

Fruiting season: Likely to fruit between July and October. Seed is best collected between August and October.

Dispersal method: Scientists are still not sure how these seeds disperse.

Germination: Suitable for seed collecting, processing, and storage but may be difficult to germinate. The seed coat must be broken to allow the seed to take up water. Seed coat should be rubbed between two sheets of sand paper. In nature, this kind of action might take place as the seed passes through an animal that has eaten it. After treatment, sow seeds indoors any time or outdoors in summer. Sow on the compost or soil surface with a thin (2-5mm) covering layer of soil.

Uses:

- Young mallow shoots used to be eaten as a vegetable up to Roman times.
- In medieval times the plant was considered to have a calming effect.
- More recently, mallow leaves have been used to treat wasp stings and the sap made into a soothing ointment

Description: The leaves at the base of the plant are rounded whereas the stem leaves are ivy shaped. The pink flowers are made up of five narrow dark veined petals. The round fruits are called cheeses because of their shape. They contain many 'nutlets'.

Fun facts:

- Nearly all the folk names for the plant refer to the shape of the fruit eg: Billy buttons, pancake plant and cheese flower.

Scientific name: *Artemisia vulgaris**

Common name: Mugwort, wild wormwood.

Where found: Commonly found along roadsides and in rough or waste ground. Likes dry sandy areas. It is common throughout the UK and across much of Europe.

Flowering season: July to September.

Fruiting season: Likely to fruit between September and early November.

Dispersal method: Scientists are still not sure how these seeds disperse.

Germination: This seed is easy to germinate but prefers light for germination. Sow indoors at any time or outdoors in pots or in the ground from early spring to late summer (10-25°C). Sow on the compost or soil surface with a thin (2-5mm) covering layer of soil.

Uses:

- Mugwort used to be used to flavour drinks. In Japan it is still used for flavour in cooking, like a herb.
- Plants from the same family are being used in China and India to treat malaria.

Description: This is a tall aromatic plant growing up to 1.5m with a reddish grooved stem. The deeply divided leaves are hairless above but covered with white downy hairs below. Mugwort has a lot of tightly packed, stalked spikes of small flowers that closely resemble the 'groundsel' weed. Like daisy and yarrow, the 'heads' each contain a number of small, dull yellowish-brown or purple flowers surrounded by hairy bracts with a papery edge.

Fun facts:

- The common name was given to the plant as it was supposed to repel bugs and moths.

- Roman soldiers put mugwort in their sandals because they thought it would protect their feet against fatigue.
- The name mugwort is often assumed to refer to the herb's use in beer-brewing (the mug would have contained beer).
- It was also believed that placing the herb inside the cover of a pillow and sleeping on the pillow would induce vivid dreams.

Scientific name: *Plantago lanceolata**

Common names: Ribwort plantain, English man's foot, white man's foot, black Jack, cocks and hens, fighting cocks, swords and spears.

Where found: *Plantago* is common on waste ground and in well-trodden places like paths and lawns across the UK and the rest of Europe.

Flowering season: April to October.

Fruiting season: Likely to fruit between May and November. Seed is best collected from May to September.

Dispersal method: Seeds carried by animals (sticking like dust) and wind as they are very small.

Germination: This seed is easy to germinate but prefers light for germination. Sow indoors at any time or outdoors in pots or in the ground from early spring to late summer (10-25°C). Sow on the compost or soil surface with a thin (2-5mm) covering layer of soil.

Uses

- In the past, people used *Plantago major* to treat wounds and snake bites.
- Saxons bound it to their heads to try and treat headaches, but it is not used for this now!

Description: The leaves grow from the base of the plant and form an upright rosette. The stems are furrowed and hairy. The densely packed, pale greenish-yellow or pale brown flowers form well above the leaves. Covered in silky hairs, the leaves are thin and oval and narrow into a long stalk. The leaves are strongly veined. The fruits are egg shaped capsules and inside are eight to twelve seeds.

Fun facts:

- A game can be played with *Plantago*: Take the bottom of the stalk towards the top of the flowering head and wind it once around the top of the stalk just under the head. Then aim the stalk and head away from you as if pointing an arrow and push the loop firmly against the head. It usually snaps the head off the stalk and propels the flower head some distance away from you - a bit like a catapult.
- Plantain has over 60 different common names!

Scientific name: *Trifolium pratense***

Common name: Red clover, meadow clover, wild clover.

Where found: Common to the UK and throughout Europe, red clover is found in grasslands, waysides and waste ground.

Flowering season: May to September.

Fruiting season: Likely to fruit between June and October, seed is best collected from July to October.

Dispersal method: Seed carried by animals and also disperses unassisted - it just drops off.

Germination: Suitable for seed collecting, processing, and storage but may be difficult to germinate. The seed coat must be broken to allow the seed to take up water. Seed coat should be rubbed between two sheets of sand paper. In nature, this kind of action might take place as the seed passes through an animal that has eaten it. After treatment, sow seeds indoors any time or outdoors from spring to mid autumn (15-25°C). Sow on the compost or soil surface with a thin (2-5mm) covering layer of soil.

Uses:

- A yellow dye can be obtained from the flowers and is used as a natural food colouring.
- The roots of clover have tiny nodules containing bacteria which can help increase levels of soil nitrogen. For these reasons it is used as a green manure crop.
- Traditionally, red clover was used to treat eczema, psoriasis and whooping cough.
- The isoflavones and phytoestrogens from red clover have been used to treat the symptoms of menopause but this is not clinically proven to work.

Description: The plant has a sprawling habit. The flowers are red or reddish purple in small tight spherical heads with leaves immediately below. The leaves are made up of three oval leaflets often marked with a whitish crescent.

Fun facts

- *Pratense* is Latin for 'found in meadows'.
- Clover is often known as 'bee bread'.
- Children used to pull the individual blossoms out of the flower and suck the nectar out of the ends.
- The flowers of clover can be made into a very strong wine.
- Finding a rare four-leaved clover is supposed to bring the owner good luck. Place seven grains of wheat on a four-leaved clover if you can - tradition says that fairies may appear!
- Growing clover is supposed to keep snakes away.

Scientific name: *Prunella vulgaris**

Common name: Self heal, hook heal, sickly wort, carpenter wort.

Where found: Self heal is commonly found in grasslands, waste ground, woodland and in open spaces across Europe.

Flowering season: June to October.

Fruiting season: Likely to fruit between June and November. Seed is best collected from August to October.

Dispersal method: Scientists are still not sure how these seeds are dispersed.

Germination: This seed is easy to germinate but prefers light for germination. Sow indoors at any time or outdoors in pots or in the ground from mid spring to late summer (10-25°C). Sow on the compost or soil surface with a thin (2-5mm) covering layer of soil.

Uses

- The common name self heal suggests that in the past, it was believed to be successful as a treatment for illness or injury. It was often used on wounds.
- In Greek times it was used to treat sore throats and tonsillitis.
- Mixing the juice from self heal with oil of roses and applying it to the temples and forehead was recommended to 'remove headaches'.

- Most of these uses from the past remain untested; self heal is not used for this today.

Description: The plant is downy, low and creeping. The flowers have two lobes and are generally purple and closely packed, forming oblong or square heads. The leaves are stalked, oval and appear in opposite pairs. The fruit is made up of four small seeds each with a ridge running the length of the seed.

Fun facts:

- It was believed that the appearance of a plant could give a clue to its use. The shape of the flower reminded people of a hook and in medieval times the most common accidents in rural communities were injuries caused by billhooks and sickles.

Scientific name: *Capsella bursa-pastoris***

Common name: Shepherd's purse, lady's purse, pickpocket, shepherd's heart, pepper and salt.

Where found: One of most common of all weeds across the UK, this plant is often on waste and cultivated ground.

Flowering season: Almost all year; one of the earliest to be seen.

Fruiting season: Best to collect seed between May and October.

Dispersal method: Seed eaten and regurgitated by animals.

Germination: This seed may be difficult to germinate and may require chilling. Sow seeds on a wetted tissue, cover with cling film and place in a fridge for two to three months. Afterwards, move into the classroom - seeds should then germinate quickly. Alternatively you could try sowing outdoors in pots or in the ground in autumn for spring germination. Sow on the compost or soil surface with a thin (2-5mm) covering layer of soil.

Uses:

- Shepherd's purse can be used for flavouring soup.
- This plant has a long tradition of being used to treat excessive internal and external bleeding but there is a lack of clinical research to support this use.

Description: Shepherd's purse is a small, slender plant, reaching around 60cm high. It has a neat rosette of basal leaves, and clasping stem leaves which are often arrowhead-shaped. The tiny, four-petalled white flowers are followed by heart-shaped/triangular pods which resemble little purses. The plant is often covered by a white floury coating (a fungus) in winter.

Fun facts:

- This plant is related to cabbages and mustards. It will flourish and set seed in the poorest soil.
- The Latin name means –'little pods that resemble a shepherd's purse'.
- The little fruits look like the purses that were worn by men in the Middle Ages.
- The seed pods can be used to flavour soups or stews, giving them a peppery flavour.
- Shepherd's purse will grow in marshy areas and can survive in soil which contains large amounts of salt. The plant absorbs salt from the soil, allowing other plants to grow there.
- If sprinkled on water where mosquitos are breeding, the seed is helpful in keeping numbers down. In water, the seeds release a substance which is toxic to mosquito larvae. Half a kilo of seed is said to be able to kill 10 million larvae.

Scientific name: *Betula pendula**

Common name: Silver birch

Where found: The tree is very common and is often seen in woods on heaths and moors. It is also common in gardens and parks. The tree particularly likes sandy or gravelly soils.

Flowering season: April to May.

Fruiting season: Likely to fruit between August and September.

Dispersal method: Carried by wind (has a winged shape), and possibly also by animal.

Germination: This seed is easy to germinate. Sow indoors at any time or outdoors in pots or in the ground in summer. Sow on the compost or soil surface with a thin (2-5mm) covering layer of soil.

Uses:

- In the past the wood was used for spools and bobbins.
- Silver birch has an attractive trunk and is often planted as an ornamental tree in parks and gardens or for conservation purposes.
- In late spring to early summer the outer bark can be removed from the tree without killing it. The bark is tough, waterproof and durable; it has been used to make drinking vessels and canoe skins.
- Birch sap, harvested in early spring, can be tapped and makes a pleasant drink. It can be boiled to make syrup (similar to maple syrup). In the past, this sap was fermented into a beer favoured with honey, cloves and lemon peel. It is still used to make silver birch wine.

Description: This elegant tree is easily recognisable by its silvery-white bark with its protruding bumps and the glossy brown, slender drooping branches. The mid-green oval pointed leaves are coarsely toothed and turn yellow in the autumn. The flowers are grouped in either male or female catkins; male flowers appear in looser and longer catkins than those of the female.

Fun facts:

- There are over 50 different species of *Betula*. *Betula pendula* is one of the three types of birch native to the British Isles.
- Most birches are extremely hardy and are often referred to as pioneers since they are some of the first tree species to colonise areas cleared of vegetation. This is because they are very tolerant of inhospitable soils and have efficient wind pollination and seed dispersal.
- Silver birch is a fast growing tree, growing up to a metre per year.
- Silver birch trees start to produce their own seed after 15 years.
- Silver birch trees can be rather short lived as they eventually lose out to the very trees which the birch trees have created suitable colonisation conditions for.
- The twigs can be gathered and made into besom brooms.
- Birch tar can be made from the bark and sap and used to waterproof leather.
- The seeds are much loved by small birds as well as insects and other animals.
- The silver birch is Finland's national tree.

Scientific name: *Rumex acetosa**

Common names: Sorrel, common sorrel, spinach sorrel.

Where found: Common throughout Europe. Found in grassland, roadside verges, and waste ground.

Flowering season: May to July.

Fruiting season: Likely to fruit between June and August.

Dispersal method: Carried by wind (parachute).

Germination: This seed is easy to germinate but requires light for germination. Sow indoors at any time or outdoors in pots or in the ground from late spring to summer. Sow on the compost or soil surface with a thin (2-5mm) covering layer of soil.

Uses:

- The leaves can be used in salads and to flavour sauces and soups.
- The juice of the plant can be used to remove ink or iron stains from linen. Dark green to grey dyes can be made from the roots.

Description: Sorrel is a large upright plant with a long tap root. The lower leaves have stalks and the upper leaves are stalkless. The leaves are spear or arrow-shaped. The flowers are minute and reddish/greenish brown on branched spikes. The seeds are three-sided and winged. The flowers are dioecious (individual flowers are either male or female, but only one sex is to be found on any one plant so both male and female plants must be grown if seed is required)

Fun facts:

- Plants can contain quite high levels of oxalic acid, which is what gives the leaves of many members of this genus an acid-lemon flavour. Sorrel was used to flavour foods in the same way as lemons are used today.
- The name *Rumex* comes from the Latin 'to suck' as Romans used to suck the leaves to stop them feeling thirsty.
- In Tudor times sorrel was a very popular vegetable.

Scientific name: *Cirsium vulgare**

Common name: Spear thistle, common thistle, bell thistle, Scots thistle.

Where found: Fields, verges, gardens and waste ground across Europe.

Flowering season: July to October.

Fruiting season: Likely to fruit between July and October. Seed is best collected between August and October.

Dispersal method: Carried by wind (parachute).

Germination: This seed is easy to germinate but prefers light for germination. Sow indoors at any time or outdoors in pots or in the ground from mid spring to autumn. Sow on the compost or soil surface with a thin (2-5mm) covering layer of soil.

Uses:

- The downy seed head makes excellent tinder that is easily lit by a spark from a flint.

Description:

The leaves are spear shaped and deeply lobed, each with a spine. The stems have discontinuous wings. The purple globular flower-like structure is made up of lots of little flowers (florets) surrounded by spine tipped bracts. Each fruit contains one seed with a parachute of soft feathery hairs.

Fun facts:

- This is probably the true Scots thistle - the national flower of Scotland.

- It is said that it prevented a night attack by the Danes in the Battle of Largs in Scotland (1263) because the enemy cried out in pain as they were pricked by the spines of the plant thus warning the clansmen of their approach.

Scientific name: *Silene latifolia** (originally called *Silene alba*)

Common names: White campion, cow-rattle, cockle, cuckoo flower, thunder flower, white bachelors' button, white robin.

Where found: Field margins, hedge banks road verges and disturbed ground across Europe.

Flowering season: May to October.

Fruiting season: Likely to fruit between May and October. Seed is best collected from June to August.

Dispersal method: Seed carried by wind, or rolls along.

Germination: This seed is easy to germinate. Sow indoors at any time or outdoors in pots or in the ground from mid spring to summer. Sow on the compost or soil surface with a thin (2-5mm) covering layer of soil.

Uses:

- The roots of this species used to be made into a soap to wash clothes.

Description: The leaves appear in pairs and are spear shaped and hairy. The upper leaves do not have stalks. Stems are hairy. The white flowers are made up of five deeply lobed petals with five sepals joined to form a tube. There are male and female plants. Each seed capsule can contain up to 350 seeds.

Fun facts

- The plant is very good at surviving mowing.
- Seeds recovered from archaeological digs and house demolitions have germinated after being buried for seventy years.
- Extracts from the leaves are toxic to mosquito larvae.
- The plant produces a scent at night because unlike many wild flowers they remain open as dusk descends. The scent attracts many moths which pollinate the flowers.

Scientific name: *Lamium album****

Common names: White deadnettle, bee nettle.

Where found: Hedgerows roadside verges and waste ground.

Flowering season: May to December.

Fruiting season: Likely to fruit between May and December. Seed is best collected from June to August.

Dispersal method: Seed carried by animals (ants).

Germination: This seed may be difficult to germinate. Seeds sown outdoors in pots or in the ground during autumn may germinate the following spring. Sow on the compost or soil surface with a thin (2-5mm) covering layer of soil. Might germinate better on a wetted tissue chilled in a fridge for two to three months first.

Uses:

- White dead nettle is used to make aromatic teas and can be boiled and eaten like spinach.

Description: White deadnettle stems have a square shape. The leaves are heart-shaped

and wrinkled and found in opposite pairs either side of the stem. The flowers are white with black anthers under a hooked upper lip, arranged in whorls at the base of leaves. Four nutlets form the fruit.

Fun facts:

- This plant is an important food plant for bees. It has large amounts of nectar at the bottom of the flower tube to reward the bee. The lower lip of the flower acts as a landing pad.
- The name deadnettle refers to the fact that it does not sting unlike the stinging nettle that it closely resembles.

Scientific name: Achillea millefolium*

Common name: Yarrow, milfoil, field hops, hundred leaved grass, soldier's woundwort.

Where found: Yarrow is commonly found in dry grassland, hedge banks, at the edge of woods, waste ground, roadsides and untended lawns or village greens. It is common throughout the UK and across much of Europe, although it is rarer in the Mediterranean.

Flowering season: June to November.

Fruiting season: Likely to fruit between July and November. Seed is best collected from August to November.

Dispersal method: Carried by wind.

Germination: This seed is easy to germinate. Sow indoors at any time or outdoors in pots or in the ground from early spring to late summer (10-25°C). Sow on the compost or soil surface with a thin (2-5mm) covering layer of soil.

Uses:

- *Achillea* has been used as food colouring after it has been treated to remove the toxic chemical 'thujone'.
- Historically, young leaves were cooked and eaten like spinach.
- In the Middle Ages, yarrow was part of a herbal mixture known as gruit, which was used in the flavouring of beer prior to the use of hops.
- The plant is sometimes planted as a companion plant to keep insects away from tender crops.

Description: This is an upright, tough-stemmed, hairy plant with feathery leaves that grow in clumps. It varies a lot in both size and flower colour.

Yarrow is very resistant to drought and adds a splash of colour wherever it grows, even in the driest summer months.

The flattish white flower-like 'clusters' are made up of a number of smaller flowering heads (see 'daisy'). Each little head is about 3-6 mm across and is made up of five or more white or pinkish-purple flowers around the rim called ray florets (they look like petals) and a few small white or cream flowers grouped across the middle section (disc florets)

Fun facts

- The Latin name *millefolium* means 'thousand leaves'- describing the very many segments to the feathery leaves.
- The Latin name *Achillea* comes from the Greek god Achilles, who carried it with his army to treat battle wounds in Greek myths.
- Pollen from yarrow (among other herbs) was found during the excavation of a 40,000-60,000 year old Neanderthal tomb.

- According to nursery rhymes you will dream of your own true love if you put yarrow under your pillow.
- Yarrow was used in Saxon amulets. These were supposed to act as a charm for protection against everything from disease to domestic troubles!
- Witches were said to use yarrow for their spells in the Middle Ages. This may be why the plant has many common names such as devil's nettle, devil's plaything, and bad man's plaything.