

The image features three ceramic sculptures of botanical specimens. On the left, a green stem with purple, needle-like structures. In the center, a blue, textured structure with a brown, spiky, spherical part and a yellow, spiky, circular part. On the right, a blue, cylindrical structure with a white, spiky, circular part.

seeds

CERAMIC SCULPTURE EXHIBITION
MAYA FERNANDES KEMPE

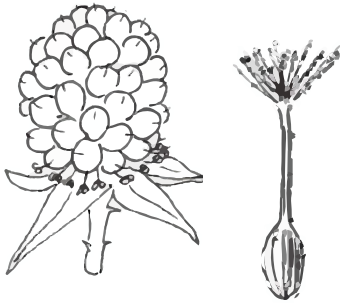
TECHNICAL COLLABORATION BY BIOLOGISTS Larissa Ohl AND Paula Canha

CURATORIAL SUPPORT Sofia Marçal

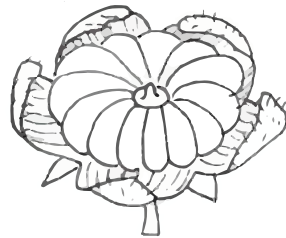
SCIENTIFIC SUPPORT NATIONAL MUSEUM OF NATURAL HISTORY AND SCIENCE OF THE UNIVERSITY OF LISBON

PARA CONSULTA . PROPRIEDADE DO MUSEU

FLOWERS, FRUITS AND SEEDS



All flowers bear fruit. We are used to thinking of a fruit as a sweet, juicy organ, but not all fruits are like that. However, they all have seeds inside them and are in charge of dispersing them.

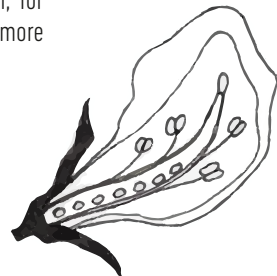


Most flowers have both female and male reproductive organs but they avoid self-pollination as much as possible.

Flowers dress in colors and shapes that are attractive to pollinators, as the genetic diversity comes from cross-pollination.

The more diverse the parents, the more diverse the new generation will be and the less risk of extinction the species runs.

Animals and insects are not always recruited for pollination; for example the discreet flowers of grasses, such as wheat, rely more on the wind for this function.

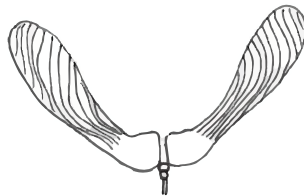


Once fertilization is complete, the petals and stamens wither and their mission is over. Instead, the ovary grows and gives rise to the fruit, which contains the seeds. Each fruit has its own strategy for dispersing the seeds as far as possible.



Nature is very creative. The shapes and functions of fruits and seeds are proof of this.

Some fruits are covered in nourishing tissue to be eaten by animals. Later, in a remote place, the seeds are dropped on the ground, intact and manured by the animal that ate the fruit. But this is just one of many possible strategies!



Inside the seed is the embryo and some nutritional reserves. The seed's protective dress, the integument, is a determining factor of germination.

The seed will only leave its "hibernation" when there are conditions to germinate, and this varies greatly from species to species. The embryo develops using the nutrient reserves until it becomes a small plant with roots capable of absorbing water and leaves capable of photosynthesis.

THE PLANTS



CORIANDER

Coriandrum sativum

FLOWERING PERIOD

From May to June.

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Cultivated land, ruderal in North Africa and West Asia. Naturalised in southern Europe.

CURIOSITIES AND USES

Seeds (rich in fibre, calcium, selenium, iron, magnesium and manganese) used in cooking, including curry powder, used as a spice in Asian cuisine. Used for medicinal purposes at least since the time of the ancient Egyptians. In Europe, the leaves are mainly used in cooking, as they are rich in vitamin K, vitamin C, vitamin A, vitamin E, folate, vitamin B2, iron, magnesium and potassium. It also has medicinal uses - treating digestive disorders, flatulence, diarrhoea and colic. The essential oil has various compounds with antibacterial, detoxifying, antiseptic, antibiotic and antifungal properties.

REPRODUCTION

Coriander fruits are not particularly adapted for dispersal, as is the case with many cultivated plants. The seeds end up germinating more or less close to the mother plant, where the habitat is likely to be favourable.

The unripe fruit and seeds have very different aromatic components to those found in the ripe seeds or leaves, and coriander is a very creative plant in its chemical processes.



CORNFLOWER

Centaurea cyanus

FLOWERING PERIOD

From May to September.

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Cultivated land and meadows. Occurs throughout most of Europe, but is exotic in Portugal, having been introduced in the 18th century for ornamental purposes.

CURIOSITIES AND USES

The flowers are edible (raw or cooked) and are used to flavour bread, salads, cheeses and ice cream. They have laxative and diuretic properties and can be prepared as a tonic?

Legend has it that the name of this genus comes from the mythical creature Centaurus, who healed the incurable wounds inflicted by Heracles with its sap. It is also considered a symbol of delicacy and the true love of children for their mothers.

REPRODUCTION

The plant produces up to 7,000 seeds with thin extensions that resemble a tiny feather duster, easily carried by the wind or adhering to animal hair. Ants also carry these seeds to the ground, but not all of them will be used in the anthill, many will germinate successfully.



Euphorbia terracina

FLOWERING PERIOD

From February to October.

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Dunes, uncultivated fields, slopes and roadsides, rubble. In sandy, disturbed soils, usually near the coast. Mediterranean region. Native species in Portugal.

CURIOSITIES AND USES

Deep roots and a vigorous growth system, *Euphorbia terracina* can help control soil erosion in areas prone to landslides.

Some cultures have used parts of *Euphorbia terracina* in traditional medicine to treat joint pain and skin problems. However, it is important to note that the medicinal use of this plant should be done with caution, as its latex can be toxic.

REPRODUCTION

Flowers have nectaries, large and very generous glands that produce nectar to attract pollinators. When fertilisation occurs, the plants reabsorb the remaining nectar, once their function has been achieved.

The fruits are capsules which, when they reach maturity, open explosively, throwing the seeds a certain distance. This mechanism is known as mechanical explosion and helps disperse the seeds around the mother plant. The seeds have a winged membrane that facilitates dispersal by the wind. They also adhere well to the fur of animals, which is an alternative method of dispersal.



MARIGOLD

Calendula officinalis

FLOWERING PERIOD

From June to October.

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Pathsides, fallow land, agricultural fields, places exposed to the sun, southern Europe and the Mediterranean basin. Native to central Africa.

CURIOSITIES AND USES

Flowers are used to make salads, butters and breads, giving a flavour that is both bitter and sweet. They open as soon as the sun rises and close at sunset. The name “marigold” comes from the Latin *kalendae*, meaning “first day of each month”, from which the word “calendar” is also derived, which is based on the solar cycle. The flowers are rich in flavonoids and beta carotenes and have many medicinal properties.

An interesting traditional use consists of a prayer to St Luke while applying the balm of this marigold to the face before going to sleep. This ritual would attract dreams of the man you love. The balm was made from the dried flowers, ground with honey and vinegar.

REPRODUCTION

The seeds emerge from the *Calendula* flowers during fruiting. Some have thorns and hooks for dispersal by animals, others are smoother and fall close to the mother plant. In this way, the plant invests in the distant and unknown (seeds that travel and may never find a suitable place) and the safe (continuing to colonise the favourable place where they are found).



PRICKLY GOLDEN FLEECE

Urospermum picroides

FLOWERING PERIOD

From February to July.

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Coastal sands, forest clearings, crevices in rocky outcrops, cultivated fields and fallow land. It has a very wide distribution, covering several continents. A native species in Portugal.

CURIOSITIES AND USES

Edible leaves, used in soups, stews and omelettes. The name is a reference to the golden fleece that the hero Jason rescued from the possession of the king of Colchis in the famous sea epic aboard the Argo.

REPRODUCTION

The seeds are aerodynamic, i.e. they have the ideal shape to be dispersed by the wind. Air travel is facilitated by their low weight and by the papillus, a light feather that acts like a parachute.



COUCH GRASS

Elymus repens

FLOWERING PERIOD

From April to August.

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Cultivated land, uncultivated land, wasteland and sea sands. Occurs in Europe, Asia, the Arctic biome and north-west Africa. Native species in Portugal.

CURIOSITIES AND USES

Dried rhizomes were used as incense in mediaeval northern Europe. Like chicory roots, the roots of this plant can also be used as a coffee substitute. The rhizomes of *Elymus repens* have been used in traditional Austrian medicine against fever. Its tea is also used to cure urinary infections.

REPRODUCTION

Dispersal by the faecal droppings of birds that feed on the seeds. Some seeds are transported by water to other more distant locations, others are spread by the wind. However, the main way of propagating this plant is through its underground rhizomes.



NARROW-LEAF CONEFLOWER

CONEFLOWER

Echinacea angustifolia

FLOWERING PERIOD

From June to August.

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Native to North America, it is now found on all continents due to its ornamental and medicinal value.

CURIOSITIES AND USES

Already used by Native American peoples to treat various illnesses. Various parts of the plant are used as dried or fresh preparations to make infusions, juices, extracts, capsules or tablets, and preparations for application to the skin, wounds and other skin problems.

Rich in alkaloids, polysaccharides, glycoproteins and derivatives of caffeic acid, with anti-inflammatory and immunomodulatory action, which help to strengthen the immune system, preventing and helping to fight infections of the respiratory system, such as flu, colds, sinusitis or otitis.

REPRODUCTION

Its name comes from the Greek echînos, meaning hedgehog, due to the flower's central cone. It's not actually a flower, but an inflorescence, i.e. a cluster of flowers. Dozens of flowers are in the central cone and have very short, discreet petals. The outer flowers of the group have a much larger petal.

Echinacea flowers are very efficient at recognising their own pollen, and self-fertilisation never occurs, which ensures greater genetic diversity. Fruits ripen from the small flowers without any specialised structure for dispersal, so the seeds don't travel great distances.



Prenia tetragona

FLOWERING PERIOD

From March to August.

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Coastal areas, rocky and sandy soils.
Native to South Africa.

CURIOSITIES AND USES

Succulent leaves that store water in order to survive arid conditions. As well as being used in landscaping for its ornamental value, it is used for erosion control in coastal areas, helping to stabilise the soil with its extensive root system and succulent foliage. The leaves are edible and are used in salads.

REPRODUCTION

The seeds are dispersed by opening the capsule that contains them. Seeds are also dispersed by wind. The seeds of this genus can withstand very high temperatures for long periods. In fact, the arid soils where they are native to can reach over 80°C for months!



YELLOW FLOATING HEART

WATER-FRIDGE

Nymphoides peltata

FLOWERING PERIOD

From June to August.

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Backwaters of rivers, low-flowing streams and still waters. In eutrophic waters, at low altitude. It is an aquatic plant native to much of Europe and Asia, but in Portugal its distribution area has suffered a major decline and it is currently only known to occur in the River Minho. The species is classified as Endangered.

CURIOSITIES AND USES

Aquatic plant with aerenchyma, a tissue with air-filled cavities, responsible for the plant's buoyancy and essential for gas exchange.

N. peltata is an edible plant. The leaves and flowers are cooked as a vegetable, as are the petioles, but they must be peeled. The seeds are ground and used for other culinary purposes. The fresh leaves are commonly used to treat headaches, with a paste of the leaves applied to the area of pain. In Chinese medicine it has been used for snakebites, among other uses.

REPRODUCTION

The fruits ripen underwater and, when their walls decompose, they release the seeds which come to the surface and float away. In fact, the seed resembles a tiny boat.

The surface of the seed is hydrophobic, i.e. it repels water, which helps it to float and disperse. This feature is also useful for adhering to bird feathers, which are also hydrophobic. In flight, the marginal trichomes (filaments) that surround the seeds keep them attached to the bird, but when they return to the water, the seeds break and sink into the substrate, where germination can begin. Another means of dispersal is by sticking to amphibious animals and boats. On the other hand, seeds eaten by ducks, geese or fish are completely digested and are no longer viable.



CHICORY

Cichorium intybus

FLOWERING PERIOD

From March to September.

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Cultivated or uncultivated agricultural fields, pastures, urban wastelands, roadsides.

Southern Europe, Asia and Africa. Native species in Portugal.

CURIOSITIES AND USES

It is a medicinal and edible plant. The sativa variety is grown for its root, which is used as a coffee substitute. A number of other varieties are grown for their leaves: var. foliosum (endive, radicchio), var. intybus (chicory). The root has therapeutic properties related to the liver and gallbladder. The leaves have diuretic properties.

REPRODUCTION

The fruit is an angular cup with a single seed that is dispersed by the wind. It is a very light seed, a characteristic that makes it easier for the wind to disperse the seeds. The seed breaks dormancy easily and germinates in a wide variety of conditions.



MALLOW

Lavatera trimestris

FLOWERING PERIOD

From March to June.

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Cultivated or uncultivated agricultural fields, roadsides, meadows and scrubland clearings. Clay, limestone and sandy soils. Southern Europe, North Africa, Asia and Oceania. Native species in Portugal.

CURIOSITIES AND USES

In traditional medicine it is used as a calming, anti-inflammatory and skin moisturiser.

REPRODUCTION

The fruit (schizocarps) resembles a girl pumpkin, with twelve "slices" (mericarps) containing the seeds. The fruits of this species have an original characteristic: the small mericarps are covered by an "umbrella", a membrane that protects them until they are dispersed.



Phacelia tanacetifolia

FLOWERING PERIOD

From April to June.

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Roadsides, meadows, dry and disturbed soils. Native to the western United States of America. Naturalised in western Europe and other parts of the world.

CURIOSITIES AND USES

Ornamental use and as a pollinator attractant and mellifer. Used in homoeopathy. The Phacelia flower is known for having a calming effect on the mind and body, reducing stress and anxiety and helping to find inner peace. The honey from its flowers has antibacterial properties and its external application has anti-inflammatory properties.

According to Greek mythology, the goddess of love, Venus, was born from sea foam. When she emerged from the water, she was adorned with Phacelia flowers. This led to the belief that the Phacelia flower represented love, purity and beauty. For Native Americans, the Phacelia flower is a symbol of hope and renewal, while in Hinduism it is associated with the goddess of wealth and prosperity, Lakshmi.

BLUE PHACELIA

BLUE TANSY

PURPLE TANSY

TANSY-LEAF PHACELIA

FIDDLENECK

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REPRODUCTION

When the capsules containing the seeds dry out and open, the seeds fall out next to the mother plant. In areas where there is running water, the seeds can be carried by the water and deposited in suitable places for germination. The seed's concavities help it to float. Dispersal by animals also occurs, as the seeds can adhere to the bodies of animals, such as birds, mammals or insects, and be transported to other areas before falling.



GREATER STITCHWORT

Stellaria holostea

FLOWERING PERIOD

From March to July.

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Meadows in woodland glades and scrubland, banks of watercourses, altitudes up to 1800m in Asia, Europe and North Africa. Native to Portugal.

CURIOSITIES AND USES

In some regions it is believed that plucking its flowers causes storms.

REPRODUCTION

As it is a woodland glade species, it doesn't invest much in seed production and dispersal, as the young plants wouldn't be able to grow in the shadier parts of the wood. The plant therefore invests more in asexual reproduction, which produces clones. Genetic diversity is ensured by the few seeds it produces, contained in capsules that explode when they ripen, dispersing the seeds along with the mother plant. In cases of flooding, the seeds are transported to more distant areas by the water.



IVY-LEAVED

TOADFLAX

KENILWORTH IVY

Cymbalaria muralis

FLOWERING PERIOD

From March to September.

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Cracks in rocks and walls, in urban areas and woodlands. Prefers shady areas. Originally from the Adriatic region; naturalised in the rest of Europe, America, the Caribbean and Australia.

CURIOSITIES AND USES

Used to make yellow dye. Edible leaves rich in vitamin C. Poultices with leaves and flowers are used to stop bleeding from small wounds.

REPRODUCTION

After the flower has been pollinated, the forming fruits become negative phototropic, i.e. they run away from the light. Their peduncles begin to curl towards darker areas, close to the rock or wall where the plant is installed. The seeds thus have a better chance of finding a damp spot favourable for germination.



Borago officinalis

FLOWERING PERIOD

From January to July.

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Meadows, uncultivated land, fallow land and roadsides. Prefers limestone soils. Southern and Western Europe and the Mediterranean region. Native species in Portugal.

CURIOSITIES AND USES

Flowers and leaves added to salads, stews, soups or as a filling for savoury pies. Its best-known medicinal use is as an oil extracted from the seeds of the plant, both externally (topical application) and internally (ingestion). The gamma-linoleic acid contained in the oil is beneficial for brain function, bone health and has anti-inflammatory properties. The oil is used internally to combat depression and is therefore called the plant of good humour.

BORAGE

STARFLOWER

Legend has it that holding the plant in both hands, thinking of the person you love and then throwing it into the water gives you answers about love. If the plant moves in the water, it means that the love is not shared and is short-lived. If the plant remains still in the water, it means that the love will be eternal.

REPRODUCTION

The borage flower matures its male reproductive organs first. The pollen grains are only viable for 48 hours. After that, the flower matures the female organs, thus avoiding self-pollination, which would reduce the genetic diversity of the species.

The seeds dry inside the fruit, which opens when dry and the seeds are scattered around the mother plant.



SEA HOLLY

SEA ERYNGO

Eryngium maritimum

FLOWERING PERIOD

From May to September.

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Dune systems in the coastal zone of Europe.
Native species in Portugal.

CURIOSITIES AND USES

The slimy root, with its slightly sweet flavour and strong carrot smell, was used as a medicine for chest diseases. In northern Europe, when young, the shoots are eaten as a vegetable or the leaves as a salad.

REPRODUCTION

The seeds have structures similar to parachutes/wings, making it easier for them to be dispersed by the wind to more distant places. Some seeds travel in the sea, carried by currents, although they have a limited floating time. In order to start germinating, the seeds have to undergo thermal shocks (cold spells of at least 10°C), followed by mild temperatures of around 20°C in spring. Climate change could therefore affect the reproduction of this species if the seeds' dormancy is not broken by the lack of these thermal shocks.



GREVILLEA SPIDER FLOWER

Grevillea ellendale

FLOWERING PERIOD

Autumn, spring and summer.

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Forests, scrubland, dunes and plains. Native to Australia.

CURIOSITIES AND USES

The flowers of the grevillea are used by Aboriginal peoples for their sweet nectar. The flowers are squeezed in the hand or mixed with a little water to make a sweet drink.

REPRODUCTION

In Australia, grevilleas are pollinated by birds that feed on nectar. The seeds are dispersed by animals that feed on the fruit. The seeds have “wings”, making it easier for them to be dispersed by wind and water.



Loasa chilensis

FLOWERING PERIOD

From September to March (spring and summer in Chile).

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Woodland and shrubland on damp soils. Native to Chile.

CURIOSITIES AND USES

Used in traditional Chilean medicine. Anti-inflammatory and diuretic properties. Leaves and flowers used for infusions.

REPRODUCTION

This plant is endemic to Chile and lives in dry, exposed places, in harsh conditions with rare rainfall and lots of wind. In these conditions, the fruit has developed a very special ability: it is able to open in less than 15 minutes and close shortly afterwards, thus releasing some seeds

and retaining others. This gradual release of seeds can last almost a year, increasing the likelihood that some will find a favourable environment for germination and ensuring wider dispersal. The capsule opens and the fruit is released at the driest and windiest times, when wind dispersal capacity is at its highest. Months after the fruit tissues die, this mechanism of opening and closing the capsule still works.

The small size of the seed and the empty alveoli in its lining make it very light and easily carried by the wind. The honeycomb lattice will also help retain water and keep the seed moist at the start of germination.



WILD CARROT

Daucus carota

FLOWERING PERIOD

From April to August.

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Cultivated land, uncultivated land, scrubland clearings and roadsides in Europe, Asia and North Africa. Native to mainland Portugal.

CURIOSITIES AND USES

This wild species was domesticated 1100 years ago in Afghanistan and Central Asia, giving rise to the edible carrot. There are no contraindications to eating this species, but there are very similar species that are toxic! Root used for poultices, being anti-anaemic, antiseptic, healing, diuretic, stimulant and tonic.

REPRODUCTION

The flower is an umbel, resembling the stems of an umbrella. As the fruit ripens, these stems curve inwards into a beautiful bird's nest shape. The small thorns that surround the seed cling easily to animal hair and end up falling far from the mother plant.



CHAMOMILE

Matricaria chamomilla

FLOWERING PERIOD

From April to June.

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Fields, pastures, roadsides, on well-drained, fertile soils. Southern and Eastern Europe, North Africa and West Asia.

CURIOSITIES AND USES

Plant used as an ingredient in creams and soaps as well as in shampoos, as it has the power to straighten and lighten hair. In traditional medicine, it is often used in teas and infusions to relieve digestive problems, calm the nervous system, treat internal inflammations and promote sleep. Applying a chamomile cream or balm helps to heal wounds.

REPRODUCTION

As with most species in its family (Compositae or Asteraceae), what we call the chamomile flower is not actually a flower, but an inflorescence, i.e. a cluster of flowers. In this case, dozens of flowers are gathered together on a small platform, forming a chapter. Only the outer flowers of this chapter have a giant white petal, the central ones are small, yellow and more discreet. The seeds are dispersed by the wind.



AFRICAN BARBBELL

Trichodesma africanum

FLOWERING PERIOD

Variable depending on location (between September and March in the southern hemisphere).

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Dry grasslands, fallow lands, sandy desert plains. Various regions of Africa, including Cape Verde, Mauritania, Senegal, Ethiopia and Namibia. Also in Arabia, Afghanistan and India.

CURIOSITIES AND USES

A warm poultice of the leaves has an anti-inflammatory, diuretic and febrifugal effect. The plant can be used to treat diarrhoea when boiled and mixed with cereal flour, shea butter and sodium to form a paste that is eaten.

REPRODUCTION

Dispersal by means of schizocarps (dried fruits that split into separate parts, each part containing a seed). When these schizocarps split, the seed is dispersed by the wind. In addition to wind dispersal, the seeds are also dispersed by birds that consume the fruit and excrete the seeds in distant places.



CAPE SUNDEW

Drosera capensis

FLOWERING PERIOD

From May to September.

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Banks of ponds and lakes. Places with non-calcareous soils and exposed to the sun, native to South Africa.

CURIOSITIES AND USES

Carnivorous plant that catches its prey through a digestive mucus that is produced in colourful tentacles on the leaves, which attract its prey. The prey stick to the tentacles and are enveloped by the leaf. The prey is digested through this mucus, and in the end only the chitin shell remains.

REPRODUCTION

The plant produces capsules which, when they mature, open and release seeds, which are then dispersed. As its habitat is so specific and limited, its seeds are not easily dispersed over long distances, where they would probably not find a suitable location. However, this species often produces new plants through its roots or leaves, ensuring the colonisation of the waterlogged area where they live.



DILL

Anethum graveolens

FLOWERING PERIOD

From April to August.

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Ruderal, cultivated. Native to North Africa, the Arabian Peninsula and the Orient. Naturalised in Europe.

CURIOSITIES AND USES

Leaves and seeds are used to flavour various culinary dishes. The Ancient Greeks used it as a remedy for hiccups, while its seeds were used as a sedative in ancient Egypt. It is still used in traditional medicine, for example as an infusion to relieve colic in babies.

In mediaeval times, amulets made from dill leaves or twigs were used both for witchcraft and for protection against witchcraft. Drinking dill water was also considered effective in getting rid of enchantments. Other stories include adding dill to wine to create passion and bathing in dill water to become irresistible.

REPRODUCTION

Dill was one of the plants studied to show the value of the pollination services provided by insects. When pollination is provided by a wide variety of insects, seed production increases compared to pollination provided only by bees. Installing bee hives is a common practice in places where pollinators do not occur naturally because they have been eliminated by the use of insecticides. The quality of the seeds and their oil content is also higher when pollination is ensured by a wide variety of insects.

Dill seeds are located in umbels which, when they dry out and open, disperse their seeds along with the mother plant. Other dry umbels are blown away by the wind.



SNAPDRAGON

Antirrhinum majus

FLOWERING PERIOD

Spring and summer, depending on local weather conditions.

HABITAT AND GEOGRAPHICAL DISTRIBUTION

Open fields, cultivated land, drained soils. Native to the Mediterranean (southern Europe, northern Africa and western Asia).

CURIOSITIES AND USES

The main use is ornamental. It is a flower full of symbolism. It represents courage, strength and endurance, as well as being associated with protection and true love. For this reason, it is common to see this flower in bridal bouquets or as a gift for loved ones. It has anti-inflammatory, emollient and soothing properties.

REPRODUCTION

The capsules containing the seeds spontaneously open a few holes through which the seeds fall. They don't spread very far, but are carried by gravity or the wind, often staying close to the mother plant.

GLOSSÁRIO

HERMAFRODITA Flor que possui estames e carpelos funcionais ou planta que possui flores com ambos os sexos.

AQUÊNIO Fruto normalmente seco. Estrutura que envolve uma única semente, formada a partir do ovário da flor. A dispersão das sementes geralmente ocorre quando o aquênio é transportado por vento, água ou por meio de interações com animais.

ESPERMATÓFITAS Plantas que produzem sementes.

TERÓFITO Planta com ciclo de vida anual e que o completa totalmente, desde a germinação até à produção de sementes, em um único período de crescimento. As plantas desta classificação passam a estação desfavorável, sob a forma de semente, por baixo da terra.

ENTOMÓFILO Planta cuja polinização ocorre através dos insectos.

ANEMÓFILO Planta cuja polinização ocorre pela ação do vento.

ESQUIZOCARPO Fruto seco que na maturação se divide em frutos parciais.

MERICARPO Porção do fruto formado a partir de cada carpelo e que se separa naturalmente, contendo uma semente.

CARPELO Peça floral feminina que após a fecundação dará origem ao fruto.

BRÁCTEA Folha modificada, localizada na base da flor, que a protege enquanto está fechada.

FRUTO Indescente Fruto que não abre espontaneamente.

FANERÓFITOS Plantas que projetam os caules para o ar, mantendo as suas gemas expostas ao ar durante a estação desfavorável.

CAMÉFITOS Plantas essencialmente lenhosas com as gemas de renovo muito próximas do solo (altura inferior a 25 cm acima do solo).

HEMICRIPÓFITOS Vegetais herbáceos, vivazes ou bienais, que perdem a biomassa aérea na estação desfavorável. As gemas estão junto ao solo protegidas por detritos orgânicos.

CRIPÓFITOS As gemas de renovo estão enterradas no solo, associadas a rizomas, cormos, bolbos ou estruturas similares, ou são gemas subaquáticas.

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2024



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