

ALPINE FLOWERS

About the Author

Gillian Price was born in England but moved to Australia when young. After taking a degree in anthropology and working in adult education, she set off to travel through Asia and trek the Himalayas. The culmination of her journey was Venice where, her enthusiasm fired for mountains, the next logical step was towards the Dolomites, only hours away. Starting there, Gillian is steadily exploring the mountain ranges and flatter bits of Italy and bringing them to life for visitors in a series of outstanding guides for Cicerone.

When not out walking with Nicola, her Venetian cartographer husband, Gillian works as a freelance travel writer www.gillianprice.eu. A committed promoter of public transport to minimise impact in alpine areas, she is an active member of the Italian Alpine Club CAI and Mountain Wilderness.

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ALPINE FLOWERS

by Gillian Price

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Those who dislike mountains and are bored with plants need have no dealings with this volume.
Reginald Farrer *The Dolomites* (1913)

Dedication
For Betty, my dear mum and flower aficionado

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Front cover: (L to R) Top row: Alpine Aster, Coltsfoot, Cowberry, Dusky Cranesbill; second row: Carnic Lily, Alpine Snowbell, King of the Alps, Lady's Slipper Orchid; third row: Alpine Buttercup, Spring Gentian, Alpine Toadflax, Yellow Mountain Saxifrage; bottom row: Meadow Saffron, Orange Lily, Bear's ear, Bee Orchid

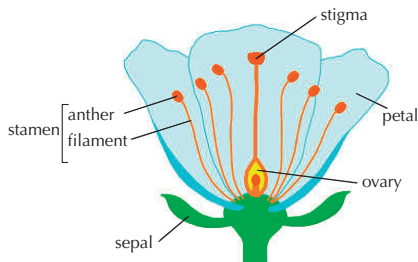
Back cover: This thistle has successfully attracted two pollen distributors

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GLOSSARY

<i>anther</i>	found at the tip of a filament, this is the pollen-bearing part of a stamen
<i>basal</i>	means the leaves sprout from the base of the plant, not from the stalk
<i>bulbil</i>	aerial bulbs born on the above-ground part of the plant
<i>calyx</i>	made up of sepals, this protective husk casing encloses a bud and opens up with the flower
<i>endemic</i>	not necessarily rare, but found only in a limited geographical area
<i>filament</i>	stalk-like part of the stamen which supports the anther
<i>labiate</i>	describes a flower divided into two parts that look like lips
<i>palmate</i>	leaves shaped like the outstretched palm of a hand, with separate lobes
<i>pinnate</i>	compound leaves structured like a feather with multiple leaflets arranged on either side of the stalk like leaves and usually green, these make up the calyx
<i>sepal</i>	
<i>stamen</i>	this is made up of a filament and anther and is the male part of the flower, producer of pollen
<i>stigma</i>	prominent tip of a style, the tube for transporting pollen to the ovaries – the female part of the flower



INTRODUCTION



Alpine Moon-daisy thrives in high rocky spots

Wild campanulas and purple gentians, deep gold Arnica blossoms, pink Daphne, and a whole world of other flowers, some quite new to us, here bloom in such abundance that the space of green sward on either side of the carriage-way looks as if bordered by a strip of Persian carpet.

*Amelia Edwards Untrodden Peaks and Unfrequented Valleys:
A midsummer ramble in the Dolomites (1873)*

It happens to all visitors to the European Alps – walkers, climbers and tourists alike. Engaged in a stiff climb, or a leisurely stroll along a mountain lane, and out of the corner of your eye you spot a curious flowering plant. It may even be vaguely reminiscent of something in the garden at home. And you store the image away: ‘Must look that up when I get back’. The idea of this pocket guide is to act as a lightweight companion in the field, with colour-coded pages to make it easy to consult. With no pretence to be encyclopaedic, the guide focuses on the main flowers likely to be encountered and gives readers helpful pointers for distinguishing flowers that appear identical at first glance.



Colourful clumps of blooms make their home on 'meadows' of stone

Alpine flowers are unique, hardy species that appear brilliantly yet fleetingly during summer at high altitude. The challenges these tiny plants have to overcome are enormous: extreme temperatures, fierce winds, shortage or excess of moisture, thin soil, threat from livestock and humans and competition for reproduction. They need to do their utmost both to survive and to reproduce, and they have developed remarkably ingenious mechanisms to adapt to the range of stressful factors in their habitats. To say that alpine flowers have perfected survival techniques is an understatement!

SURVIVAL TECHNIQUES

The formidable mountainous barrier of the Alps begins close to sea level and soars to over 4000m, experiencing dramatic extremes of temperature. Cold is a crucial issue – for every 100m rise in altitude the thermometer drops by about 0.6°C. Moreover, there can be a 20–30°C difference in air temperature between day and night – and that's only at 2000m.

Challenges notwithstanding, a good 52 alpine flowers are known to survive up to 3500m above sea level, while an amazing 12 species make it to the 4000m mark. The record holder for altitude is the Glacier Crowfoot; an exemplar was reported on the 4274m Finsteraarhorn in the Swiss Bernese Alps. The leaf cells of the highest growing flowering plant in

Europe contain a high concentration of sugar which acts as an anti-freeze, lowering the freezing point of its tissues and thus enabling it to live amid snow and ice in sub-zero temperatures. Incredibly, the plant is able to photosynthesise even at -6°C.

Strange as it may seem at first, snow cover is essential to many alpine plants. It acts as a source of moisture and nutrients, but also provides protection from winds and extreme temperatures during the harsh winter months; however, it may mean they are under cover for eight months of the year. The air temperature drops dramatically, especially at night time, and when, for instance, the thermometer plunges to -33°C outside, snug under the snow it may be a comfortable -0.6°C, allowing the plant to function, albeit in a sort of hibernation. The Alpenrose seeks out north-facing slopes where snow accumulates to be sure of long-lasting blanket cover. Such plants can usually survive at temperatures as low as -25°C, which would seem amazing if it were not for the -70°C limit of plants that deliberately grow on windy crests! By contrast, dwellers in nooks and crannies on vertical rock faces, such as Devil's Claw and Moretti's Bellflower, cannot count on snow protection, but they are out of the range of chilling winds.

In spring as the white stuff starts to melt, light begins to filter downwards and triggers photosynthesis as the plant wakes up. Here the Alpine Snowbell comes into its own. One of the first blooms to appear in spring-time, it can often be seen pushing its way up through the snow; in fact, the heat it releases as it breaks down carbohydrates can actually melt the snow.

Unstable terrain, such as the mobile scree slopes or talus found across the Alps, proves another challenge. Fragments of rock falling from higher rock faces and cliffs are constantly adding to the slopes, accumulating on the surface and provoking a downhill slide. A well-anchored root system is essential for any plant to be able to call such



The Alpine Snowbell pushes its way up through snow

terrain its home. Alpine Toadflax and Rhaetian Poppies are experts in this regard.

Survival techniques involving moisture are two-fold: retention and removal. Cactus-like succulents are experts at reducing moisture loss, with their thickly cuticled leaves, and they also have the ability to store water in their stems for times of need. The Cobweb Houseleek is true to its name and has a thick layer of soft netting on its rosettes, which additionally slows moisture loss from the plant's surface.

Small leaf size can effectively **minimise evaporation**, and a good example is Moss Campion. The technique used by the Edelweiss is to cover itself with white woolly hairs, which not only reduce moisture loss but also protect the plant from the strong solar radiation encountered at high altitudes. These hairs can also create a micro-climate around the plant where the temperature is slightly higher than that of the surrounding air.

In contrast, Lady's Mantle practises **guttation**, a process occurring under conditions of high humidity, particularly at night, whereby the plant exudes surplus water to the rim of its leaves. The drops of water are often mistaken for dew; these drops were treasured by ancient alchemists who claimed they could transform metals into gold – hence the genus name *Alchemilla*.

In a similar way, Saxifrage plants on limestone rock may find themselves overwhelmed by calcium salts. While the plant uses some for its

Calcium salt encrustations on Saxifrage leaves



physiological requirements, it banishes the excess to the edges of its leaves, and the resulting encrustations have the bonus effect of reinforcing the leaf itself.

Keeping a **low profile** as a protection from the elements is a successfully tried and tested technique used by the likes of Alpine Rock Jasmine, which barely attains a height of 3cm. However, below the ground it develops a root system that serves as an anchor, penetrating all available cracks in the rock. Saxifrages are also renowned specialists in this. With a genus name that means 'stone-breaker', the roots do just that, fracturing the rock into particles and delving down, providing stability for the plant while also on a quest for moisture. A number of prostrate woody shrubs such as Retuse-leaved Willow have networks of slender roots and branches that creep over rock surfaces, acting as anchors.

Moss Campion grows painstakingly slowly over its 20–30-year lifespan, producing a woolly cushion rich in humus where small creatures can live. Another plant that takes its time is Alpenrose, which needs 8–10 years for its seeds to mature into flowering plants. Then there's Net-leaved Willow: it has been calculated that a trunk as slender as 7mm could be 40 years old. Nature outclasses the bonsai masters!

Many alpine plants practise **solar tracking**, which is also known by the rather forbidding term of heliotropism. In addition to placing their leaves perpendicular to the sun's rays to maximise exposure and encourage photosynthesis, they make constant alterations to the angle of their flower heads so as to receive the full blast of the sun's warming rays all



Moss Campion produces a cushion where small creatures can live

day long. Buttercups with their yellow saucers are experts in this field; they are able to store heat and the temperature inside the petals can be 8°C hotter than the surrounding air: a great lure for insects that need warm conditions as well as a boost for the plant itself as seed development accelerates. Should the heat become overwhelming, the plant can rotate its 'satellite dish' parallel to the incoming rays to reduce exposure; this also minimises moisture loss, essential in dry habitats.

The Carline Thistle, on the other hand, has the advantage of **hygrometric (moisture measuring) equipment** in the scales that envelop its flowers. This is triggered in adverse weather and the flower closes up in self-defence; it will then open when conditions improve. This behaviour has earned the plant the reputation of being a reliable weather forecaster.

REPRODUCTION

In their very short annual growth period, concentrated into 100 days at most, survival is not the sole life purpose of alpine flowers; reproduction is also crucial. Generally speaking, a plant's growth period and opportunity to reproduce is shortened by a week for every 100m of altitude. A mind-boggling array of techniques has been invented by flowering plants in order to encourage pollination and spread their seeds, and competition can be fierce.

A Painted Lady butterfly with Round-leaved Pennycress



Attracting insects

Colour is a key factor in attracting insects which, while feeding, inadvertently gather pollen and spread it, thus improving the plant's chances of reproduction. Many alpine flowers only bloom for the two midsummer months of July and August, and the plants make the most of it with a brilliant display of livery.

Dominant colours at high altitudes are red and purple, but there are lots of blue and yellow flowers and also a multitude of white and green flowers: the pale Edelweiss is a good example.

Bees evidently prefer blooms of pink, blue and yellow and keep a special eye out for flowers with distinctive patterns. They are also suited to flowers with closed or unusual shapes which are fairly sturdy so they can clamber inside.

Insect orchids give pollinators an additional helping hand. The Bee Orchid, for instance, fools bees into thinking they have found a mate, and as they alight the pollen rubs off onto their back to be carried away. The Lady's Slipper Orchid, on the other hand, entices potential pollinators into its cavity and then makes it hard for them to clamber out again, because of its slippery walls and in-turned lips. In the ensuing struggle they become coated with pollen, which they then carry with them to the next flower.

Cottongrass seeds are attached to a fluffy lightweight head



Flies have weaker vision, reportedly going for bright white and yellow flowers and flatter, saucer-shaped blooms on which they can land without complication. Butterflies, by contrast, have long, thin feeding gear so they prefer tubular flowers. Beetles reportedly like strongly scented flowers as well as bright colours.

Seed dispersal

An important system of seed transport and dispersal – the wind – is exploited by alpine flowers to maximum effect. Cottongrass plants attach their seeds to a fluffy lightweight head that is easily detached and carried off by a breeze.

Other flowers have another card up their sleeve to double their chances of reproducing and seeing another summer. Two notable examples are the Orange Lily and the Alpine Bistort which carry a multitude of ‘bulbils’ or aerial bulbs down their stem; these drop to the ground and mature after two or three years. Similarly, the Cobweb Houseleek has rosettes that can be dropped, propelled by the wind they roll away to a new spot to begin another colony.

Gaining nutrients

Insectivorous plants such as the Butterworts exploit insects in a different way – by eating them! Their sticky leaves act as old-fashioned flypaper, trapping the insects. The victims are digested over two days, supplying the host with essential nitrogen and phosphorous and the remains are left on the leaves to be washed away by rain or dew.

Some plants steal to gain the nutrients they need for survival. The Broomrapes, which do not contain chlorophyll and cannot produce their own food, are parasites that tap into the roots of other plants.

Predators

A particular threat to alpine flora is posed by living creatures. Chamois enjoy nibbling Leopardsbane (known as ‘Chamois Grass’ in German), evidently for its high sugar content, while marmots have a penchant for Forget-me-nots. Some human beings continue the unfortunate practice of picking blooms; it was once the fashion to press them between the pages of a book. Fortunately, most enlightened modern-day visitors take away only photographs. Not only does this preserve the brilliance

of the colours, it is also the perfect way to appreciate them. It means, for instance, that the picture can be enlarged, revealing previously invisible aspects of these fascinating and precious plants.

Many of the flowers in this guide are protected – the Edelweiss was the very first, thanks to an 1836 law in Austria. Some, like the Lady’s Slipper Orchid, are already rare and risk extinction. It goes without saying that all alpine wild flowers should be left in their natural habitat for others to wonder at.

MIGRATION AND CLIMATE CHANGE

The origin of a number of alpine species has been traced to the Arctic region and the freezing steppes of central Asia. With the advance of glaciers during the Ice Ages they migrated southwards, spreading out in search of less demanding conditions, and then staying on after the retreat of the icy masses. Well-known examples are the Edelweiss and the Net-leaved Willow.

Nowadays, with ongoing climate change the Alps, as everywhere, are feeling the effects of the progressive rise in global temperature. Glaciers and snow fields are reducing in surface area, sometimes quite drastically, and the vegetation is shifting upwards in altitude as the plants do their best

Alpine Squill and White Crocus appear in springtime



FLOWERS



This thistle has successfully attracted two pollen distributors

Alpenrose

Rhododendron ferrugineum – Rhododendron ferrugineux – Rostblättrige Alpenrose – Rododendro ferrugineo



Thickets of this attractive evergreen shrub cover vast swathes of mountain-sides up to 3200m altitude, often in the company of larch and bilberries. The name derives from the Greek 'tree of roses' and it puts on a glorious show June–August with clusters of pink-red bell-shaped blooms. It can be distinguished from the otherwise identical Hair

Alpenrose by rusty-coloured scales underneath its shiny dark green leaves. These contain toxic substances, a savvy protection from grazing livestock. Its dried branches were once fashioned into brooms or used to filter milk.

Alpine Aster

Aster alpinus – Aste des Alpes – Alpen-Aster – Astro alpino

A striking member of the Daisy family that brightens alpine pastures and dry stony places with its pinkish or, less commonly, mauve outer petals and rich yellow disc-like heart. It grows as high as 3200m altitude, and flowers June–August. Aster comes from the Greek for 'star'.



Alpine Gypsophila, Creeping Baby's Breath

Gypsophila repens – Gypsophile rampante –
Kriechendes Gipskraut – Gipsophila strisciante



A sprawling clump of silvery grey leaves all but smothered with tiny stars of pale pink or lilac. On close inspection five-petalled flowers with minimal notches are revealed. It flowers May–August and prefers dry stony places and bare rock surfaces up to 2900m altitude. The main name means 'lover of chalk' while the tag is 'creep' and in fact the stems are semi-prostrate.

Alpine Rock-jasmine

Androsace alpina – Androsace des Alpes –
Alpen-Mannschild – Androsace alpina



An eye-catching spreading cushion plant that hugs screes and rock surfaces, keeping as low a profile as possible. Very small pretty pale pink or white flowers with five petals are accompanied by lance-shaped leaves covered in short hairs. Unlike the very similar Moss Campion, this has rounded petals and a yellowish centre, as well as woody branches and roots. Widespread, it flowers July–August as high as 4000m altitude.

Alpine Rose

Rosa pendulina – Rosier des Alpes – Alpen-Heckenrose –
Rosa alpina

An exceptionally pretty pinkish-purple rose that grows in dense thickets that emanate a recognisable sweet fragrance. The flower centre is white, punctuated with showy yellow anthers. The bushes can grow as tall as 2m and do not generally have thorns. It flowers June–July in clearings and woodland up to 2600m altitude.



Alpine Thrift, Mountain Thrift

Armeria alpina – Arméria des Alpes – Alpen-Grasnelke –
Armeria alpina



Just like the seaside version – in fact the name may derive from the Celtic for 'near the sea' – this thrift is a multi-bloom tuft atop a slender hairless green stalk, accompanied by slim spiky leaves. The calyx resembles thin plastic sheeting and embraces a bunch of flowers ranging from bright to pale pink. Its habitat is screes and damp meadows up to 3100m, and it flowers July–August across all but the central-north Alps.

Alpine Willowherb

Epilobium fleischeri – Épilobe de Fleischer –
Kies-Weidenröschen – Epilobio di Fleischer



While similar to Rosebay Willowherb, this plant is blunter in shape and notably shorter. It bears paler pink flowers distinguished by dark pink stamens. It flowers July–September up to 2700m altitude on moraines and river banks and is widespread with the exception of the eastern Alps.

Bee Orchid

Ophrys apiifera – Ophrys abeille –
Bienen-Ragwurz – Ofride fior d'ape

Just one of the weird and wonderful so-called insect orchids, this resembles a bee. The exquisite flowers have pink-purple outer lips framing a deep brown velvet man-like figure. It flowers May–June on grassy places in patches across the Alps up to 1800m altitude. *See also* other orchids: Black Vanilla; Yellow: Elder-flowered and Lady's Slipper; Purple: Broad-leaved Marsh, Common Spotted and Heath Spotted; White: Burnt, Musk and Small White.



Bird's-eye Primrose

Primula farinosa – Primevère farineuse –
Mehl-Primel – Primula farinosa

This dainty Primrose has a multitude of light pink-lilac flowers, each with five toothed petals and a tiny yellow eye, atop a slender stalk. Sprouting from the base are pale grey-green veined leaves that contain a white farinaceous powder. It flowers May–August on marshes and damp meadows up to 3000m altitude. *See also* Stinking Primrose; Yellow: Bear's-ear, Oxlip and Primrose; Purple: Marginate Primrose.



Black Vanilla Orchid

Nigritella nigra – Orchis vanillé – Schwarzes Männertreu –
Nigritella comune



Rich alpine meadows are often dotted with tiny dark brown-reddish orchids that go unnoticed by the uninitiated eye. Close up, the surprisingly strong vanilla-cocoa scent is evident and according to alpine hearsay, cows that eat them produce chocolate-flavoured milk! The flower can be rounded or pyramidal and also comes in pink. It flowers June–August up to 2800m altitude. *See also* other orchids: Bee; Yellow: Elder-flowered and Lady's Slipper; Purple: Broad-leaved Marsh, Common Spotted and Heath Spotted; White: Burnt, Musk and Small White.

Carthusian Pink

Dianthus carthusianorum – Oeillet des Chartreux –
Gewöhnliche Karthäuser-Nelke – Garofano dei Certosini



Thin leaves are placed at intervals on tall slender stalks that bear dense clusters of vivid deep pink-purple flowers with a central patch of white, serrated petals and a brown-purple calyx. It flowers May–August to 2500m altitude across most of the Alps. *Dianthus* derives from the ancient Greek for ‘flower

of the Gods’, although ‘Pink’ was probably first used for the flower and later extended to the colour. The plant was popular in Roman times for ceremonies, while the Arabs appreciated its scented species for distilling perfume; no wonder the Crusaders brought it back to Europe. *See also* Large, Maiden and Three-veined Pink.

Catsfoot, Mountain Everlasting, Cudweed

Antennaria dioica – Pied de chat dioïque –
Gewöhnliches Katzenpfötchen – *Antennaria dioica*

Unusual pale pink, reddish or white flowers with multiple petals surrounding a darker centre punctuated with multiple protruding stamens. The stalks are long and thick and several leaves attached, though the majority are around the base, silvery grey and oval. The plant is reportedly helpful in treating gastric ailments. Commonly found, it flowers June–August on dry heaths, rocks and meadows up to 3000m altitude.



Caucasian Stonecrop

Sedum spurium – Orpin bâtard – Kaukasus-Fetthenne –
Sedo del Caucaso



This plant originally hailed from the Caucasus region but is now naturalised across the Alps, with the exception of the southwest. Its fleshy rounded leaves form open rosettes and attractive white-red or pink star-shaped flowers tightly grouped together. It grows in dense carpets on stony wastes up to 1800m altitude, and flowers June–August. The genus name derives from the Latin for ‘settle’ as the leaves of

some species are believed to bring relief for wounds. As Stonecrops are commonly found on walls and roofs, they were popularly believed to protect houses from lightning strikes and fires. *See also* Yellow: Biting and Creamish Stonecrop; White: Thick-leaved Stonecrop.

Cobweb House-leek

Sempervivum arachnoideum – Joubarbe aranéuse –
Fitzige Spinnweb-Hauswurz – *Semprevivo ragnateloso*

Minuscule leaf rosettes coated in a cobweb of down typify this succulent. A lover of rocky crannies and dry but sun-blessed terrain, it grows at 1700–3000m altitude. By far the brightest of its kind, its brilliant red star flowers may be streaked with purplish pink, on reddish-brown stalks. As with the other house-leeks, in addition to resembling a triffid, it holds true to the *sempervivum* (ever alive) designation and does not die back during winter. It flowers July–September. *See also* Common and Mountain House-leek; Yellow: Wulfen’s House-leek.



Common Bistort

Polygonum bistorta – Renouée bistorte –
Schlangen-Knöterich – Poligono bistorta

Meadows smothered with pink-tipped spikes are a common foreground to the Alps. These spikes bear a tight cluster of tiny flowers that sway in the breeze, and long oval leaves grow alongside. The strange name refers to its 'many-kneed' jointed root. It flowers at length May–September up to 2500m altitude. *See also* White: Alpine Bistort.



Common House-leek

Sempervivum tectorum – Joubarbe des toits –
Dach-Hauswurz – Semprevivo dei tetti



Dull pink flowers with a yellow centre and a perfectly circular display of delicate stamens distinguish this evergreen House-leek. A large tall plant, it has an especially stocky stalk tinged reddish-brown and smallish blue-green-red basal rosettes. It is distributed in large patches across most of the Alps, except for the northeast. It flowers June–September on grassy and rocky terrain up to 2800m altitude. *See also* Cobweb and Mountain House-leek; Yellow: Wulfen's House-leek.

Common Lungwort

Pulmonaria officinalis – Pulmonaire officinale –
Echtes Lungenkraut – Polmonaria officinale

The crepe-like flowers begin life pink but gradually assume a bluish-purple hue, so the plant often sports dual colours. It has long been used in the treatment of coughs and lung ailments. The leaves are hairy with large light blotches and shaped like elongated hearts. It flowers in damp woods March–May up to 1900m altitude, and is widespread except for the eastern Alps.



Cowberry

Vaccinium vitis-idaea – Airelle rouge –
Preiselbeere – Mirtillo rosso

Delicate white, open bell-shaped blooms of the cowberry are followed by the edible though acidic-tasting red berry fruit which appears at the end of summer. A miniature evergreen shrub, it has an extensive system of underground roots, and flowers May–August up to 3000m altitude on open heath, woods and pastures, often in the company of the tastier Blueberry.



Creeping Azalea, Alpine Azalea

Loiseleuria procumbens – Azalée des Alpes – Alpenazalee – Azalea delle Alpi



Clusters of minuscule light pink flowers shaped like bells grow amongst dark green oblong leaves with rolled edges. A woody shrub, it forms extensive mats that hug the ground, hence the tag which means 'prostrate'. While not terribly common, it is found across the Alps up to 3000m altitude on dry rocky terrain often in windswept spots, and flowers June–July. The plant's reduced

dimensions and ground hugging profile make it easy to distinguish from similar Dwarf Alpenrose.

Cyclamen, Sowbread

Cyclamen purpurascens – Cyclamen pourpre – Europäisches Alpenveilchen – Ciclamino delle Alpi

A beautiful plant with deep purple-carmine nodding flowers. Its heart-shaped leaves are dark green and glossy with light vein tracings. The common English name derives from the Medieval Latin, a reminder that it was swine feed, whereas the Cyclamen family name comes from the Greek for 'circle', plausibly due to the round tuber. It flourishes in well-shaded damp woods, especially beech, and flowers July–September as high as 1800m altitude. It is found everywhere but the far southern Alps.



Dwarf Alpenrose, Ground Cistus

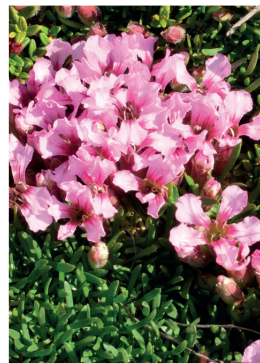
Rhodothamnus chamaecistus – Rhodothamne ciste nain – Zwergalpenrose – Rododendro cistino

This is exactly what the name says – a dwarf version of the attractive and widespread Alpenrose. The low-lying woody shrub has hairy branches and very small tough leaves that are bright green. The flower has five separate pale pink petals but its distinguishing feature are the showy long white filaments that end in dark brown anthers surrounding a pink stigma. It flowers May–July across the eastern Alps on dry open slopes and rock surfaces up to 2400m altitude. An even smaller similar plant is prostrate Creeping Azalea.



Dwarf Soapwort, Pygmy Soapwort

Saponaria pumila – Niedriges Seifenkraut – Saponaire naine – Saponaria minore



The pretty deep rose pink flowers with five separate notched petals are more or less stemless. They sprout from a cushion crowded with small fleshy oblong leaves. The low plant spreads across meadows and rocky terrain. A rare find, it grows in the central-eastern Alps up to 2600m altitude. It flowers July–September. The tag means 'dwarf'. *See also* Rock Soapwort, which has rather smaller flowers.