A **rose** is either a woody [perennial](https://en.wikipedia.org/wiki/Perennial_plant) [flowering plant](https://en.wikipedia.org/wiki/Flowering_plant) of the [genus](https://en.wikipedia.org/wiki/Genus) ***Rosa*** ([/ˈroʊzə/](https://en.wikipedia.org/wiki/Help:IPA/English)),[[4]](https://en.wikipedia.org/wiki/Rose#cite_note-W3-4) in the family [Rosaceae](https://en.wikipedia.org/wiki/Rosaceae) ([/roʊˈzeɪsiːˌiː/](https://en.wikipedia.org/wiki/Help:IPA/English)),[[4]](https://en.wikipedia.org/wiki/Rose#cite_note-W3-4) or the [flower](https://en.wikipedia.org/wiki/Flower) it bears. There are over three hundred [species](https://en.wikipedia.org/wiki/Rose_species) and [tens of thousands](https://en.wikipedia.org/wiki/Garden_roses) of [cultivars](https://en.wikipedia.org/wiki/Cultivar).[[*citation needed*](https://en.wikipedia.org/wiki/Wikipedia:Citation_needed)] They form a group of [plants](https://en.wikipedia.org/wiki/Plant) that can be erect [shrubs](https://en.wikipedia.org/wiki/Shrub), climbing, or trailing, with stems that are often armed with sharp [prickles](https://en.wikipedia.org/wiki/Thorns,_spines,_and_prickles).[[5]](https://en.wikipedia.org/wiki/Rose#cite_note-:1-5) Their flowers vary in size and shape and are usually large and showy, in colours ranging from white through yellows and reds. Most species are native to Asia, with smaller numbers native to Europe, North America, and northwestern Africa.[[5]](https://en.wikipedia.org/wiki/Rose#cite_note-:1-5) Species, [cultivars](https://en.wikipedia.org/wiki/Cultivar) and [hybrids](https://en.wikipedia.org/wiki/Hybrid_(biology)) are all widely grown for their beauty and often are fragrant. Roses have acquired cultural significance in many societies. Rose plants range in size from compact, miniature roses, to climbers that can reach seven meters in height.[[5]](https://en.wikipedia.org/wiki/Rose#cite_note-:1-5) Different species hybridize easily, and this has been used in the development of the wide range of [garden roses](https://en.wikipedia.org/wiki/Garden_roses).

[](https://en.wikipedia.org/wiki/File:Rosa_sulfurea_001.JPG)*Rosa hemisphaerica* (syn.: *Rosa sulphurea*), watercolor by Pierre-Joseph Redouté (1759–1840).

Etymology

The name *rose* comes from Latin *rosa*, which was perhaps borrowed from [Oscan](https://en.wikipedia.org/wiki/Oscan), from [Greek](https://en.wikipedia.org/wiki/Greek_language) ῥόδον *rhódon* ([Aeolic](https://en.wikipedia.org/wiki/Aeolic_Greek) βρόδον *wródon*), itself borrowed from [Old Persian](https://en.wikipedia.org/wiki/Old_Persian_language) *wrd-* (*wurdi*), related to [Avestan](https://en.wikipedia.org/wiki/Avestan_language" \o "Avestan language) *varəδa*, [Sogdian](https://en.wikipedia.org/wiki/Sogdian_language) *ward*, [Parthian](https://en.wikipedia.org/wiki/Parthian_language) *wâr*.[[6]](https://en.wikipedia.org/wiki/Rose#cite_note-6)[[7]](https://en.wikipedia.org/wiki/Rose#cite_note-7)

Botany

[](https://en.wikipedia.org/wiki/File:Rose_Prickles.jpg)Rose thorns are actually prickles – outgrowths of the [epidermis](https://en.wikipedia.org/wiki/Epidermis_(botany))[](https://en.wikipedia.org/wiki/File:Roseleaves3800px.JPG)Rose leaflets[](https://en.wikipedia.org/wiki/File:Roses_Boutons_FR_2012.jpg)Exterior view of rose buds[](https://en.wikipedia.org/wiki/File:Rose_hip_02_ies.jpg)Longitudinal section through a developing rose hip

The [leaves](https://en.wikipedia.org/wiki/Leaf) are borne alternately on the stem. In most species they are 5 to 15 centimetres (2.0 to 5.9 in) long, [pinnate](https://en.wikipedia.org/wiki/Pinnate), with (3–) 5–9 (−13) leaflets and basal [stipules](https://en.wikipedia.org/wiki/Stipule); the leaflets usually have a serrated margin, and often a few small prickles on the underside of the stem. Most roses are [deciduous](https://en.wikipedia.org/wiki/Deciduous) but a few (particularly from [Southeast Asia](https://en.wikipedia.org/wiki/Southeast_Asia)) are [evergreen](https://en.wikipedia.org/wiki/Evergreen) or nearly so.

The [flowers](https://en.wikipedia.org/wiki/Flower) of most species have five petals, with the exception of [*Rosa omeiensis*](https://en.wikipedia.org/wiki/Rosa_omeiensis) and [*Rosa sericea*](https://en.wikipedia.org/wiki/Rosa_sericea), which usually have only four. Each [petal](https://en.wikipedia.org/wiki/Petal) is divided into two distinct lobes and is usually white or pink, though in a few species yellow or red. Beneath the petals are five [sepals](https://en.wikipedia.org/wiki/Sepals) (or in the case of some *Rosa omeiensis* and *Rosa sericea*, four). These may be long enough to be visible when viewed from above and appear as green points alternating with the rounded petals. There are multiple [superior](https://en.wikipedia.org/wiki/Ovary_(plants)#Superior_ovary) ovaries that develop into [achenes](https://en.wikipedia.org/wiki/Achene).[[8]](https://en.wikipedia.org/wiki/Rose#cite_note-8) Roses are insect-pollinated in nature.

The [aggregate fruit](https://en.wikipedia.org/wiki/Aggregate_fruit) of the rose is a berry-like structure called a [rose hip](https://en.wikipedia.org/wiki/Rose_hip). Many of the domestic [cultivars](https://en.wikipedia.org/wiki/Cultivar) do not produce hips, as the [flowers](https://en.wikipedia.org/wiki/Flower) are so tightly petalled that they do not provide access for [pollination](https://en.wikipedia.org/wiki/Pollination). The hips of most species are red, but a few (e.g. [*Rosa pimpinellifolia*](https://en.wikipedia.org/wiki/Rosa_pimpinellifolia)) have dark purple to black hips. Each hip comprises an outer fleshy layer, the [hypanthium](https://en.wikipedia.org/wiki/Hypanthium), which contains 5–160 "seeds" (technically dry single-seeded fruits called [achenes](https://en.wikipedia.org/wiki/Achene)) embedded in a matrix of fine, but stiff, hairs. Rose hips of some species, especially the [dog rose](https://en.wikipedia.org/wiki/Dog_rose) (*Rosa canina*) and [rugosa rose](https://en.wikipedia.org/wiki/Rugosa_rose) (*Rosa rugosa*), are very rich in [vitamin C](https://en.wikipedia.org/wiki/Vitamin_C), among the richest sources of any [plant](https://en.wikipedia.org/wiki/Plant). The hips are eaten by fruit-eating [birds](https://en.wikipedia.org/wiki/Bird) such as [thrushes](https://en.wikipedia.org/wiki/Thrush_(bird)) and [waxwings](https://en.wikipedia.org/wiki/Waxwing), which then disperse the [seeds](https://en.wikipedia.org/wiki/Seed) in their droppings. Some birds, particularly [finches](https://en.wikipedia.org/wiki/Finch), also eat the seeds.

The sharp growths along a rose stem, though commonly called "thorns", are technically [prickles](https://en.wikipedia.org/wiki/Thorns,_spines_and_prickles), outgrowths of the [epidermis](https://en.wikipedia.org/wiki/Epidermis_(botany)) (the outer layer of tissue of the stem), unlike true thorns, which are [modified stems](https://en.wikipedia.org/wiki/Aerial_stem_modification). Rose prickles are typically sickle-shaped hooks, which aid the rose in hanging onto other vegetation when growing over it. Some species such as [*Rosa rugosa*](https://en.wikipedia.org/wiki/Rosa_rugosa) and [*Rosa pimpinellifolia*](https://en.wikipedia.org/wiki/Rosa_pimpinellifolia) have densely packed straight prickles, probably an adaptation to reduce [browsing](https://en.wikipedia.org/wiki/Browsing_(herbivory)) by animals, but also possibly an adaptation to trap wind-blown [sand](https://en.wikipedia.org/wiki/Sand) and so reduce [erosion](https://en.wikipedia.org/wiki/Erosion) and protect their [roots](https://en.wikipedia.org/wiki/Root) (both of these species grow naturally on [coastal](https://en.wikipedia.org/wiki/Coast) [sand dunes](https://en.wikipedia.org/wiki/Dune)). Despite the presence of prickles, roses are frequently browsed by [deer](https://en.wikipedia.org/wiki/Deer). A few species of roses have only vestigial prickles that have no points.

**Evolution**

The oldest remains of roses are from the Late [Eocene](https://en.wikipedia.org/wiki/Eocene) [Florissant Formation](https://en.wikipedia.org/wiki/Florissant_Formation) of Colorado.[[9]](https://en.wikipedia.org/wiki/Rose#cite_note-9) Roses were present in Europe by the early [Oligocene](https://en.wikipedia.org/wiki/Oligocene).[[10]](https://en.wikipedia.org/wiki/Rose#cite_note-10)

Today's garden roses come from 18th-century China.[[11]](https://en.wikipedia.org/wiki/Rose#cite_note-11) Among the old Chinese garden roses, the Old Blush group is the most primitive, while newer groups are the most diverse.[[12]](https://en.wikipedia.org/wiki/Rose#cite_note-12)