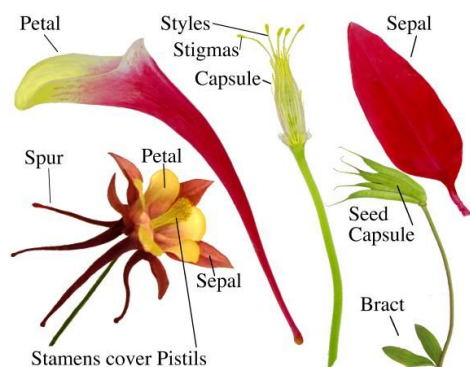


Aquilegia : A flock of doves, an eagle claw, or a granny's bonnet ?

Aquilegia, Columbines, Granny's Bonnets (or whatever you want to call them) are cottage garden champions, not only their blooms are charming, their soft, fern like foliage is a beautiful feature in itself. Their flowers open at the perfect time to bridge the gap between spring and summer, as spring flowering bulbs begin to fade, aquilegias come into life...

The *Aquilegia* genus belongs to the buttercup (*Ranunculaceae*) family, and contains around 70 species found over much of the temperate and subarctic Northern Hemisphere. The name is derived from the Latin *aquila* which means eagle, a possible reference to the hooked spurs of some species appearing like the claws of that bird. The common name 'columbine' comes from the Latin for 'dove', due to the resemblance of the inverted flower to a flock of doves clustered together. If you thought the flower would make a cute bonnet, you would also be correct in naming it so, as this flower also goes by the name granny's bonnet.

The plants are of the classic English cottage garden type. They originated in Europe, the most common species is *Aquilegia vulgaris*, and there are many other species and numerous hybrids and cultivars. Around October they send up spires to around 30 - 90cm tall with beautiful flowers, lovely rounded leaves a bit like maidenhair fern foliage. The old-fashioned aquilegia produces blue, pink or white flowers, with 'spurs' at the back of the flower, but cultivated forms are now available in single and double forms, in many coloured versions, some are bi and tri-colours, some have contrasting sepals and petals, such as red outer petals and white inner 'bonnet'. Inner petals may partially fuse to form long funnel-shaped spurs. The flowers have 5 petal-like sepals that are often held at right angles to the rest of the floral parts. These sepals are often the most conspicuous part of the flower. The petals have two parts: the short, rounded parts that point forward from the sepals and enclose the stamens and pistils, and the nectary spur that points away from the sepals. The spur may be hooked, straight or practically non-existent. The stamens may be shorter, equal to or beyond the petals. These floral features are important to differentiate the various species. The leaves are very recognizable, they are made up of green to bluish-green small fan-shaped leaflets, resembling maidenhair fern fronds held flat in sets of three, six or nine on long leaf stems. The flowering stems usually reach above the



foliage and carry spurred, often pendulous flowers in many shades from blue and purple to red, yellow, and white, some are bi-and tri-coloured. The flowering period can vary among the species; some bloom through much of late spring and summer, others are short-flowering. The spurs contain nectar, some species have sweet nectar rich flowers, which native Americans use as a condiment with other fresh greens, reported to be safe in small quantities. The seeds and roots are however highly poisonous. Very small amounts of root used as a treatment for ulcers by native Americans has been reported.

Thanks to extensive breeding, apart from having a wide range of colours, the cultivated flower also boasts an impressive range of shapes: bell, trumpet,

down-facing, up-facing etc. All have the identifying spurs, they may be long spurs at the back of the flowers or short, curved spurs facing inwards, the range of spur length is from almost negligible to 15cm.

The genus *Aquilegia* is very adaptable, with species, cultivars and varieties suitable for a range of situations from woodlands, rockeries, to perennial borders. The plants are clump-forming with fine stem, blue-green foliage and a woody rootstock. Their size ranges from dwarf alpine 25-30cm tall to hybrid garden plants up to 1 metre. Dwarf aquilegias are ideal for rock gardens and excellent as cut flowers.

Aquilegias grow easily from seeds, they self-sow and interbreed freely. You often get different colour combinations and types due to the plants being cross-pollinated with neighbouring plants; the seedlings rarely resemble the parents. If you want to keep your aquilegias pure then snip off the flower stalks after flowering to prevent seed forming and increase your stocks by division, however, they have deep roots and it is not easy to lift and divide. Propagation by cutting is another possible alternative. To prolong the flower display, dead head the spent blooms, this will actually promote more flowering, as when you do not deadhead, the plant will prematurely stop producing blooms.

The size and shape diversity of aquilegia petal spurs in correlation with their pollinators, ranging from bees to long-beaked bird, is a textbook example of adaptive radiation: the spurs are tailored to the length of their pollinators' tongues; bees, for example, enjoy the short spurs, whereas long-beaked birds favour the long spurs. This interaction helps to explain how the genus has achieved such a rapid radiation of so many species over the years.

