

Silene gallica



Status

Nationally Scarce

UK Biodiversity Action Plan Priority Species.

IUCN Threat category: Endangered (2005).

Taxonomy

Magnoliopsida: Caryophyllaceae

Scientific name:

Silene gallica L.

Synonyms: *Silene anglica* L., *Silene quinquevulnera* L.

Common names:

**Small-flowered Catchfly,
Gludlys Amryliw**

Biology & Distribution

Silene gallica is a winter-annual of cultivated and disturbed ground, mainly in arable fields on sandy or gravelly, often acidic, free-draining soils, and on old walls and waste ground. It also occurs in open, drought-prone coastal grassland on banks and cliffs, and on sand dunes in the Channel Islands.

In Wales it is still widely scattered, but has declined markedly in inland sites throughout the UK, and many of the remaining sites are in coastal areas. It has declined as a result of widespread changes in agricultural practices such as intensification, especially from increased use of herbicides and fertilizers, loss of field-margins, earlier harvesting which denies the plants an opportunity to produce seeds, and the use of competitive crops. At coastal sites, tourist developments have resulted in further loss. It has also been introduced with impure, imported clover seed. The species has largely become extinct in northern Europe but is still widespread in central and southern Europe. Many populations are now very small.

Identification & Field survey

Silene is a member of the Pink family (Caryophyllaceae) which are characterised by having mostly opposite, entire leaves without stipules, flowers with 4-5 green sepals with petals mostly greenish to white or coloured yellow, pink, red or purple, 8-10 stamens, and a many-seeded capsule.

In *Silene* the sepals are joined to form a distinct calyx-tube, the calyx teeth are shorter than the calyx tube, falling short of the petals. The petal tip can be entire to two-lobed. There are (2-)3(-5) styles in female

flowers (styles absent in males). The capsule has twice as many teeth as there are styles. The related genus *Lychnis* (Catchflies) has 5 styles and the capsule has 5 teeth.

There are six native species of *Silene* in Britain and three archeophytes including *Silene gallica*. Many other species are grown in gardens or occur as bird-seed impurities and consequently can appear on rubbish tips and waste ground (see Stace 1997). *Silene gallica* is distinguished from similar species by being covered in soft sticky hairs, having small narrow lanceolate middle stem leaves, white to pinkish flowers which all tend to point in the same direction in loose inflorescences, and weakly notched petals.

It is a polymorphic species which tends to form local geographic races throughout Europe (Figure 1); plants in Britain fall into three main groupings which are not wholly distinct (Lousley 1936):

Var. *sylvestris*: stem simple with few erect branches; petals large - lamina at least 5 x 5 mm, pale pink or rose, rounder and more entire. Rare.

Var. *anglica*: stem branching, spreading; petals small, dingy white, yellowish or even pale pink; lower fruiting pedicels exceeding the calyx, often spreading or even reflexed. Commonest in southern Britain, with red-flowered plants predominating in the west.

Var. *quinquevulnera*: Like var. *anglica* with stem branches spreading, and petals small with a wide red spot at the base of each petal. This has been cultivated as an ornamental annual and sometimes appears as a casual.

Silene gallica is a winter annual plant with germination typically occurring in autumn, but occasionally in spring and so the plant can be present in both spring and winter crops. It flowers usually between June and October, which is the best period during which to survey it. The common name refers to the plant being sticky, so much so that small flies can become fastened to the leaves or stem.

Key characters

Pubescent, erect annual to 30(-50) cm, without non-flowering shoots; leaves oblanceolate (lower) to linear (upper), the middle leaves lanceolate and sessile. Flowers ± erect in one-sided inflorescences. Calyx 7-10 mm long, 10-veined, with long acuminate teeth. Petals yellowish-white to pink, or red-blotched, emarginate to weakly lobed at apex. Styles usually 3. Capsules ovoid, about as long as calyx.

