

Status

UK Biodiversity Action Plan Priority species.
Red Data Book species.
Schedule 8, Wildlife & Countryside Act (1981).
IUCN threat category: Vulnerable (2005).

Taxonomy

Magnoliopsida: Rosaceae

Scientific name:

Cotoneaster cambricus J. Fryer & B. Hylmö
(*C. integerrimus* auct. non Medik.)

Common names:

**Wild Cotoneaster,
Creigafal y Gogarth.**

Cotoneaster is a large genus of woody shrubs and small trees which has recently been monographed by Fryer & Hylmö (2009). They are widely grown in gardens in Britain and over 100 species have been recorded as cultivated. Stace (1997) covers 68 species naturalised in Britain.

Cotoneaster cambricus was described by Fryer & Hylmö (1994) as a native endemic species confined to Great Orme's Head, Caernarfonshire. Kay & John (1995) considered it to be more likely of garden origin and have cast doubt on its distinction from *C. integerrimus*, a widespread European species which was in cultivation by 1656. Further genetic studies are being carried out, but in the meantime it is accepted as a native endemic.

Biology & Distribution

It occurs as very few plants on limestone rocks and ledges on the Great Orme's Head. It has declined since its discovery in N. Wales in 1783 due to poor fruiting, grazing and scrub encroachment. Re-introduction of native material has helped to increase the population.



Figure 1. *Cotoneaster cambricus*. (from J. E. Smith & J. Sowerby (1852). *English Botany*. London)

Identification & Field survey

Cotoneaster cambricus can be separated from other *Cotoneaster* species by the leaves which are flat and matt on the upper side, and covered in white hairs on the lower side. The size and shape of the leaf (0.9-4 cm, broadly ovate to oblong-ovate) separates it from other species with a white underside to the leaves.

Ten other *Cotoneaster* have been recorded in the 10km-square on the Great Orme's Head containing *C. cambricus* (Preston *et al.* 2002). These are *C. conspicuus*, *C. dielsianus*, *C. franchetii*, *C. hjelmqvistii*, *C. horizontalis*, *C. integrifolius* (as *C. microphyllus* agg.), *C. rehderi*, *C. salicifolius*, *C. simonsii* and *C. sternianus*. Examination of the shape, size, and pubescence on the underside of the leaves will eliminate most of these species.

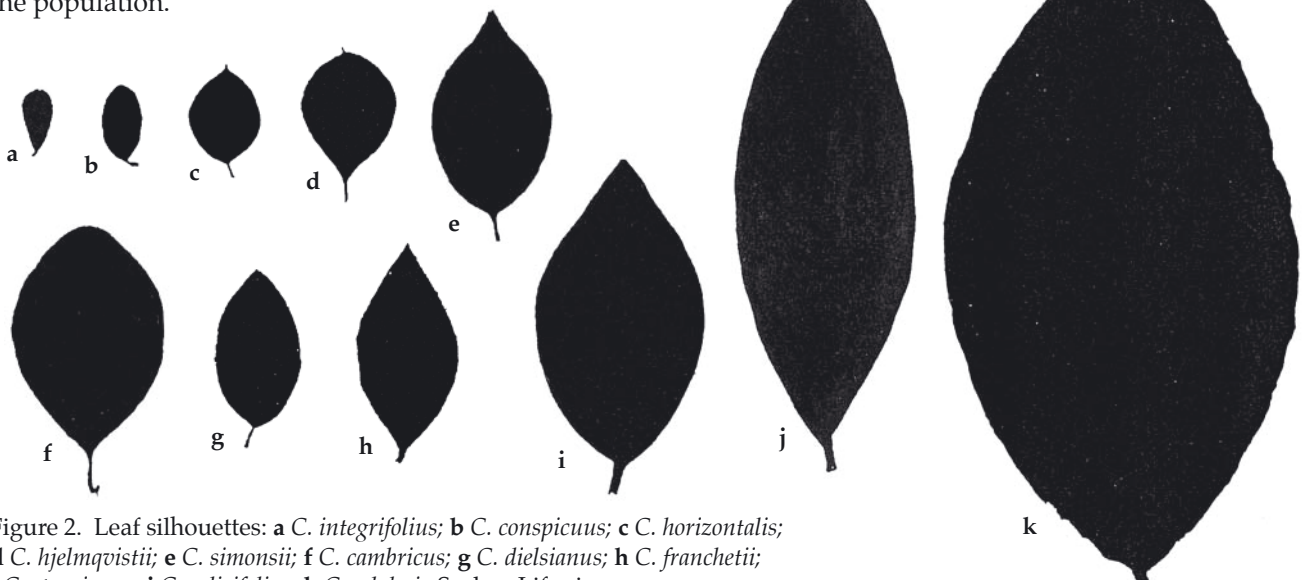


Figure 2. Leaf silhouettes: a *C. integrifolius*; b *C. conspicuus*; c *C. horizontalis*; d *C. hjelmqvistii*; e *C. simonsii*; f *C. cambricus*; g *C. dielsianus*; h *C. franchetii*; i *C. sternianus*; j *C. salicifolius*; k *C. rehderi*. Scale = Life size.

Differentiation from similar species

Table 1. Some characters distinguishing *Cotoneaster* species on the Great Orme, with the most likely species with which it can be confused nearer the top of table.

<i>Cotoneaster</i>	Lower side of leaf	Leaf shape	Mature leaf length	Upper side of leaf
<i>cambricus</i>	densely covered in short, cottony, white hairs (tomentose)	broadly ovate to oblong-ovate	0.9-4cm (typically 3.1 cm)	flat, matt
<i>dielsianus</i>	densely covered in short cottony grey or greenish hairs	ovate to obovate	1.2-2.5(-3) cm (typically 2.1 cm)	veins slightly impressed
<i>simonsii</i>	with sparse short and soft hairs	broadly ovate	1.5-2.5(-3) cm (typically 2.1-2.4 cm)	shiny, flat
<i>franchetii</i>	densely covered in short, cottony, silvery to yellowish hairs	elliptic to ovate	2-3.5 cm (typically 2.8-3 cm)	veins deeply impressed
<i>sternianus</i>	similar to <i>C. franchetii</i>	elliptic to ovate implied	2.5-5 cm (typically 4-4.8 cm)	similar to <i>C. franchetii</i>
<i>rehderi</i>	with short and soft hairs to rather sparsely so	ovate to oblong-elliptic	5-15 cm (typically 7-8.8 cm)	with surface with raised, blister-like swellings (bullate)
<i>salicifolius</i>	densely covered in short, cottony, white hairs	elliptic-lanceolate	3-10 cm (typically 6.2 cm)	shiny and ± bullate with indented venation
<i>hjelmqvistii</i>	nearly hairless	ovate to circular	to 1.5(-2) cm (typically 1.4 cm)	shiny and flat
<i>horizontalis</i>	nearly hairless	nearly circular to broadly elliptic	0.6-1.2 cm (typically 0.9 cm)	shiny and flat
<i>integrifolius</i>	with appressed short and soft hairs and paler green than upper side	oblanceolate to oblong or obovate	0.7-1.5 cm (typically 1.0 cm)	shiny, very dark green
<i>conspicuus</i>	with short and soft hairs	narrowly elliptic	0.5-2.0 cm (typically 1.1 cm)	with short and soft hairs; much less shiny than <i>C. integrifolius</i>

Key characters

An apomictic deciduous shrub to 1.5m tall, with a bushy, arching habit. Leaves 0.9-40cm, broadly ovate to oblong-ovate, flat and matt on upper side, tomentose on lower side largely obscuring the surface in summer. Flowers 1-4(-7) in short, nodding, mostly glabrous panicles. Hypanthium and calyx glabrous or nearly so. Fruit 8-11mm, red, sub-globose, nutlets 2-3.

References

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- Kay, Q. O. N. & John, R. (1995). *The conservation of scarce and declining plant species in lowland Wales*. Science Report No. 110. Countryside Council for Wales. Bangor.
- Preston, C.D., Pearman, D. A. & Dines, T. D. eds. (2002). *New Atlas of the British & Irish flora*. Oxford University Press, Oxford.
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