## Status

Schedule 8, Wildlife \& Countryside Act (1981). IUCN Threat category: Least concern (2005).
Nationally Scarce.
UK Biodiversity Action Plan Priority species.

## Taxonomy

Magnoliopsida: Lamiaceae
Scientific name:

## Mentha pulegium L.,

Common names:

## Pennyroyal, Brymlys

Mentha is a distinctive genus of the Dead-nettle family (Lamiaceae, Labiatae) which is instantly recognised by its distinctive minty smell. The flowers of Mentha and Lycopus are unusual in the British members of the Lamiaceae in having the corolla with four approximately equal lobes. Mentha differs from Lycopus in having lilac, red or purple (rarely albino) flowers with four stamens, rather than having white flowers with two stamens (Lycopus also does not smell of mint).

Of the 13 Mentha taxa currently recorded in Britain (Stace 1997), there are two species which are much smaller than the others, M. pulegium and M. requienii. Mentha pulegium is quite distinct from the other larger species and does not hybridise with them. Mentha requienii is a garden escape and occurs in flower beds, pavements, lawns, etc. and looks more like Mind-your-own-business Soleirolia soleirolii than Mentha pulegium.

There are reported to be two forms of Mentha pulegium, a prostrate native form (var. pulegium) and an erect introduced form (var. erecta Martyn). DNA analysis (R. Cowan, pers. comm. 2004) now confirms that there are indeed two forms, which interbreed and form intermediates where they grow together. Although var. erecta is often associated with known introduced sites it is not always so, and both taxa could equally be native, at least in some localities.


Figure 1. Mentha pulegium. From L. \& H. G. Reichenbach, Icones, tab. MCCXC.

## Differentiation from similar species

1 Calyx glabrous inside; calyx teeth more or less equal is size
Mentha spp.
1 Calyx hairy inside; the lower two calyx teeth a little longer and narrower than the three upper teeth 2

2 Mat-forming tiny procumbent plant with leaves up to 6 mm long; whorls with 2-6 flowers Mentha requienii
2 Erect or procumbent plant with leaves up to 20 mm long; whorls with many flowers Mentha pulegium

## Distribution \& Ecology

It is a rare species scattered throughout southern Britain, with especial concentrations of records in south-east and central southern England and is declining in native habitats (Preston et al. 2002).

It is rare in Wales. Details of all records are held in the Threatened Plants Database (Lockton 2001).

It occurs in seasonally-inundated grasslands, ponds, ditches, roadsides, village greens and heaths, usually in very short open vegetation often which is grazed. It is also becoming widely introduced with grass seed on road verges, old coal tips, etc. but does not persist.

## Identification \& Field survey

Please record whether plants are erect or prostrate in the field, and note associated species and habitat and especially the likelihood of it being a recent introduction at the site with grass or other seed.

## Key characters

Prostrate or erect perennial to 30 cm tall, sparsely to densely hairy, with leaves $8-20(-30) \mathrm{mm} \times 6-10 \mathrm{~mm}$, narrowly elliptic to nearly round. Calyx with lower two calyx teeth longer and narrower than the three upper teeth, hairy in the throat. Corolla lilac, four lobed, hairy outside. Stamens four, exerted.

## Local action plans

UK BAP Species Action Plan: http:/ / www.ukbap.org.uk

## References

Kay, Q. O. N. \& John, R. F. (1995). The conservation of scarce and declining plant species in lowland Wales: population genetics, demographic ecology and recommendations for future conservation in 32 species of lowland grassland and related habitats. Countryside Council for Wales Science Report No. 110. March 1995.
Lockton, A. J. (2001). An association between Mentha pulegium and Roman Roads. TPDB report, May 2001.

Preston, C.D., Pearman, D. A. \& Dines, T. D. eds. (2002). New Atlas of the British E Irish flora. Oxford University Press, Oxford.
Stace, C. A. (1997). New Flora of the British Isles. 2 ${ }^{\text {nd }}$ ed. Cambridge University Press, Cambridge.

Additional photographs are available on the ARKive website (http: / / www.arkive.org / species).

