

Ultra Competitive Plants

Data Sheet No 2: Cotoneaster species

Cotoneaster species are widely used by landscape architects as both trees and shrubs. Whilst most of these species are useful and attractive plants, there are however, five species that pose significant problems for designed and 'natural' environments throughout the UK. The chief problem is that they have the potential to spread widely and outcompete native flora in areas such as heaths, exposed hillsides and dune systems. As such their use should be carefully considered and actions prescribed in management plans to ensure that they do not escape the designed environment.

Relevant legislation

All five invasive species of Cotoneaster are listed on Schedule 9 of the Wildlife and Countryside Act in England and Wales and it is therefore an offence to plant or otherwise cause to grow these species in the wild. However, some Schedule 9 plants are widely available in nurseries but are rarely advertised as such and landscape architects should ensure that they are aware of the implications of using these plants inappropriately or without understanding the risks.

In addition, many Cotoneaster species in addition to the five species identified here are monitored by the Non Native Species Secretariat, whilst many species meet the criteria for being listed as an Article 4 species in the EU Invasive Alien Species Regulation and as such, may soon be subject to these conditions. In any case, as a signatory to the Convention on Biological Diversity, the UK has a duty to manage pathways to prevent the introduction and establishment of alien invasive species under Article 9 of the Aichi Biodiversity Targets. All species within the genus Cotoneaster must be accompanied by a Plant Passport at all stages of growth, supply and planting.

Alternative species

For berries: *Callicarpa dichotoma*, *Crataegus* spp, *Ligustrum ovalifolium*, *Prunus spinosa*, *Sambucus* spp

For speed of growth: *Cornus* spp, *Rosa* spp (not *Rosa rugosa*), *Rubus tricolor*, *Symphoricarpos albus*;

As groundcover: *Hebe* spp, *Phlomis russeliana*, *Polygonum affinis*, *Prunus*, *Rubus* spp, *Symphytum* spp

For overall shape and size: *Lonicera* spp, *Hebe* spp, *Potentilla* spp, *Viburnum* spp



Species	Origin	Introduced	Form	Uses	Invasive
<i>C. bullatus</i>	W. China and Tibet	1898 in France	Deciduous tree, 3-4m tall, sparse habit, excellent fruit	Small tree in tight spaces or as part of mixed border	Throughout UK
<i>C. horizontalis</i>	China	1870 in France	Deciduous shrub, up to 1.2m tall	Tends to grow flat over open ground but can climb walls	Throughout UK & Ireland
<i>C. integrifolius</i>	China and northern India	1895 in UK	Low-growing shrub to 1.2m tall	Hedging, ornamental plant in mixed borders	England, Ireland & Wales
<i>C. microphyllus</i>	Himalaya and SW China	1824 in UK	Evergreen shrub, up to 1.2m tall	Often used as a groundcover	Throughout UK
<i>C. simonsii</i>	Nepal, Sikkim and Bhutan	Probably mid 19 th Century	Deciduous, sometimes semi-evergreen shrub up to 3m	Vigorous shrub often used as hedging or in mixed borders	Throughout UK & Ireland

The good

Amenity value

Cotoneasters are a group of shrubs and occasionally trees, deciduous, semi-evergreen and evergreen, that are widely planted in the UK. They are used in a range of situations from commercial landscape projects to hedges, borders and covering slopes as groundcover.

Tolerance

"No shrubs are more easily cultivated than these," wrote Bean. Cotoneasters are hardy of conditions such as compacted soils, salts and frosts, they tend to be reliable, long-lived and quick to establish in almost any environment that is not marshy or water-logged.

Ecosystem services

The flowers are small and usually white or pale pink, borne in clusters and tend to be attractive to pollinators but their chief interest is their fruits which can be a brilliant red colour, or sometimes orange, brown or black. It should be noted that this is a complex situation as the Non Native Species fact sheet notes that in habitats of lower value, especially in urban areas, *C. horizontalis* may actually have a net benefit to local ecosystems as its flowers are highly attractive to bees and birds eat its berries in winter when other food sources may become scarce.

Further reading

[Bean's Encyclopaedia of Trees and Shrubs](#)
[EU Regulation 1143/2014 on Invasive Species](#)
[GB Non Native Species Secretariat](#)
[The Invasive Species Compendium](#)

The bad

There are three main problems with Cotoneasters: they are quick to establish and will tend to outcompete neighbouring plants, they can be difficult to eradicate or control, and in some cases the tendency of shrubby forms such as *C. horizontalis* to become climbing plants if placed against a wall may present maintenance problems.

Invasive

Cotoneasters are generally spread by birds eating the fruit and depositing their seeds some distance from the parent, and as a result the species listed above are naturalised throughout the UK although this distribution is patchy. Their competitive tendencies are particularly problematic in alkaline soils and especially areas of limestone soils as not only are these habitats often refuges for rare native plants, but also because they are able to outcompete herbaceous meadow communities.

Regeneration

Seed production is prolific and viable in warmer areas; germinates in many inappropriate locations, such as native limestone plant associations.

Eradication

Cotoneaster species can be difficult to eradicate because they are often invasive in areas where there are complex plant associations, making it difficult to eradicate only the target plants and not those nearby, combined with the fact that they have tough roots, making them difficult to dig up. Because herbicides such as Broadsword and Roundup leave the dead branches in place, they also form ideal places for brambles and ivy to establish in their place.