## Plant in Focus, October 2017

# Helleborus Hellebores





Helleborus lividus subsp. corsicus, GBG May 2015

Helleborus, GBG June 2015

#### Introduction

Commonly known as Hellebores, the Eurasian genus *Helleborus* consists of about 20 species of herbaceous or evergreen perennial flowering plants in the family Ranunculaceae. This family includes Buttercup *Ranunculus*, *Anemone*, *Clematis*, *Delphinium* and *Aquilegia*. Many species are poisonous. Despite names such as "Winter Rose", "Christmas Rose" and "Lenten Rose", Hellebores are not closely related to the Rose family Rosaceae.

Various species of this genus originated in Europe and Asia. The greatest concentration of species occurs in the Balkans. The flowers have five petal-like sepals surrounding a ring of small, cup-like nectaries which are actually "petals" modified to hold nectar. The sepals do not fall as petals would, but remain on the plant, sometimes for many months. Thus the flowers remain attractive for a long time. Research in Spain suggests that the persistence of the sepals contributes to the development of the seeds.





Nectaries form a whorl surrounding the stamens of Helleborus. The nectaries are modified petals. GBG





www.friendsgbg.org.au Phone: 5222 6053

## **Hellebore myths**

Ancient civilisations used Hellebore as a medicine to cure paralysis, gout, and insanity. Many Hellebore species are in fact toxic, causing their own set of symptoms such as vertigo, swelling of the tongue and throat, tinnitus, and thirst. In extreme cases the poison can lead to slowing of the heart, heart attack, stupor, and even death. It is for these reason that the Hellebore has been cloaked in a number of dark myths and folklore. One being its connection with witchcraft. It was the ancient Greeks who seemed to get the most out of it. During the siege of Kirrha in 585 BC the Greek forces poisoned the city's water supply by adding large amounts of crushed Hellebore leaves to it. The locals drank the water and were quickly overcome by diarrhoea. Unable to defend the city, the Greeks mounted an aggressive attack, quickly securing the city for themselves.

Perhaps the most insidious use of Hellebore is the death of Alexander the Great. Having created many enemies around the Mediterranean and North Africa, it was only a matter of time before an assassination attempt was made. This turned out to be an inside job arranged and executed by top Greek politicians. Using the son of Alexander's Greek Viceroy as a 'mule', Hellebore was brought into Babylon, cleverly hidden inside a mules hoof. It was administered by the royal cupbearer and 12 days later he was dead. On a positive note, Greek Mythology tells a story where it was used to cure the daughters of King Midas after they were touched by madness and found running through the streets screaming. It was the through quick thinking by Pylos. He administered the potion and managed to save the daughters.

One charming story is derived from *Helleborus nigra* Christmas Rose. Tradition says that the name Christmas Rose was given after it grew from the tears of a young Jewish girl who was so sad, and too poor to have a gift to give baby Jesus, as was the custom in her day.





Top: Hellebore. GBG
Bottom: Hellebore species and hybrids: Helleborus
viridis (top left); H. foetidus (top right) with
cross-section; flowers of various Hellebore cultivars.
Simon Garbutt, commons.wikimedia.org CC BY-SA 3.0









Hellebores and Blue Bells thrive under the Copper Beech tree (top left of photo), GBG.

They are in deep shade in summer and receive direct sun in winter.

#### Cultivation

Hellebores are widely grown for decorative purposes. They are particularly valued by gardeners for their winter and early spring flowering period; the plants are surprisingly frost-resistant and many are evergreen. Best grown in part shade and moist well drained humus-rich soil, they must not dry out in summer. Many species of Hellebore have green or greenish-purple flowers and are of limited garden value, although Corsican Hellebore *Helleborus lividus* subsp. *corsicus* (syn. *Helleborus argutifolius*), a robust plant with pale green, cup-shaped flowers and attractive leathery foliage, is widely grown. So is the 'Stinking Hellebore' or Setterwort *H. foetidus*, which has drooping clusters of small, pale green, bell-shaped flowers. *H. foetidus* 'Wester Flisk', with red-flushed flowers and flower stalks, is becoming popular, as are more recent selections with golden-yellow foliage.

The so-called Christmas rose *H. niger*, a traditional cottage garden favourite, bears its pure white flowers (which often age to pink) in the depths of winter; large-flowered cultivars are available, as are pink-flowered and double-flowered selections.

The most popular Hellebores for garden use, however, are undoubtedly *H. orientalis* and its colourful hybrids (H. × hybridus). In the northern hemisphere, they flower in early spring, around the period of Lent, and are often known as Lenten Hellebores, Oriental Hellebores, or Lenten Roses. They are excellent for bringing early colour to shady herbaceous borders and areas between deciduous shrubs and under trees.





#### **Pests and Diseases**

Hellebore plants are usually left alone by animals such as deer and rabbits due to the fact that the leaves of the plant produce poisonous alkaloids, making them distasteful to animals. The poisonous alkaloids have been known to sometimes bother gardeners with sensitive skin.

However, Hellebores can become food for very small animals: *Phytomyza hellebori* Hellebore leaf miner and sap feeding *Macrosiphum hellebori* Hellebore Aphid or Greenfly. In addition they can suffer infections of fungus *Botrytis cinerea* Grey mold and *Coniothyrium hellebori* a black spot or leaf spot fungus, of bacteria *Pseudomonas viridiflava* and of *Helleborus* net necrosis virus also known as Hellebore black death.

## **Hellebore Summary**

Family: Ranunculaceae Genus: Helleborus

Common names: Hellebore

**Origin**: Europe and Asia, with the greatest concentration of species in the Balkans.

Location in GBG: Under the Cooper Beech in Ornamaental Shrubs Bed No. 7, and in Camellia

Bed No. 1 and Bunya Line West Bed No. 1 at the West end of the Camellia Walk. **Availability**: Helleborus plants may be available for purchase at the Friends Nursery

#### References

'Hellebore' <a href="https://en.wikipedia.org/wiki/Hellebore">https://en.wikipedia.org/wiki/Hellebore</a>
'Stories, myths, legends and the folklore of Hellebore'
<a href="https://gardenofeaden.blogspot.com.au/2009/01/stories-myths-legends-and-folklore-of.html">https://gardenofeaden.blogspot.com.au/2009/01/stories-myths-legends-and-folklore-of.html</a>











Helleborus niger plant parts: 1. Cross-section of flower showing, from the base towards the centre: sepals, nectaries, stamens (anther & filament), carpel (stigma, style, ovaries with ovules). 2. Nectaries. 3. Anther at top of the filament.

4. Carpel. Prof. Dr. Otto Wilhelm Thomé, Flora von Deutschland, Österreich und der Schweiz, 1885, Gera,

Germany, www.biolib.de and commons.wikimedia.org Public Domain.





Hellebore, GBG







This information was prepared by Gwen Anderson Volunteer Guide Friends of Geelong Botanic Gardens

www.friendsgbg.org.au www.geelongaustralia.com.au/gbg/