

Berberis darwinii

[Synonyms : *Berberis costulata*]

DARWIN'S BARBERRY is an evergreen shrub. Native to Chile it has red-tinged yellow flowers then bluish-purple berries.

It is also known as Barberry, *Darwinberberis* (Swedish), Darwin's berberis, *Épine-vinette* (French), and *Zuurbes* (Dutch).

Darwinii commemorates an English naturalist, Charles Darwin (1809-1882), who presented a body of evidence to support his theory that living organisms develop through natural selection enabling evolutionary change, a theory upon which biology today in its broadest sense still stands. While his university education was directed initially towards medicine, and then theology, his interest in natural history burgeoned and at Cambridge he studied under the English botanist and geologist, John Stevens Henslow (1796-1861) who was professor of botany. He also joined a geology course run by an Englishman, considered by many to be a founder of modern geology, Adam Sedgwick (1785-1873). Henslow recommended Darwin to the captain of HMS *Beagle*, Robert Fitzroy (1805-1865), as gentleman's companion on a projected 2-year trip charting the South American coastline (one which actually lasted from 1831-1836 and embraced the Galapagos Islands, New Zealand and Australia, as well as South America). Henslow believed this expedition would offer Darwin the opportunity to further his naturalist dreams and in fact it formed the basis of his career. He spent most of the time ashore collecting specimens (many new to his peers) and making copious notes and observations covering anthropology, biology and geology (about people he met both native and colonial and their practices, animal and plant life, geological features and environmental factors, and their interrelationship). He first formulated his fundamental theory in 1838 but was circumspect in broadcasting it without sufficient evidence not least because he appreciated the controversy it could cause. In June 1858 however he received a Paper, *On the Tendency of Species to form Varieties*, from the Welsh naturalist, geographer and anthropologist, Alfred Russel Wallace (1823-1913) which, while not as advanced as Darwin's theory, was on similar lines. Darwin passed this to his colleagues Sir Charles Lyell (1797-1875), the Scottish geologist and Sir Joseph Hooker (1817-1911), the English botanist, and it was decided that the Paper would be presented to the Linnean Society on 1st July 1858 together with one from Darwin, *Perpetuation of Varieties and Species by Natural Means of Selection*. The two Papers were little remarked and this provided a short interval for Darwin to finalise his next major work *On the Origin of Species by Means of Natural Selection*. This book appeared in November 1859 and the publishers, John Murray, were no doubt delighted to find the stock of copies was oversubscribed and many reprints and translation into other languages have followed in the 150 odd years since then. Reaction to the book was immediate and extreme, not least because many feared it removed a distinction between man and beast – there are still some who condemn it even today. Darwin watched this effect and never defended his theory publicly. Instead he continued his experiments, investigations and writing, and his next major work *The Descent of Man, and Selection in Relation to Sex* was published in 1871. From the time he left the *Beagle* Darwin was plagued with ill health and some wonder today whether this could have

stemmed from two bouts of fever he experienced in South America in 1833 and 1834 which might have been caused by insect bites resulting in a tropical parasitic illness, Chagas disease. Other authorities suggest that illness might have emanated from a disorder of the inner ear, Ménière's disease. He was a Fellow of the Royal Society and was awarded both its Royal and Copley Medals, as well as the Geological Society of London's Wollaston Medal. Among the geographical features named after him are Mount Darwin in the Andes and Darwin, the capital city of the Northern Territory in Australia and these ignore all the species bearing his name either in their botanical or common names (or both). Apart from those mentioned above, his many publications also included *The Voyage of the Beagle* (1839) first issued under the title *Journal and Remarks* (after Robert Fitzroy's own report on that epic journey). and *The Expression of Emotion in Man and Animals*.

In 1834 or 1835, during his voyage on HMS *Beagle* Darwin discovered this shrub, which came to be known as Darwin's barberry, on an island off the Chilean coastline, one of many discoveries in that region. But it fell to the Cornishman William Lobb (1809-1864) to introduce it to England in 1849. He had gone plant-hunting in South America, with his brother Thomas, for the English nursery Veitch and Sons.

The berries are enjoyed by birds.

The shrub is cultivated widely as both hedging and an ornamental plant. In fact its ornamental qualities appear to be valued not only outside in gardens but also inside under the ministrations of a flower arranger. Darwin's barberry can receive the attentions of bonsai enthusiasts too.

It appears that Darwin's barberry is not a welcome introduction everywhere. This is witnessed by its inclusion on a list of plants monitored by a body in Wellington, New Zealand with regard to any potential for causing significant environmental problems there.

Although the pleasant-tasting ripe fruit are pippy they can be eaten raw or cooked (in muesli, porridge or preserves) and are said to be especially enjoyed by children.

The fruit are also enjoyed by birds.

A yellow dye can be obtained from the root and the bark.

Medicinally, the shrub has been used for treating dysentery and the root bark has provided an ingredient for a tonic.