

# Expert Herbal Reality Resource

## Bilberry

### Names

**Botanical Name** *Vaccinium myrtillus* L

**Family:** *Ericaceae*

**Common names:** Whortleberry, Whinberry (Eng), Heidelbeere (Ger), myrtille (Fr), myrtillo (Ital)

### Description

Bilberry (*Vaccinium myrtillus*), is one of many members of the Ericaceae (heath) family, along with blueberries, cranberries and bearberries (*uva ursi*). It is particularly closely related to blueberries.



It native to Europe, Asia and the Western states of the USA, but wild cultivars are now found across many temperate climates. It grows as a low shrub on moorland and mountain ranges, approximately 30-40 cm high with erect, branched flowering stems. Its leaves start as a rose colour, they then turn yellow-green and eventually become a deep red in the autumn. The leaves are very small and 'leathery' to the touch and its flowers are a light pink colour and bell shaped, the fruit are a dark purple and similar in size and shape to a blueberry

### Constituents

Bilberry contains the following key constituents

- **anthocyanins**. some of which are blue pigments responsible for the colour of the ripe fruits.
- **condensed tannins**
- **oligomeric procyanidins** (OPCs - including procyanidin B1, B4)
- flavonoids
- catechin, epicatechin
- pectins

### Traditional use

Bilberry fruit has been used as an astringent healing remedy, topically for haemorrhoids and vaginal inflammations, and internally for diarrhoea, dysentery, and gastrointestinal inflammation. It has a reputation for "drying up" breast milk<sup>1</sup>. The fruit has also been used to treat scurvy (well-justified by its constituents), and like its relative the cranberry, for urinary complaints. Bilberry was also used in Europe to colour wine and to dye wool.

### Traditional actions

Bilberry's oldest and most common use was for diarrhoea and dysentery. Described as an astringent and absorptive for a "hot" digestive tract, it was also commonly used to alleviate acute vomiting and general digestive upset. Topically, it was used as a mouthwash and gargle for inflammations and ulcerations of the mouth.

In Indian Ayurvedic medicine it has the following qualities

**Rasa** (taste) Sweet, astringent, sour.

**Virya** (action) Cooling.

**Vipaka** (post-digestive effect) Sweet.

**Guna** (quality) Light, dry, spreading.

**Dosha** effect: strengthens *kapha*, and reduces *pitta* and *vata*

**Dhatu** (tissue) blood and nervous tissue.

**Srotas** (channels) circulatory, nervous, urinary.

## What practitioners say

Bilberry is a prime choice for congestion and fragility of veins and the microcirculation. It is used in formulations for varicose veins and haemorrhoids, slow-healing bruises, and heavy painful legs.



## Evidence

Evidence over many decades points to a range of benefits for the health of the microcirculation and for improvement in venous and lymphatic drainage.<sup>ii</sup>

Effects in reducing markers of inflammation have been noted in clinical research<sup>iii</sup>, with beneficial implications for gum disease,<sup>iv</sup> and inflammatory bowel disease.<sup>v</sup> Bilberries were also shown to be associated with reduced inflammation in prediabetic conditions,<sup>vi</sup> improvements in insulin response after meals,<sup>vii</sup> and blood sugar control: all leading to recommendations for its consumption in diabetes.<sup>viii</sup> There are pointers to linked benefits for heart and circulatory health.<sup>ix,x</sup> for obesity,<sup>xi</sup> and for non-

alcoholic fatty liver disease<sup>xii</sup> (often associated with prediabetic states). Separate benefits in reducing cholesterol and blood fats have also been established in human studies.<sup>xiii</sup>

A range of research studies has suggested that bilberry assists vision, though with mixed clinical evidence.<sup>xiv,xv</sup>

## Safety

No significant adverse effects from taking bilberry are expected<sup>xvi</sup>, although ingestion of the whole fresh fruit (as opposed to extracts) in a small minority of people may irritate the intestinal lining. An even smaller percentage of those taking bilberry at full dose may also suffer mild rash and minor nervous reactions. High doses should be used cautiously in patients taking anticoagulant medicines or with haemorrhagic disorders.

## Dosage

The equivalent of 3 g fresh bilberries (this is sometimes standardised to 7.5 mg anthocyanins) two to four times per day.

## References

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