Mirtoselect®

THE ORIGINAL BILBERRY EXTRACT

(FROM *VACCINIUM MYRTILLUS* L.)

The medicinal properties of bilberries have been written about since the Middle Ages. The fruit became popular when World War II pilots reported an improvement in their night visual acuity. Today, bilberries are not just eaten as a food but widely used to decrease vascular permeability, capillary fragility and treat ophthalmological disorders.

Flavonoids, specifically anthocyanins, constitute bilberry's active fraction. These natural pigments give the fruit its deep blue color and have been directly correlated to its antioxidant activity.

Fifteen anthocyanins have been identified in bilberry fruit and extract: they generate a very specific HPLC profile that can be used to confirm the authenticity of the extract.

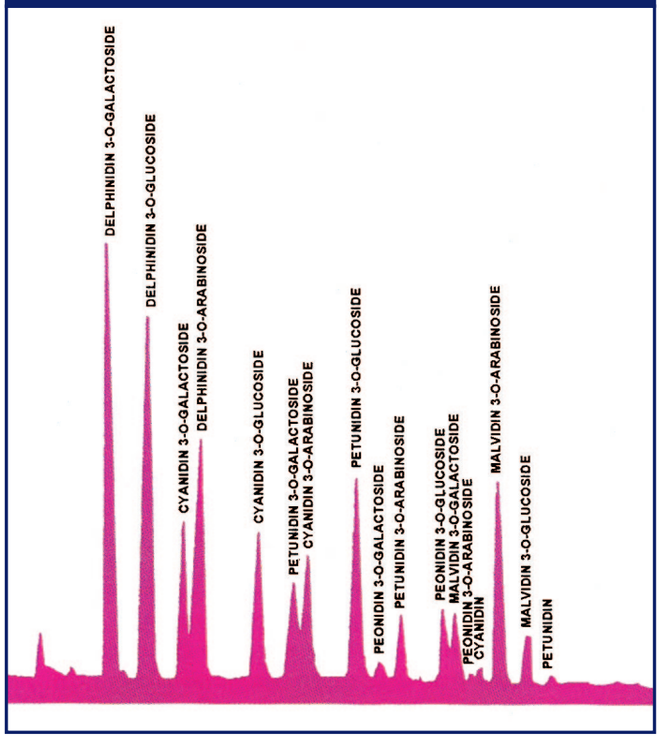
Indena's Mirtoselect® is standardized to contain 36% anthocyanins (anthocyanosides), calculated as and equivalent to 25% anthocyanidins.

Clinical evidence shows Mirtoselect® is useful in:

- Treating circulatory problems due to vascular insufficiency: it helps decrease abnormal vascular permeability and capillary fragility by protecting the connective tissue of the vascular wall - particularly collagen and elastin from degradation - and by stimulating muco-polysaccharide synthesis.[1-3]

- Slowing the progression of various eye disorders including myopia, impaired night vision and diabetic and hypertensive retinopathy. This therapeutic effect of bilberry is associated with the antioxidant activity of its anthocyanins, their ability to increase blood supply to the retina and to inhibit retinic phosphodiesterases, the enzymes responsible for the decay of visual impulses.[4-7]

HPLC profile of anthocyanins in *Vaccinium myrtillus* L. extract (Mirtoselect®)



Indena expanded methods of analysis to include the HPLC "fingerprint" of the anthocyanins as an integral part of the specifications. This tool can prove the authenticity of the extract and differentiate it from material not derived from *Vaccinium myrtillus* L.

These statements have not been evaluated by the FDA.

indena®

References:
1. Pezzangora et al.: Gaz. Med. It. 143, 405 (1984)
2. Oliva et al.: Aggior. Med. Chir. 8, 1 (1990)
3. Teglio et al.: Quad. Clin. Ost. Gin. 42, 221 (1987)
4. Perossini et al.: Ann. Ottal. Clin. Ocul. 113, 1173 (1987)
5. Repossi et al.: Ann. Ottal. Clin. Ocul. 113, 357 (1987)
6. Spadea et al.: Clin. Ocul. 3, 122 (1991)
7. Contestabile et al.: Boll. Ocul. 70, 1157 (1991)