



## 1- Botanical information:

Sambucus nigra L. (fam. Adoxaceae), Black Elder or Elder, is a deciduous small tree or a bushy shrub, native to Europe. Its habitat consists in woodland and hedgerows. Flowers are clustered in creamy-white, flat, sweet scented umbrellas; the blooming time is May-July. According to Pliny, the name "sambucus" comes from the ancient Greek word "sambùk", the sackbut, an ancient musical instrument made from the wood of this tree and commonly used by the Romans; "nigrum" ("black") refers to the dark, juicy berries.

## 2- Parts used: dried flowers

- **3-** Active constituents: the main components of Sambuci flos are flavonoids (rutin and hyperoside), hydroxycinnamic acids (caffeic acid, chlorogenic acid, ferulic acid), volatile oil, triterpenes, sterols, mucilage and tannins. Sambuci flos is high in potassium.
- **4- Galenic form:** dry extract standardized to contain  $\geq 0.3$  % of tot. flavonoids calculated as isoquercitroside (spectrophotometric method, ref. EP).

## 5- Traditional uses, safety and warnings:

Black Elder has a very long history of use as a medicinal herb, dating back to ancient Greece; dried flowers are regarded as diaphoretic, diuretic, anti-inflammatory, expectorant and they have been used to treat respiratory ailments, such as common cold, flu, cough, sinusitis. It has been suggested that the flowers may relieve nasal congestion because of their anti-inflammatory action (they may reduce the swelling in mucous membranes). The German Commission E has approved S. nigra flower for the treatment of feverish colds. Unfortunately, there is a lack of strong clinical data on humans, however its use is based upon a long-standing use; in the few existing studies Black elder flowers have been associated with other herbs. The diuretic effect of Elder flower has been demonstrated only in rats, but not in humans; Elder flowers have been traditionally used to treat arthritis because of their diaphoretic and diuretic (i.e. depurative) properties. For external use Elder flowers have been used in poultices or as eye and mouth wash to soothe and reduce inflammation. S. nigra flower is generally recognized as safe; other parts than flowers and ripe berries can be poisonous and should not be ingested, as they contain the cyanogenic glycoside sambunigrin; the bark of S. nigra contains a toxic lectin (nigrin b). S. nigra is not recommended in pregnant and breast-feeding women or in pediatric patients (under 12 years of age) according to EMA (European medicine Agency) due to the lack of data. The recommended dosage of EPO Black Elder dry extract is 750mg-1.5g divided in two single doses (literature data).

Website: <a href="http://www.eposrl.com">http://www.eposrl.com</a> e-mail: <a href="mailto:epo@eposrl.com">epo@eposrl.com</a>