



### 1- Botanical information:

*Drosera ramentacea* Burch. ex DC. (Droseraceae), known as Sundew, is an evergreen, perennial, carnivorous plant, not taller than 25 cm, typical of marshes and boggy areas of northern Europe, Siberia, Japan, Korea and northern America. The long-petiolated leaves are arranged in a rosette; their surface is covered by reddish, showy glandular hairs, which bear on their top a drop of sticky mucilage (resembling nectar) to attract and then capture insects. The preys are later digested by hairs digestive enzymes, with the exception of exoskeleton. Both the botanical and English common name refer to those glistening drops of mucilage which look like drops of morning dew.

**2- Parts used:** dried aerial portion of the plant

**3- Active constituents:** Sundew contains enzymes, naphthaquinones and flavonoids mainly. Naphthaquinones (plumbagin, ramentone, ramentaceone, biramentaceone etc.) have been proved to have antispasmodic properties in experimental models and antimicrobial activities. While flavonoids (hyperoside, quercetin and isoquercitrin) have anti-inflammatory activity and they are responsible for the spasmolytic effect and not the naphthaquinones which are present in traces.

**4- Galenic form:** dry extract with a standardized DER (drug/extract ratio) of 4/1.

### 5- Traditional uses, safety and warnings:

Traditionally *Drosera* has been used to treat lower respiratory tract conditions, such as dry coughs (bronchitis), wheezing and asthma; the German Commission E has approved the use of *Drosera* for pertussis and irritative cough. Furthermore, it is considered one of the major herbs for asthma according to the British Herbal Pharmacopoeia 1983. Although its clinical use is not well documented in humans and only a few trials exist, *Drosera* is commonly prescribed, alone or in association (i.e. with Thyme), especially in Europe. The plant is generally regarded as safe when correctly administered. There are no known side effects or drug interactions associated with the use of the plant; naphthaquinones are potentially allergenic, but their content in the plant is usually low. Concerning possible interactions, Sundew might enhance the activity of antiasthmatic drug and/or antispasmodic/anti-inflammatory herbs and supplements. Safety during pregnancy and lactation has not been established; in the lack of enough data the use of this plant during pregnancy and lactation should be avoided. The recommended dosage of EPO Sundew dry extract is 750mg/die (literature data).