

# **Greek Mountain Tea**

Sideritis sp. plants are widely distributed in the Mediterranean flora. The genus Sideritis L. (Lamiaceae) in Greece is broadly distributed and comprises more than 15 taxa, typically referred to as Mountain Tea. The plants are used traditionally as herbal teas for treating cold, cough, fever, as well as digestive, diuretic or respiratory problems. The name 'Sideritis' derives from the Greek word 'sideros' meaning iron; in the ancient past, Sideritis was a generic reference for plants used to heal wounds caused by weapons made with this metal. Due to the high content of polyphenolic compounds the species have been also associated with potential antioxidant activity.

Today many pharmacological studies have revealed that Sideritis species have antiinflammatory, anti-ulcerogenic, digestive, antispasmodic, analgesic and antimicrobial properties. The chemical components found in Sideritis genus include essential oils, terpenes, flavonoids, iridoids and sterois, among others.

### What is MonTéa?

MonTéa is a standardized extract of *Sideritis* spp. aerial parts. It is obtained through "green" extraction using subcritical water and adsorption resins. It is rich in phenols, such as flavonoids and phenylpropanoid glucosides which are widely known for their strong antioxidant properties.

# **Specifications**

MonTéa contains: acteoside, martynoside and glycosides of apigenin, hypolaetin, isoscutelarein, 4'-O-methylisoscutellarein and 4'-O-methyl-hypolaetin

Total Phenolic Content: min. 15%

Antioxidant activity (DPPH IC<sub>50</sub>): <100 µg/ml

# Recommended dose

MonTéa is destined for food supplements and/or cosmetic formulations. It is a powdered extract and can be included in various types of per os (capsules, softgels, sachets, drinks, tablets) and cosmetic formulations (emulsions, gels etc.). It can be administered orally in a dose of 300-500 mg/day or topically, up to 2% in the final formulation.

# BOTANICAL PRODUCT INFORMATION

Product name & code: MonTéa Common name of product: *Sideritis* spp. extract General product information: *Sideritis* spp. extract standardized to min. 15% total phenols

# BOTANICAL MANUFACTURING INFORMATION

harmaGnose

Name & address of manufacturing site: PharmaGnose S.A., 57km Athens Lamia National Road, Inofyta, 32011, Greece Agricultural process: Sideritis spp. cultivation Recovery process: Subcritical water green extraction / natural chromatographic enrichment

# **GENERAL SPECIFICATIONS**

Appearance: MonTéa is a brown/green free-flowing powder Solubility: Soluble in water, ethanol & hydroglycolic mixtures Total polyphenols: >15% (by Folin Clocalteau method) Antioxidant activity:  $C_{\rm so}$  = <100 µg/ml (by DPPH radical scavending assay)

Main identified compounds: acteoside, martynoside and glycosides of apigenin, hypolaetin, isoscutelarein, 4'-O-methyl-hypolaetin

Origin/Obtaining method: Subcritical water green extraction / natural chromatographic enrichment

INCI name: Sideritis scardica, S. syriaca, S. raeseri and/or S. perfoliata extract

# Contact:

PharmaGnose address: Papathanassiou 24, 34100 Chalkida, Euboea, Greece mail: info@pharmagnose.com web: www.pharmagnose.com

# flow chart process

(1)

aerial parts
subcritical water
extraction

(2) Polyphenols adsorption

olyphenols recovery

recovery and enrichment

> (4) Spray-drying

(5) Qualit