

Inacea[®]

Echinacea 400 mg



Composition

Inacea[®] 400 mg capsule: Each capsule contains 400 mg standardized extract of Echinacea (*Echinacea purpurea*).

Description

The medicinal plant Echinacea, indigenous to the U.S., is one of the most popular herbs in the U.S. marketplace. The roots of several species were the most widely used medicines to Native Americans of the Great Plains. Preparations made from several plant species and plant parts of the genus Echinacea constituted the top-selling herbal supplement sold in all U.S. channels of sales in 1997. In 2000, Echinacea preparations ranked 4th in the mainstream market.

Nine species of the genus Echinacea have been classified taxonomically although recent chemical and genetic research suggests possible reclassification of the genus to four species. Echinacea preparations consist of anyone or more of the plant parts from three Echinacea species (Fam. Asteraceae) including the fresh, above-ground parts (harvested at the time of flowering), the fresh or dried root of *E. purpurea* (L.) and their preparations in effective dosage.

Chemistry

E. purpurea herb (i.e., aerial parts) and root both contain caffeic acid derivatives (0.6 - 2.1% in roots), including mainly cichoric acid (1.2 - 3.1% in the flowers), caffeic acid, caftaric acid, chlorogenic acid and 0.001 - 0.04% alkamides. *E. purpurea* herb also contains water-soluble polysaccharides, fructans, 0.48% flavonoids of quercetin and kaempferol type and 0.08 - 0.32% essential oil.

Pharmacology

Internal

Demonstrates immunomodulatory, immunostimulant and antimycotic activity.

In vitro

Enhances phagocytosis, increases no-production of macrophages, demonstrates natural killer cell action and enhances the cytotoxicity of macrophages against tumor cells. Enhances antibody production (IgM, number of antibody-producing cells), induces cytokine production (IL-1, IL-6, TNF α , IFN γ).

Uses

- Treatment and prevention of upper respiratory tract infections (URTIs)
- Inflammation of the mouth and pharynx
- Urinary tract infection
- Infection tendency
- Immune system stimulation

Mechanism of action

- Binds polysaccharides to carbohydrate receptors on the cell surface of T-cell lymphocytes and macrophages.
- Promotes tissue regeneration and reduces inflammation by inhibiting hyaluronidase production.
- Generates oxidative burst and selective cytokine production in macrophages, leading to specific toxicity to tumor cell lines.
- Enhances phagocytosis by human neutrophils in vitro

Adverse effects

There are few reported adverse effects for internal and external applications. Anaphylaxis has been reported with ingestion of an Echinacea preparation made of *E. purpurea* root.

Contraindications

Individuals with an increased tendency to have allergies, especially allergies to members of the family Asteraceae including amica (*Arnica spp.*) flower, chamomile (*Matricaria spp.*) flower, marigold (*Calendula officinalis* L.) flower, yarrow (*Achillea spp.*) flower, ragweed (*Ambrosia spp.*), asters (*Ast tataricus*) and chrysanthemum (*Chrysanthemum spp.*).

Drug interactions

The Commission E stated that there are no known interactions.

Pregnancy and lactation

The Commission E found no known restrictions.

Dosages

1 or 2 capsules two to three times daily or as advised by the physician.

Storage

Keep in a cool, dry place & away from direct sunlight.

How supplied

Inacea[®] capsule: Each box contains 3x10's Alu-PVC blister pack.

Manufactured by:



HERBAL & NUTRACEUTICALS LTD.

® Registered Trade Mark.

Revision No.: 00