

Native American Botanics

Red Raspberry - Traditional Medicine and Food

Scientific Name

Rubus idaeus

Botanical Family

Rosaceae

Common Names

Red raspberry, hindberry, bramble

Plant Parts Used

Leaf, fruit, seed



Overview

Tea made from the leaves of raspberry, *Rubus idaeus*, has a long history of medicinal use as an astringent and stimulant for treating wounds, diarrhea, and colic pain. Widely valued for its effects in toning the uterus, this herb is also used as a uterine relaxant for treating menstrual pain and complications of pregnancy. Red raspberry has recently received attention from both scientists and consumers because it contains high levels of the ellagic acid, a known anti-cancer agent. Ellagic acid is a phenolic compound that prevents the growth of certain chemically-induced cancers in laboratory studies. Ellagic acid, flavonoids, and other phenolics in red raspberries may contribute to the antioxidant and vaso-relaxation effects of red raspberries.

Botanical Description

Red raspberry (*Rubus idaeus*), a member of the rose family, is native to Europe and Asia. However, North America is the naturalized habitat of several subspecies of raspberries. In the United States, *Rubus idaeus* ssp. *strigosus*, the most widespread variety of this species, is found in the Appalachian mountains, coastal plains of the East and West, and the Rocky mountains. *Rubus idaeus* grows two meters in height as a deciduous bush that bears white flowers. The thorny brambles form a thicket that provide valuable food and cover for a wide range of wildlife.

Chemical Constituents

Ellagitannins, sanguin H-6, lambertianin C, other phenolic compounds (trace levels of ellagic acid and its sugar conjugates, kaempferol- and four quercetin-based flavonol conjugates), flavonoids (mainly glycosides of kaempferol and quercetin), tannins, volatile oil, pectin, fruit sugar, pectin, citric acid, malic acid.

Medicinal Uses

Traditional Uses (Leaf): astringent for wounds, diarrhea, colic pain, uterine relaxant for menstrual pregnancy, and other female reproductive complaints such as morning sickness, toning the uterus, controlling uterine contractions, hot flashes, excessive menstrual flow.

Clinical Applications (Leaf): gastrointestinal complaints such as diarrhea, leucorrhoea, cardiovascular disorders, mouth and throat ulcers, bleeding gums, inflammations.

Pharmacological and Clinical Findings

The leaf of *Rubus idaeus* has shown in vitro relaxant activity and in vivo utero activity. Structure-function studies indicate that the compounds lambertianin C and sanguin produce vasodilation effects. Several compounds (including H-6.sanguin H-6, vitamin C, and the anthocyanins) in raspberries may account for the antioxidant action of this plant.

According to researchers at the Hollings Cancer Institute at the University of South Carolina, 150 grams (or about one cup of red raspberries) daily prevents the development of cancer cells. In vitro studies suggest that ellagic acid disrupts the cell cycle regulation of cancer cells by scavenging carcinogenic chemicals. Ellagic acid extracted from red raspberries blocked carcinogens from binding to DNA. By preventing cancer cells from dividing, ellagic acid extract also decreased the rate of cancer growth in cultured human cells exposed to carcinogens. The Hollings Cancer Institute researchers showed that ellagic acid, one of the most important

compounds found in raspberries, blocks cancer cells from dividing and promotes apoptosis, or normal cell death of several types of cancer. Although more clinical research is needed, the evidence to date suggests that *Rubus idaeus* has potent antioxidant activity that may be beneficial for slowing down the aging process and protecting against cellular damage.

Dosage Range

Dried leaf: 4 - 8 g or tea 3 times per day.

Safety

Red raspberry leaf is considered safe for healthy persons when taken in recommended dosages.

Side Effects

No side effects have been reported for red raspberry leaf when taken in recommended dosages

Warnings/Contraindications/Precautions

Excessive quantities should be avoided because of the high tannin content in red raspberry. Pregnant women should consult a qualified health care provider before taking raspberry.

Interactions

None reported.

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Native American Botantics
4721 West Calle Torim
Tucson, Arizona 85746-9746
Toll Free: 1-800-915-8742
Voice: (520) 883-8300
Fax: (520) 292-1584