GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: ***Eupatorium cannabinum***

Eupatorium cannabinum 简体中文 正體中文

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Asterales	Asteraceae

Common name boneset (English), hemp agrimony (English), linwe di tchet (English), eupatorio (English), koyunpitragi (English), common hemp agrimony (English), common Dutch agrimony (English), gravel root (English), Koninginnenkruid (English), khad al bint (English), hindheal (English), holy rope (English), St John's herb (English), water agrimony (English)

Synonym

Similar species *Ageratum spp.*

Summary Eupatorium cannabinum is a woody perennial herb that prefers to inhabit and invade moist habitats such as swamps, marshes and stream banks. It forms dense monotypic stands that compete with and eventually crowd out native species. This species also has the ability to alter the nutrient structure of habitats it invades.

view this species on IUCN Red List

Species Description

Grieve (2005) states that,\" *E. cannabinum* root-stock is woody and from it rises the erect round stems, growing from 60cms to 1.5m (2 to 5 feet) high with short branches springing from the axils of the leaves, which are placed on it in pairs. The stems are reddish in colour, covered with downy hair and are woody below. They have a pleasant aromatic smell when cut. The root-leaves are on long stalks, but the stem-leaves have only very short rootstalks. They are divided to their base into three, more rarely five, lance-shaped toothed lobes, the middle lobe much larger than the others, the general form of the leaf being similar to that of the hemp (hence both the English name and the Latin specific name, derived from cannabis, hemp). In small plants the leaves are sometimes undivided. They have a bitter taste, and their pungent smell is reminiscent of an umbelliferous rather than of a composite plant. All the leaves bear distinct, short hairs, and are sparingly sprinkled with small inconspicuous, resinous dots. The plant blooms in late summer and autumn, the flower heads being arranged in crowded masses of a dull lilac colour at the top of the stem or branches. Each little composite head consists of about five or six florets. The corolla has five short teeth; though generally light purple or reddish lilac, it sometimes may be nearly white; it is covered with scattered resinous points. The anthers of the stamens are brown, and the very long style is white. The crown of hairs, or pappus, on the angled fruit is of a dirty white colour.\"

Clarkson *et al.* (2003) state that, \"Branch leaves are simple ovate or lanceolate and all leaves are opposite. The leaves are divided at the base into three, or more rarely five, lance-shaped toothed lobes with the middle lobe being much larger than the others (Grieve, 2003). This gives the leaf the general form of Hemp, hence the name derived from cannabis. Leaves have short hairs and many glands (Clapham *et al.* 1987) and there are many reported medicinal uses (Glick, 2002; Grieve, 2003). The flowers, which bloom in late summer and autumn, are in heads in dense terminal corymbs, each head with 5-6 small flowers, purple to white in colour (Clapham *et al.* 1987). Pollination in its native country takes place *via* Lepidoptera and some flies and bees (Clapham *et al.* 1987).\"

Notes
Plants For A Future Database (2000) states that, \"*Eupatorium cannabinum* is noted for attracting wildlife.\"

Uses
Sharma *et al.* (1998) state that, \"Extracts of *Eeupatorium cannabinum* have been used for spleen, liver and biliary diseases, diarrhoea, snakebites, ulcers, wound healing, fever, as a diuretic, anthelmintic and as a repellent against poisonous animals (Woerdenbag, 1993; Madaus, 1938). Extracts of leaves and roots have choleretic, laxative and appetising actions (Woerdenbag, 1993; Hoppe, 1975; Woerdenbag *et al.* 1991). Aqueous extracts of *E. cannabinum* had choleretic and hepatoprotective activity in mice against carbon tetrachlorideinduced hepatotoxicity (Lexa *et al.* 1989, 1990). The aerial parts of *E. cannabinum* are used as immunostimulating agents in cases of influenza infection, as a remedy against obstipation, for decreasing the level of cholesterol and as a diuretic (Roeder, 1995). The plant is currently used as an ingredient in immunostimulatory drugs (Siebertz *et al.* 1989). Due to its content of alkaloids, the plant should only be used under professional supervision.\"
Plants For A Future Database (2000) reports that, \"the leaves and flowering tops are alterative, cholagogue, depurative, diuretic, emetic, expectorant, febrifuge, purgative and tonic. The plant has a long history of use as a gentle laxative that does not provoke irritation, though excessive doses cause purging and vomiting. A tea made from the dried leaves will give prompt relief if taken at the onset of influenza. Recent research has shown that the plant might have anti-tumour activity, though the plant also contains pyrrolizidine alkaloids that can cause damage or cancer to the liver. The plant is harvested in the summer and dried for later use. The roots are diaphoretic, laxative and tonic. They are harvested in the autumn and dried for later use. Recently the plant has been found of use as an immune system stimulant, helping to maintain resistance to acute viral and other infections. A homeopathic remedy is made from the leaves. It is used in the treatment of influenza and feverish chills and also for disorders of the liver, spleen and gall bladder. The leaves have been laid on bread in order to prevent it from becoming moldy. The leaf juice has been rubbed onto the coats of animals as an insect repellent.\"

Habitat Description
Clarkson *et al.* (2003) state that, \"*E. cannabinum* is a typical plant of marshes and fens, also growing on stream banks and in moist woods (Clapham *et al.* 1987). Soil preferences are nitrogen rich, moist to wet environments, ...\" Heenan *et al.* (1999) state that, \"*E. cannabinum* occurs along stream banks, in damp seepages, and in swamps.\" Grieve (2005) adds that, \"This species can be found at the base of cliffs on the seashore, and in other damp places.\"

Reproduction
Plants For A Future Database (2000) states that, \"The scented flowers of *E. cannabinum* are hermaphrodite (have both male and female organs) and are pollinated by bees, flies, beetles and Lepidoptera (moths & butterflies). The plant is self-fertile.\" Clarkson *et al.* (2003) report that *E. cannabinum* produces thousands of tiny wind dispersed seeds. If these seeds are viable because there are suitable pollinators then seed dispersal will lead to range expansion.

General Impacts
Eupatorium cannabinum has the potential to out compete and crowd out native species. It is also able to alter soil nutrients and hydrology potentially reducing the suitability of the area to native flora. This species will form monotypic stands reducing local diversity (Clarkson *et al.* 2003).

Management Info
Clarkson *et al.* (2003) performed a removal experiment in which they removed 116 individual *E. cannabinum* clumps from a 30x20 metre plot. Thirteen months later *E. cannabinum* was still not present on the plot. The results of this study have led the authors to conclude that manual removal may be a viable option and state that, \"If enough volunteers can be found, this may a viable control option on a larger scale.\"

Principal source: Clarkson *et al.* 2003 *Eupatorium cannabinum* Invasion of Ihupuku Swamp, Waverley.

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ALIEN RANGE

[1] ALBANIA
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ITIS (Integrated Taxonomic Information System). 2004. Online Database *Eupatorium cannabinum*.
Summary: An online database that provides taxonomic information, common names, synonyms and geographical jurisdiction of a species. In addition links are provided to retrieve biological records and collection information from the Global Biodiversity Information Facility (GBIF) Data Portal and bioscience articles from BioOne journals.
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