Ambrosia maritima L. Compositae



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Morphological description

Usually aromatic, richly branched, grey-hairy herb with finely dissected, fragrant leaves. Grey villosecanescent annual or short-lived perennial. The stem is green, erect, solid, slender, striated with faint ridges. Leaves pinnatisect, petiolate, alternate or opposite and exstipulate, ovate to triangular-ovate shape with 4-7 lobes. Corollas tubular, yellow, pubescent outside. Anthers 1-1.5 mm with a conspicuous appendage.

Geographical distribution

Local: Nile delta, on muddy canal banks, Oases and Mediterranean region.

Regional: Egypt, Mediterranean Costal strip from El Sallum to Rafah.

Global: Mediterranean region.

Ecology

iThe plant grows on the Nile and canal banks on the sediments from the Nile flood. After the construction of the high Dam and the lack of these sediments, the plant became rare. This threatens this species in addition to the continuous collection for folk medicinal uses.

Status

The plant is threatened due to the retreat of its habitat and the exploitation for folk medicinal uses. There is need for conserving this species, both *in situ* and *ex situ*.

Ambrosia maritima L.

Crushed dried herb of Ambrosia Ambrosia maritima L.; Species Plantarum 2: 988. 1753

Arabic: Damsissa English: Damaseisa, Rogweed, Ambrosia, Sea Ambrosia, Oak of Cappadocia French: Ambroisie, Ambrosie

Part used

The flowering and fruiting herb. Collection: Fruiting stage Preparations: Decoction Use: By mouth

Constituents

Sesquiterpene: chloroambrosin, ambrosin, damsin, neoambrosin, farnserin, hymenolin, hymenin, stamonin-b, anhydrofarnserin; triterpenes: s-amyrin; flavonoids: apigenin; coumarins; sterols: ß-sitosterol; tannin; and volatile oil: carvone, camphor, caryophyllene, cineole.

- Pharmacological action and toxicity
- 1. The effect of *Ambrosia maritima* L. on the viability of lymnea snails was studied. Ambrosia maritima was lethal to lymnea snails at concentration of 3000 mg/l after one day and at 100 mg/l after 14 days.
- 2. The isolated compounds showed considerable cytotoxic activity.
- The aqueous extract exhibited significant changes in the electro cardiogram pattern of adult anesthetized dogs and induced arrhythmic manifestations in doses of 2, 4, and 8 ml/kg body weight.
- 4. It relaxes plain muscles of the intestine, uterus and blood vessels, where it inhibits the force and frequency of plain muscle contraction.
- 5. It increases the urine output/day and the level of sodium in urine.
- 6. It decreases body weight.
- It has anti microbial activity against Streptococcus pyogens, Aspergillus niger.

- 8. It has an excellent molluscicidal activity due to its content of volatile oil and sesquiterpenes.
- Pharmacopeias Not available.
- Pharmaceutical products Not available
- Traditional medicine and local knowledge

History: In ancient mythology, Ambrosia is sometimes the food, sometimes the drink, of the Gods. The word has been derived from Greek a-(not) and mbrotos (mortal): hence the food or drink of the immortals. A. W. Verrall, however, denies that there is any clear example in which the word *ambrosios* necessarilly means immortal, and prefers to explain it as "fragrant", a sense which is always suitable. If so, the word may be derived from the Semiticambar (ambergris) to which Eastern nations attribute miraculous properties. W. H. Roscher thinks that both nectar and ambrosia were kinds of honey, in which case their power of conferring immortality would be due to the supposed healing and cleansing power of honey. Derivatively, the word Ambrosia (neuter plural) was given to certain festivals in honour of Dionvsus, probably because of the predominance of feasting in connection with them. **Diseases:**

- Antispasmodic
- Anti diuretic
- Bronchial asthma
- Bilharziasis
- Diabetes
- Kidney diseases
- Spasms

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Other uses of the plant: Flowering branches of the plant are used as stimulant, stomachic, slightly astringent, emollient, vulnerary.

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