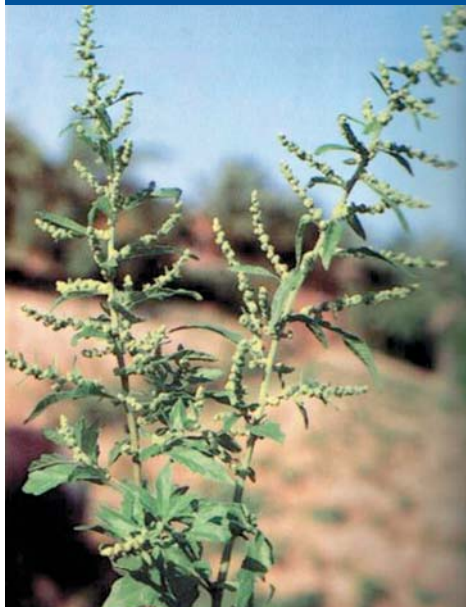


***Chenopodium ambrosioides* L.**  
Chenopodiaceae



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### ■ Morphological Description

Aromatic annual herb 10-60 cm high, green, glandular hairy.

**Flower and Fruit:** The numerous small flowers are yellowish-green and form small racemes or roundish spikes in the axils of the apical leaves. The calyx is divided into 5; the lobes are ovate and pointed; there are 5 stamens. The ovary has small, onlong, stemmed glands at the tip. The angular fruit is enclosed in the calyx. The small seeds are achaenes, smooth and black.

**Leaves, Stem and Root:** The plant is annual and grows to about 1m in height with a branched, reddish stem. The stem is covered in alternate-linear to lanceolate leaves.

### ■ Geographical Distribution

**Local:** The Nile region including the Delta, Valley and Faiyum, the oases of the Western Desert and the entire Sinai peninsula.

**Regional:** The Mediterranean coastal strip and North African countries.

### *Chenopodium ambrosioides* L.,

Sp. Pl., ed. 1, 219 (1753).

#### Names

**Arabic:** Netanah ننتنة , Habaq El Bahr حبق البحر

Fiss el-kalb فس الكلب , Minteena منتنة

**English:** Wormseed, Mexican tea.

**Global:** Native to tropical America; naturalized and cultivated worldwide.

#### ■ Ecology

The plant grows along canals in the Nile as a weed, and in the mountains of Sinai in moist habitats.

#### ■ Status

The plant is rare and endangered due to overcollection.

#### ■ Part(s) Used

Whole plant - leaves

#### ■ Collection

plants are cut in autumn for oil, or dried for liquid extracts and powder.

Leaves are picked as required and used fresh

#### ■ Preparations

Decoction, infusion, essential oil

#### ■ Use

Oral

#### ■ Constituents

Contains variable amounts of ascaridole, limonene, myrcene, P-cymene, terpinene, saturated hydrocarbons (C21 to C31, with C29 predominant), triacontyl alcohol, spinasterol, and others. The plant smells of carbon tetrachloride.

#### ■ Pharmacological Action and Toxicity

Ascaridole, the active principle of the oil, has anthelmintic properties, particularly against roundworms

(Ascaris). It is also effective against hookworms and dwarf tapeworms but not large tapeworms. The oil is considered very toxic. Toxic effects include irritation of skin and mucous membranes, vomiting, headaches, vertigo, kidney and liver damage, temporary deafness, and circulatory collapse. Effects may be cumulative.

### ■ Traditional Medicine and Indigenous Knowledge

**History:** the plant was used as an anthelmintic for roundworms (Ascaris), hookworms and dwarf tapeworms, among others. Leaves, roots and plants of *Chenopodium ambrosioides* have been used in treating tumours. In China, the fresh root is used to treat articular rheumatism of the joints, metrorrhagia, eczema and bites.

### ■ Traditional Medicinal Uses

- Antiasthmatic
- Anthelmintic
- Antispasmodic
- Carminative
- Diuretic
- Emmenagogue
- Digestive tonic
- Stomachic
- Stimulant
- Vermifuge

### ■ Other uses of the plant

The leaves and seeds of *C. ambrosioides* are used in

cooking as a carminative flavouring with bean dishes. The major use is as a fragrance component in soaps, detergents, creams, lotions and perfumes.

## ■ References

### General References

- Batanouny, K. H., (1999). "Wild Medicinal Plants in Egypt". (With contribution of: E. Aboutabl, M. Shabana & F. Soliman). With support of the Swiss Development Co-operation (SDC). Academy of Scientific Research and Technology, Egypt. The World Conservation Union (IUCN), Switzerland. pp. 191.
- Boulos, L. (2002). "Flora of Egypt", volume one, pp. 95, printed by Al Hadara Publishing, Cairo, Egypt.
- Chan, EH et al., Advances in Chinese Medicinal Materials Research, World Scientific Pub co. Singapore 1985.
- Leung AY, (1980) "Encyclopedia of common Natural Ingredients Used in Food Drugs and Cosmetics", John wily & Sons Inc., New York.
- Lewin L, Gifte und Vergiftungen, 6, Aufl., Nchdruck, Haug Verlag, Heidelberg 1992.
- Madaus G, Lehrbuch der Biologischen Arzneirainel Bde 103 Nachdruck, Georg Olms Verlag Hildesheim 1979.
- Roth L, Daunderer M, K, Giftpflanzen, Pflanzengifte, 4. Aufl., Ecomed Fachverlag Landsberg Lech 1993.
- Tackholm, Vivi. (1974) "Student's Flora of Egypt". 2<sup>nd</sup> edition, Cairo University, Egypt.