

***Cynomorium coccineum* L.**
Cynomoriaceae



Compiled by: Dr. Zeineb Ghrabi

■ **Morphological description**

Cynomorium coccineum is a perennial, giving off a strong odour of putrefaction, deep red when young and blackish purple when flowering. It has a very distinctive appearance, much of it being underground, and is a parasite, using suckers to attach itself to *Chenopodiaceae* roots. Its rhizome is branched, scaly, with big fleshy 10-20-cm. stems, not branched, with several scales, ending in a club-shaped inflorescence made up of little rudimentary contracted cymes. The flowers are either male, with a rudimentary ovary, or hermaphrodite, but all have a single stamen and 1-5 perianths over the ovary. The fruits are tiny black achenes with a tough pericarp in a persistent perigone. The plant flowers from March to May.

■ **Geographical distribution**

Local: The north-east, Cap Bon, central Tunisia, southern Tunisia.

Regional: North Africa.

Global: North Africa, the Sinai, Lebanon and Syria, the Balearics, Spain, Portugal, southern Italy,

***Cynomorium coccineum* L.** Sp. Pl.: 970.
1753

Arabic: tarthouth, zib el Turki

French: cynomorium écarlate

English: cynomorium

Sardinia, Sicily, Malta, Crete, Palestine, Iran and the Canaries.

■ **Ecology**

Cynomorium coccineum is a geophyte, living parasitically on *Chenopodiaceae* in Mediterranean countries; it is found on the edges of salty soils and on sands that have been left slightly waste.

■ **Status, conservation and culture**

Cynomorium coccineum is a wild species in Tunisia; it is picked wild.

■ **Part used**

The aerial part.

■ **Constituents**

Anthocyanins, cyanidin 3-glucoside.

■ **Traditional medicine**

There are two known traditional uses of *Cynomorium coccineum*: for haemorrhoids, a decoction of the aerial part; three cups are taken before meals every day. For diarrhoea, a decoction of the aerial part in a litre of water; three glasses are taken before meals every day.

■ **Pharmacological action and toxicity**

The hydroalcoholic extract of the plant is oestrogenic, an antioxidant and stimulates spermatogenesis. The plant has fertilising, aphrodisiac, tonic, astringent, antiulcerous, antihemorrhoidal and antiemetic properties and is a regulator of menstrual disorders.

■ **Use in herbal medicine**

Hypotensive.

■ References

- Abdel-Magid E. M., H. A. Abed-Rahman et F. M. Harraz, 2001. The effect of aqueous extract of *Cynomorium coccineum* and *Withania somnifera* on testicular development in immature Wistar rats., *Journal of Ethnopharmacologie.*, Volume 75, 1.
- Abd el-Rahman H. A., El-Bardy A. A., Mahmoud O .M., Harraz F. A., 1999. The effect of the aqueous extract of *Cynomorium coccineum* the epididymal sperm pattern of the rat. *Phytoter Res.* 13(3): 248-50
- Harborne J. B., S. Norio and C. H. Detoni., 2003. Anthocyanins of *Cephaelis*, *Cynomorium*, *Euterpe*, *Lavatera* and *Pinanga*; *Biochemical Systematics and Ecology*, Volume 22, Issue 8, 835-836
- Ikram M, Dar MS, Fakhouri T., 1978. Hypotensive agent *Cynomorium coccineum*. *Pahlavi Med. J.* 9(2) :167-81
- Batanouny K. H., 1999. Wild medicinal plants in Egypt. Palm Press. Egypt. 207 p.
- Chemli R., 2004. Enquête Ethnobotanique de la Flore de Tunisie, Faculté de Pharmacie de Monastir, Tunisie, Programme National de Recherche (en cours de publication)
- Greuter W., Burdet H. M. et Long G. ; 1986 : *Med-Cheklist. Volume 3 : Dicotylédones (Convolvaceae- Labiatae)*. 395 p.
- Le Floch E. 1983 : Contribution à une étude ethnobotanique de la flore tunisienne. Programme Flore et Végétation tunisienne. Min. de l'En. Sup. et de la Rech. Sci. 387 p.
- Ozenda P. , 1977. Flore du sahara. Editions du Centre National de la recherche Scientifique Paris. 622 p.
- Ozenda P. et S. Santa, 1963. Nouvelle flore de l'Algérie et des régions désertiques méridionales. Editions du Centre National de la recherche Scientifique Paris. 1170 p.
- Pottier Alapetite G. ; 1979 : Flore de la Tunisie. Angiospermes- Dicotylédones, Apétales - Dialypétales. Programme flore et végétation tunisiennes. 651p.
- Vanden Berghen C., 1981. Liste commentée des plantes vasculaires observées dans l'île de Djerba (Tunisie méridionale). *Lejeunia* 105, Octobre 1981. 38 pages.
- Robert W., 2003. Lebellig Jr, *Saudi Aramco World*. Volume 54, Number2