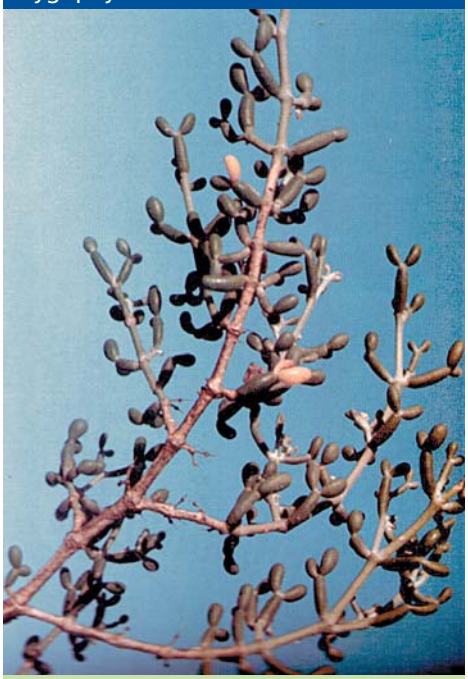
Zygophyllum coccineum L.
Zygophyllaceae



Compiled by: Prof. F. M. Hammouda, Prof. S. I. Ismail, Dr. N. S. Abdel-Azim and Dr. K. A. Shams
Edited by: Prof. K. H. Batanouny
Photos by K. H. Batanouny

Morphological Description
Low shrub, perennial herb or desert succulent undershrub, up to 75 cm high. Numerous stems, branched, erect, the young branches being green. Leaves 2-foliolate, over 10 mm long, cylindrical, bright green, glabrous, fleshy carried on a fleshy long petiole. Stipules broadly triangular, membranous. Flowers are solitary, axillary, white. Capsule 5-valved, 8-10mm long, with obtuse apex. The leaflets and sometimes the petioles are shed under severe dry conditions to reduce the transpiring surface. The fleshy cortex of the stem is shed under these same conditions.

Geographical Distribution
Local: Arid zones of Egypt (Eastern and Western Desert and Sinai Peninsule).
Regional: Syria, Palestine and Sudan.
Global: South Africa, West Asia.

***Zygophyllum coccineum* L.,**
Sp. Pl.,ed.1,386 (1753)

Names
Arabic: Rutreyt, Kammun Kermany, Ghassoul, Balbal, Tartir, Bowa.
English: Zygophyllum.

Ecology
Zygophyllum coccineum is the most widespread Zygophyllum species in Egypt and grows in diverse habitats and different soil types. The plant is very common in the limestone wadis and plains of the Eastern (Arabian) desert and tolerant of saline soils. It dominates a community of widespread occurrence there.

Status
The plant is common. Being unpalatable, it is not grazed by animals. It does not give good fuel. The plant is therefore neither grazed nor cut for fuel .

Part(s) Used
Fruits and seeds.

Collection
The fruits (seeds) are collected when the plant is in fruiting stage.

Preparations
Infusion, Extract.

Use
Oral.

Constituents
Zygophyllin (28% in leaves, 0.18% in stems and 0.26% in fruits). Quinovic acid (0.36% in leaves, 0.31% in fruits and 0.47% in stems). Flavonoids e.g, kaempfero1-3- rutinoside.

Pharmacological Action and Toxicity
Aqueous extract of the plant is documented to

produce a lowering in blood pressure, and acts as a diuretic and antipyretic, local anesthetic, with anti-histamine activity, stimulation and depression of isolated amphibian heart, relaxation of isolated intestine, contraction of uterus and vasodilation. The extract antagonized acetyl choline action on skeletal muscle, and acted additively to the muscle relaxant effect of d-tubocurarine.

Pharmacopoeia

Not available

Phytopharmaceutical Products

Not available

Traditional Medicine and Indigenous Knowledge

History: It is a plant of North Africa and Arabia. Arabs use the aromatic seeds instead of pepper.

Traditional Medicinal Uses

- Rheumatism
- Gout
- Cough
- Asthma
- Hypertension
- Flatulent colic
- Diuretic

Other uses of the plant: The juice from fresh leaves and stems is known to be used as an abrasive cleanser and as remedy for the treatment of certain skin diseases.

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