

Hammada scoparia
(Pomel) Il'jin
Chenopodiaceae



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■ **Morphological description**

Hammada scoparia is a perennial, with succulent, spindly, segmented branches, that grows no higher than 1 m. The leaves are opposed, atrophied into scales and fused onto the segment that bears them. The flowers have no petals, and are dense, arranged in a terminal spike. Their style is long and bifid. The fruitbearing perigone has a membranous, brilliant crown. Flowering starts in autumn and fructification ends in December.

■ **Geographical distribution**

Local: From Sousse to the far south of Tunisia.

Regional: Tunisia, Algeria and Morocco.

Global: North Africa and the Middle East.

■ **Ecology**

Hammada scoparia is a Saharo-Mediterranean species, developing in bioclimates that range from the upper arid to the lower Saharan, variants with mild, fresh winters, on the silty or slightly gypseous brown soils of the steppes.

***Hammada scoparia* (Pomel) Il'jin** in Bot. Zurn. (Moscow et Leningrad) 33: 583. 1048. *Arthrophytum scoparium* (Pom.) Il'jin; *Haloxylon articulatum* subsp. *scoparium* (Pomel) Batt.; *Haloxylon scoparium* Pomel

Arabic: Remth

French: Saligne à balai

It is among the gypseous steppe associations of the arid, especially with *Artemisia herba alba*, or forms a degradation facies. In the Saharan bioclimate it is found in association with *Arthrophytum schmit-tianum*.

■ **Status, conservation, culture**

Hammada scoparia is used via unsupervised picking to prepare a snuff powder (*neffa*), to which it owes its degradation. It is not seen as a pastoral species.

■ **Part used**

The fruit and branches.

■ **Constituents**

The chemical make-up is very similar to that of *Anabasis aphylla* L.: 2 to 4.5% of alkaloids, especially anabasin accompanied by aphyllidin and lupinin. Plus an alkaloid whose structure resembles that of salsolin.

The presence of anabasin explains the plant's toxicity.

■ **Traditional medicine**

The fruit's pericarp and the stem, chopped and mixed with grease, are used as a poultice for mould.

■ **Toxicity**

Poisoning in animals is shown by nervous disorders, trembling of the legs, and great general weakness.

■ **References**

Bellakhdar J., 1997. La Pharmacopée Marocaine Traditionnelle. Ed. IBIS Press.

Tessier A., 1994. Phytothérapie Analytique : Phytochimie et Pharmacologie. Ed. Marc Aurèle.

- Chaieb M. et M. Boukhris, 1998 : Flore succincte et illustrée des zones arides et sahariennes de Tunisie. ATPNE, Sfax. 290 p.
- Ferchichi A . 1997 : Contribution à l'étude caryologique, caryosystématique, morpho-biologique et écologique de la flore de la Tunisie présaharienne. Doctorat d'Etat ; Fac. des Sc. de Tunis. 214p.
- Greuter W., H. M. Burdet et G. Long, 1986. Med-Cheklist Volume 1 :Pteridophyta, Gymnospermae, Dicotylédones Acanthaceae – Cneoraceae. p.: 49.
- Le Floc'h 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.
- Maire R.; 1962. Flore de l'Afrique du Nord. Dicotyledonae: *Archichlamydeae*:
Centospermales: Chenopodiaceae, Amaranthaceae, Nyctagynaceae, Phytolaccaceae, Besellaceae. Vol. VIII. Edit. Le Chevalier Paris. 303 p.
- Ministère de l'Environnement et de l'Aménagement du Territoire 1996 : Plantes Naturelles du Sud Tunisien. Programme Main verte. 223 p.
- Nabli M. A. 1989: Essai de synthèse sur la végétation et la phytoécologie tunisiennes. Flore tunisienne 4 à 6. MAB. Fac. des Sc. de Tunis 247P.
- Neffati M., Z. Ghrabi Gammar, N. Akrimi et B. Henchi, 1999 : Les plantes endémiques de la Tunisie. Flora Mediterranea. 9 : 163 – 174.
- Pottier Alapetite G., 1981 : Flore de la Tunisie. Angiospermes- dicotylédones, Gamopétales. Programme flore et végétation tunisiennes. 655- 1190 p.