**Ammi majus L.**

**Names**
- **Arabic:** Khillah
- **Berber:** Athrilal, Thalilen, Lattilel, Akhella
- **English:** Bishop’s weed
- **French:** Ammi commun

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- **Morphological Description**
  Glabrous annual plant with much branched stem, erect, ridged, 30-100 cm in height. Leaves are greenish-glaucous, triangular ovate or ovate-oblong with long petioles, basal leaves grow in rosette, umbels 8-50 rays with small white flowers with indented petals, involucr with numerous pinnatifid bracts very elongated towards the tip. Fruit is 105 mm, small, oblong, prominently ribbed, ovoid achenes of 1.5-2 mm, laterally compressed, forming 2 small sized mericarps surrounded by a disk shaped stylod and 2 divergent curved styles, persisting carpophore on inflorescence after fruit fall.

- **Geographical Distribution**
  - **Local:** Fields of winter crops in the Nile Delta and Valley, also in the Oases and the Mediterranean region.
  - **Regional:** North Africa; all over the countries of the region.
  - **Global:** Middle East, Europe and North Africa.

- **Ecology**
  The plant grows as a weed in the fields of winter crop cereals like wheat and barley. It is considered a bad weed in these fields and affects the crop’s yield.

- **Status**
  The plant is fairly common in the Delta Valley fields. The plant is an annual winter weed growing mainly in wheat and barley fields. It is considered a menace to cultivated fields due to its invasive action. However, due to its importance in the pharmaceutical industry, it has been cultivated. The companies using the drug import Ammi fruits from Morocco.

- **Part(s) Used**
  The small ovoid fruit and leaves.

- **Collection**
  The tiny fruits containing the seeds are picked in late summer before they have fully ripened.

- **Preparations**
  Infusion, decoction and powder

- **Use:**
  Oral, external and creams.

- **Constituents**
  Coumarins and coumarin glycosides. The fruit yields not less than 0.5% of ammoidin (xanthotoxin), 0.3% ammidin (imperatorin), and 0.01% of majudin (bergapten). Furanocumarins have also been produced by cell suspension cultures of *Ammi majus*.

- **Pharmacological Action and Toxicity**
  The drug should be used cautiously, since phototoxic dermatitis (cellular damage) following its use for vitiligo has been reported.
Traditional Medicine and Indigenous Knowledge

History: As early as 2000 B.C. in Egypt, the juice of *Ammi majus*, which grows throughout the Nile River valley as a weed, is reported to have been rubbed on patches of vitiligo and patients encouraged to lie in the sun afterwards. Even today, Egyptian herbalists sell a yellowish brown powder made from *Ammi majus* seeds for the treatment of leukoderma. In 1946, a technician from a medicinal research laboratory developed a kidney problem and treated himself with a Middle Eastern herbal remedy, Khella. The technician also had angina, which improved dramatically while he was taking the herb. It was an Egyptian, Professor Abdel Monem El Motfy, of the Cairo University Medical School Department of Dermatology, who studied Egyptian folk medicine plants and began the development of modern photochemotherapy (PUVA) for vitiligo and psoriasis. In the 1940s, he used crystalline methoxsalen (8-MoP, xanthotoxin) followed by sunlight exposure to treat vitiligo.

Traditional Medicinal Uses
- Anti asthmatic
- Anti-hypoglycemic
- Antispasmodic
- Carminative
- Digestive problems
- Diuretic
- Skin diseases (vitiligo and psoriasis)

Other uses of the plant: The plant is used as a preservative and against Snakebites.

References

General References
Dan Kenner, Yves Requena (2001). "Botanical Medicine, A European Professional Perspective" pp.196, Paradigm Publications 44, Linden Street, Brookline, Massachusetts 02445 USA.