

Cyperus rotundus L.
Cyperaceae



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■ Morphological Description

Perennial herb with long rhizomes in ellipsoid form; sometimes tuberous; black coloured, with characteristic aromatic odour and taste, up to 60 cm high; leaves are 2-6 mm wide; spikes ovate, on rays to 6 cm long; spikelets linear 1-2 cm long, 12-30 flowered, the rachilla winged; scales are purplish, carinate, obtuse; achene sub-obovoid, trigonal, 1.5 mm long, black, minutely papillate.

■ Geographical Distribution

Local: In all phytogeographical regions of the country among cultivated crops and in gardens

Regional: North African countries and South India

Global: Cosmopolitan

■ Ecology

It is a major weed near cultivated crops and in gardens. It is encouraged by frequent cultivation and grows best in moist fertile soils. It doesn't grow well in the shade. Prevalent in disturbed areas and lawns. Very persistent once established.

■ Status

The plant grows in specific moist habitats, subject to changes and drying. It is therefore considered an endangered plant in Egypt and very common weed in cultivated fields. The species is extremely variable and comprises numerous forms and subspecies.

Cyperus rotundus L.

C. purpuro-variegates Boeckeler, *C. stoloniferum pallidus* Boeckeler, *C. tetrastachyos* Desf., *C. tuberosus* Roxb, *Chlorocyperus rotundus* (L.) Palla

Names

Arabic: Al-So'ad السعد

English: nut grass, nutsedge, purple nutsedge, cocoglass

French: souchet rond, souchet à tubercules, herbe à oignon

■ Part(s) Used

Rhizomes, tubers and bulb roots.

■ Collection

At fruiting stage.

■ Preparations

Decoction and powder

■ Use

Oral

■ Constituents

1,8- cineole, 4alpha,5alpha-oxidoeudesm-11-en-3alpha-ol, Alkaloids, Alpha-cyperone, Alpha-rotunol, Beta-cyperone, Beta-pinene, Beta-rotunol, Beta-selinene, Camphene, Copaene, Cyperene, Cyperenone, Cyperol, Cyperolone, Cyperotundone, Rotundanol, Linolenic acid, Linoleic acid, Myristic acid, Oleanolic acid, Oleanolic acid-3-O-neohesperidoside, Oleic-acid, D-fructose, D-glucose, Flavonoids and saponins.

■ Pharmacological Action and Toxicity

The petroleum ether extract of the roots showed anti-inflammatory activity against carrageenin-induced oedema in albino rats. The active fraction was identified as a triterpenoid. A fraction tested on aconitine-induced writhing in mice showed mild analgesic activity. Antihistaminic and antiemetic activities were shown in experimental studies on dogs. Smooth muscle relaxant activity was demon-

strated on rabbit ileum. Extracts of rhizomes were inhibitory to the growth of fungi depending on species. Antibacterial activity of oil and its fractions have been demonstrated against a number of organisms.

■ Pharmacopoeia

Not available

■ Phytopharmaceutical Products

Not available

■ Traditional Medicine and Indigenous Knowledge

History: The genus name *Cyperus* is from *Cypeiros* which was the ancient Greek name for the genus. *Rotundus* is Latin for round and refers to the tuber.

■ Traditional Medicinal Uses

- Bloody stools, urine, and vomiting blood
- Breast tumours
- *Candida*
- Colds and flu
- Colic
- Convulsions
- Diarrhoea
- Dysentery
- Dysmenorrhoea
- Fevers
- Gastritis
- Hypotension
- Indigestion
- Malabsorption
- Mental health
- Menopause
- Menstrual disorders
- Parasites
- Palpitation

Other uses of the plant: Tubers are aromatic, used to increase body weight. Fresh tubers are diaphoretic, astringent and have been used to combat scorpion stings.



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