

AVEIA

Scientific name: *Avena sativa* Linné^(1,2)

Family: *Graminaceae*.⁽²⁾

Popular names: aveia, oats.⁽¹⁾

Used parts: seeds,⁽²⁾ the fresh or dried above-ground plant, the ripe, dried fruits, and the dried, threshed leaf and stem.⁽¹⁾

Botanical characteristics: Oat is a light-green annual grass with a bushy root. The stalks are 60 to 100 cm high, smooth and glabrous. The linear-lanceolate tapering, flat leaves are in double rows, and the leaf sheath is clasping. The ligula is short and ovate with triangular pointed teeth. The leaf blade is linear-lanceolate and is 45 cm long by 5 to 15 mm wide. The spikelet has 2 to 3 flowers. The outer glume has no awn, is 18 to 30mm long and has 7 to 11 ribs. The top glumes grow from 12 to 24 mm long, have 2 divisions and a dentate tip. They have 7 ribs and can either be awned or unawned. The awn is 15 to 40 mm long, upright and rough. The double ribbed husks are 10 to 20 mm long and are thickly ciliate on the short ridge. The 3 stamens are 2,5 to 4 mm long. The ovary has a pinnatifid stigma. The fruit is 7 to 12 mm long, narrowly elliptoid and pubescent.

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Habitat: England, France, Poland, Germany, Russia, and are cultivated worldwide.⁽¹⁾

Chemical composition:

- OAT HERB: soluble oligo and polysaccharides (saccharose, kestose, neokestose, bifurcose, -glucans, galactoarabinoxylans); silicic acid, steroid saponins(avenacoside A and B); unusual aminoacids(avenic acid A and B); flavonoids

(vitexin, isovitexin, apigenin, isoorientin, tricinglycosides).⁽¹⁾

- OAT FRUIT: starch, soluble polysaccharides (glucans, galactoarabinoxylans); proteic substances(gliadin, avenin, avenalin); peptides (avenothionine, - avenothionine); steroid saponins (avenacoside A and B); sterols (sitosterol, -5-avenasterol); fatty oil;; vitamins of the b-groups; amines (gramine).⁽¹⁾
- OAT STRAW: soluble oligo and polysaccharides (saccharose, kestose, neokestose, bifurcose, -glucans, galactoarabinoxylans); silicic acid, steroid saponins (avenacoside A and B); unusual aminoacids (avenic acid A and B); flavonoids (vitexin, isovitexin, apigenin, isoorientin, tricinglycosides).⁽¹⁾

Indications:

- OAT HERB: The drug was said to lower the uric acid level and to display an antihepatotoxin effecting animal experiments.⁽¹⁾
- OAT FRUIT: able to lower serum cholesterol and to hinder prostaglandin biosynthesis.⁽¹⁾
- Nervine, stimulant, antispasmodic.⁽²⁾

Dose: fluid extract, 10 to 30 drops in hot water.⁽²⁾

References:

1. MEDICAL ECONOMICS COMPANY. **PDR for herbal medicines**. 2. ed. Montvale: Copyright, 2000.
- TESKE, M.; TRENTINI, A. M. M. **Herbarium compêndio de fitoterapia**. 3. ed. Curitiba: Herbarium, 1997.