

ARRUDA/ Common Rue

Scientific name: *Ruta graveolens* Linné

Family: *Rutaceae*.

Popular names: Arruda ⁽¹⁾, ruta de cheiro forte, ruda.

Used parts: Whole plant

Botanical characteristics: Arruda is a subshrub perennial. The leaves are dissected pinnately into oblong or spoon shaped segments and it has small and yellow flowers.

Habitat: Is a plant native of southern Europe and northern Africa ⁽³⁾.

Chemical composition: essential oil (metilnonil, metilheptilKetones, metilnonilcarbinol, alcohols, ester, phenols, terpenes), alkaloids (arboronina, graveolinina or rutanina, graveolinina, -fagarina), furanocoumarins derivatives (bergapteno, xantoxina, psoraleno, rutina) ⁽¹⁾.

Indications: rheumatism, flatulences, emmenagogue, sudorific, antihelminthic, antihemorrhagic, soothing, abortifacient, antispasmodic ⁽¹⁾, stomachic, in treating hysteria and epilepsy and also in large doses to induce criminal abortions ⁽⁴⁾.

Others informations:

- Regardless of the plant source, methanolic extracts of *Ruta graveolens* grown in Japan or in Finland were active against *Bacillus* spp. and *S. aureus* ⁽²⁾.
- The plant was applied with sulphur on dogs afflicted with scabies, and in decoction with olive oil on pigs to remove flies. ⁽⁶⁾ The decoction was administered to calves or to other livestock afflicted with helminthiasis. ⁽⁶⁾
- In the country side the fresh plant was believed to have repellent and insecticide properties towards fleas and mosquitoes, and for antihelminthic purposes to children. ⁽⁶⁾
- The possible allelopathic properties of rue, *R. graveolens*, know to prevent the attacks by fleas and other noxious insects. The plant is also used as a flavouring agent for spirits and foods. ⁽⁷⁾
- Potential effect of rue extracts as a herbicide against the germination in the soil of some common weeds, in particular *Portulaca oleracea* L. ⁽⁷⁾
- The extracts from the various parts of *Ruta*

graveolens had different compositions. The number of compounds detected at concentrations above 0.01% (w/w) in the extracts from leaves, flowers, stems and roots, was 78, 45, 25 and 24, respectively. Furanocoumarins, furoquinolines, hydrocarbons and benzodioxol derivatives were the main compound families found all extracts, at total concentrations between 3.7 and 33.9%, depending on the part of the plant ⁽³⁾.

- There has been a growing interest in new and effective techniques to reduce cases of foodborne illness. Antimicrobial substances from natural sources like plants have been investigated to achieve higher levels of food safety. Methanolic extracts of *R. graveolens* grown in Japan or in Finland were active against *Bacillus* spp. and *S. aureus*. ⁽⁸⁾
- The powdered root, aerial parts and the aerial parts aqueous extract all showed potential anticonceptive activity in rats ⁽⁴⁾.
- *Ruta graveolens* induced a dose-dependent analgesic protective effect against both thermal stimuli ⁽⁵⁾.

References:

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