

**1- Name**

- Scientific name: *Ruta graveolens* L. Family: Rutaceae [1]
- Synonyms: *Ruta hortensis* Mill. [2]
- Common English name: Rue [1]
- Common Arabic name: السذاب [3]

**2- Morphology and histology**

- It is a Perennial shrub with a of 30 to 80 cm high [4,5]
- The hairy leaves are compound pinnate and have 2-5 fleshy, sessile leaflets that varies from light green to bluish green colour [1,5]
- The plant is native to the Balkans and the Mediterranean region [5]



**Organ used for medicinal purposes:** Fresh or dried leaves [5]

**3- Method of administration:** Steeping the leaves in hot or cold water gives a tea that is administered orally [4]

**4- Active chemical constituents**

- Flavonoids: Rutin [6]
- Coumarins: Rutamarin, bergapten [7]
- Volatile oil (components): 2-nonanone, 2-Undecanone [8]
- Alkaloids: Skimmianin, graveoline [7]

**5- Pharmacological activities (Uses) [4,5]**

- Abortifacient
- To stimulate menstruation
- For treatment of varicose veins
- Antispasmodic

**6- Side effects [4,5]**

**Side effects generally occurs as a result of overdosage include**

- Hepatotoxic
- Skin contact to the plant can cause phytophotodermatitis and burn blisters after exposure to the sun
- Inhibition of fertility

- Vomiting
- Epigastric pain
- kidney damage

## 7- Contraindications [4]

The use of rue is contraindicated in pregnancy

## 8- Market products



## 9- References

- [1] Jha, S. ed., 2017. Transgenesis and secondary metabolism. Springer.
- [2] The Plant List (2013) Version 1.1. <http://www.theplantlist.org/>
- [3] <https://www.mshtly.com/>
- [4] Healthcare, T., 2004. PDR for herbal medicines. by Thomson PDR, Montvale, pp.877-878.
- [5] Encyclopedia Britannica. <https://www.britannica.com/plant/rue>
- [6] Parray, S.A., Bhat, J.U., Ahmad, G., Jahan, N., Sofi, G. and IFS, M., 2012. Ruta graveolens: from traditional system of medicine to modern pharmacology: an overview. Am J Pharm Tech Res, 2(2), pp.239-52.
- [7] Kostova I, Ivanova A, Mikhova B, Klaiber I (1999) Alkaloids and coumarins from Ruta graveolens. Monatsh Chem 130:703–707
- [8] Jianu, C., Goleț, I., Stoin, D., Cocan, I., Bujancă, G., Mișcă, C., Mioc, M., Mioc, A., Șoica, C., Lukinich-Gruia, A.T. and Rusu, L.C., 2021. Chemical profile of Ruta graveolens, evaluation of the antioxidant and antibacterial potential of its essential oil, and molecular docking simulations. Applied Sciences, 11(24), p.11753.