

1- Name

- Scientific name: *Pelargonium graveolens* L'Her. Family: Geraniaceae [1]
- Synonyms: *Geraniospermum terebintaceum* (Spreng.) Kuntze, *Geranium graveolens* (L'Hér.) Thunb., *Pelargonium intermedium* Kunth [1]
- Common English name: Rose geranium, Rose-scented pelargonium & sweet-scented geranium [2]
- Common Arabic name: العطرة/ العتر [3]

2- Morphology and histology [2,4]

- It is a shrub that can reach up to 1.3m, with a soft, hairy & succulent stem.
- The rose scented leaves have deeply indented margins and are covered with glandular hairs and rich in volatile oil (Geranium oil).
- The plant is cultivated in Egypt but native to southern and eastern African countries.



Organ used for medicinal purposes: leaves.

3- Method of administration [5]

The leaves are steeped in hot water to give a tea.

4- Active chemical constituents

- Essential oils: Geraniol, Citronellol [6]
- Flavonoids: Catechin, Hesperidin [7]
- Phenolic acids: Benzoic acid, Caffeic acid [7]

5- Pharmacological activities (Uses) [5,8,9]

- Anti-inflammatory
- Reduce general pain

- Relaxant
- Sedative
- Anxiolytic
- Antidepressant
- Relieves premenstrual syndrome
- Topically it is used for treatment of (haemorrhoids, eczema & wounds)
- The Geranium oil is widely used in perfumery
- Anaesthetic

6- Side effects

Direct application of the oil to the skin can cause contact dermatitis or sensitization [7].

7- Contraindications

There are no reported contraindications for the *P.graveolens* [7].

8- Market products



9- References

- [1] The plantlist <http://www.theplantlist.org/tpl1.1/record/kew-2532552>
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- [4] Lis-Balchin, M., 2002. Essential oils from different *Pelargonium* species and cultivars: their chemical composition (using GC, GC/MS) and appearance of trichomes (under EM). In *Geranium and Pelargonium* (pp. 159-177). CRC Press.
- [5] Asgarpanah, J. and Ramezanloo, F., 2015. An overview on phytopharmacology of *Pelargonium graveolens* L.
- [6] Boukhris, M., Bouaziz, M., Feki, I., Jemai, H., El Feki, A. and Sayadi, S., 2012. Hypoglycemic and antioxidant effects of leaf essential oil of *Pelargonium graveolens* L'Hér. in alloxan induced diabetic rats. *Lipids in health and disease*, 11, pp.1-10.
- [7] Amel, H.A., Kamel, H., Meriem, F. and Abdelkader, K., 2022. Traditional Uses, Botany, Phytochemistry, and Pharmacology of *Pelargonium graveolens*: A Comprehensive Review. *Tropical Journal of Natural Product Research*, 6(10).
- [8] Bown, D., 1995. *Encyclopaedia of Herbs and their Uses*. Dorling Kindersley, London, UK.
- [9] Can, E., Kizak, V., Can, Ş.S. and Özçiçek, E., 2018. Anesthetic potential of geranium (*Pelargonium graveolens*) oil for two cichlid species, *Sciaenochromis fryeri* and *Labidochromis caeruleus*. *Aquaculture*, 491, pp.59-64.