

**Second Semester 2020/2021**

**Natural Products & Phytopharmacy

*Rosmarinus officinalis***

**Instructor Lina Adwan**

**Student names and I.D

Asil Aljamal / 1150801

Israa Mafarjeh / 1151683

Jony Bajjail / 1183133**

**Muhammad Musleh / 1162595**

**Abstract:-**

Nowadays there are many fields of medical sciences, one of them is pharmacogenesis.  It is a past field of study of natural sources that were used in treatment of humans and animals , such as medicines prepared from herbs, animals or minerals. However, in the past, it has been used as poison.

This research is about the famous plant Rosemary, its Latin name *Rosmarinus officinalis,* Ros Mainus comes from latin - Dew of the Sea - flowers, it belongs to the Lamiaceae family. Rosemary indigenously grows in the Mediterranean region, but now it is widely distributed all over the world. With regards to appearance it has a height of 2m or more, blue and purple flowers, and needle shaped leaves, also rosemary is a rich source of phytochemicals that are extracted mainly from leaves. Historically, Greek scholars have believed that garland of Rosemary improves memory ,also it was believed that rosemary was symbols of happiness, love, loyalty and remembrance for that it was used in weddings and funerals respectively. Moreover, Napoleon colonies’s were made with this  fragrant plant. [1, 2]

There are many researches done about Rosemary, the plant that holds a huge number of phytochemicals, such as cineol, pinenes, camphor, camphene, myrcene, limonene, linalol, terpineol,  octanone, bornyl acetate and others. [3]

There are many uses of this plant in many fields, not only for food recipes, for example, with meat, soups, herbal tea and salads but also for cosmetics it is used as skin condition agent, household perfumes, hand products, eye shadow, and baby lotion. Moreover, Rosemary possesses several properties that made it used in medicinal field, such as antitumoral, anti-inflammatory, analgesic, neurodegenerative, endocrinal, anti-epileptic, antimicrobial, astringent, improve memory and alertness, and antioxidants. [3, 4, 5]

Rosemary is considered safe, non toxic and nonirritant depending on doses. However, it interacts with drugs such as paracetamol, ACE Inhibitor, codeine, antiplatelet, and anticoagulants, and affects iron absorption due to its interaction with food. Furthermore, Rosemary is contraindicated in pregnant or lactating women and patients, who have gastroenteritis, prostatitis, epilepsy, constipation, insomnia, hypertension, and hypersensitivity to essential oil. [6, 7]

Finally, during the last 30 years many researches and articles about *Rosmarinus officinalis* have been published in many scientific sites such as Pubmed. One of these amazing studies is about the effect of rosemary oil in treating Androgenetic Alopecia (Baldness), in comparison to Minoxidil 2% effect, the results shown that rosemary have an effect somewhat like Minoxidil 2%. [8, 9]

# References

1. Mahr, S. (2020). *Rosemary, Rosemarinus officinalis*. Retrieved from Wisconsin Horticulture: <https://hort.extension.wisc.edu/articles/rosemary-rosemarinus-officinalis/?fbclid=IwAR0XIfGfdvEB5RgODCFBDAeMaP-pbKm3PIQOa48m2AX6q1uOMFzJ6TtaFwI>.
2. Theplantlist. (2013). *Rosmarinus*. Retrieved from the plant list: <http://www.theplantlist.org/1.1/browse/A/Lamiaceae/Rosmarinus/?fbclid=IwAR1X2LGMqo2qaXqN4AUh25FWKlR_sHJmM-5sSbysZt68-Y26kL7nqmNBmmA>.
3. Monice M. Fiume, W. F. (2018). afety Assessment of Rosmarinus officinalis (Rosemary)-Derived Ingredients as Used in Cosmetics . *SAGE Journals*, 12-50.
4. Dsilva, N. (2020, 7 22). *Beauty Benefits Of Rosemary Oil*. Retrieved from femina: <https://www.femina.in/beauty/beauty-benefits-of-rosemary-oil-164481.html?fbclid=IwAR1pe2MutLqa4RE0V85g2clgzC9EyXTI_zGKWZym5uDuAfMwYmoTMkUBqVI>.
5. Nordqvist, J. (2017, 12 13). *Everything you need to know about rosemary*. Retrieved from medical news today: https://www.medicalnewstoday.com/articles/266370?fbclid=IwAR0FoOVB9aEDcfEkbKw4\_bXurUeC1lFjaIHTvyHQfMcilEbvPT3fIXmEtYQ.
6. A Raskovic, I. M. (2015). Analgesic effects of rosemary essential oil and its interactions with codeine and paracetamol in mice. *Eur Rev Med Pharmacol Sci*, 165-172.
7. botanical-onlin. (2020, 11 9). *rosemary contraindication* . Retrieved from botanical online-medicinal plant: <https://www.botanical-online.com/en/medicinal-plants/rosemary-contraindications?fbclid=IwAR0A5vJr-0VY-VTqBMfQfUmLqQPLcZfiUk7yjDcQeZ8L-gjd44q3IrGRM3w>.
8. Kazuya Murata, K. N. (2013). Promotion of hair growth by Rosmarinus officinalis leaf extract. *phytothyrby research*, 212-217.
9. Panahi Y, T. M. (2015). Rosemary oil vs minoxidil 2% for the treatment of androgenetic alopecia: a randomized comparative trial. *Skinmed*, 15-21.

HENDERSON, J. (2015, 7 26). *4 Ways to Preserve Fresh Rosemary*. Retrieved from the kitchn: https://www.thekitchn.com/4-ways-to-preserve-fresh-rosemary-221277?fbclid=IwAR13q-UcHe7fXTLgx4CumdR0wmQiQqOn77sCJBF09YwRYga7GKmeHMkazQg