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## PERFUMES

- Fragrances are made up of three basic categories; concentration level of perfume, the family perfume belongs too and the notes of the perfume.
- Concentration level of perfume results in providing a variety of intensities. The concentration levels acquire different names that symbolize the intensity of aromatic compounds in the perfume. Eau de cologne ranges from 2-5 %, eau de toilette 4-8 %, eau de parfum 8-15 % and parfum 15-30 % containing the most concentrated level of aromatic compounds.
- Family of perfumes are grouped under the following terms, Floral, Citrus, Green Marine, Chypre, and Oriental.
- Three basic notes of perfume causes different scents overtime. Top note contains the lightest scent and does not last for a long time due to high volatility. Middle note is scented directly after the top note. Base note is what makes the perfume scent for top and middle notes last longer.



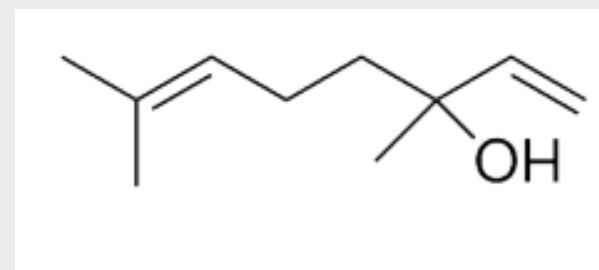
## FRAGRANCES

Each person/gender likes a different scent depending on their emotions, mood, personality, and age.

Fragrances require art and passion to obtain a unique scent that triggers a certain memory.

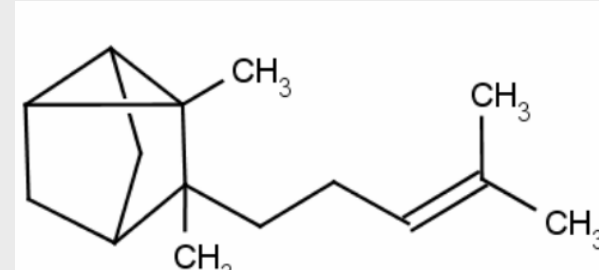


## LAVENDER



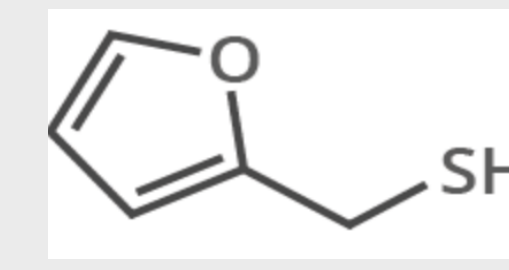
Lavender oil has sweet and sharp aroma. It is used as a middle tone in fragrances to give a scent of fresh and floral aroma. Lavender hydrosol is sweeter and less floral. Both can be mixed with other oils to form a unique floral scent.

## SANDALWOOD



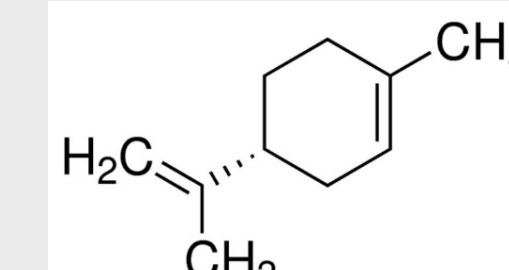
Sandalwood oil contains a woody, sweet and more of a masculine scent. Used as a base note to enhance the smell of other perfumes. Sandalwood hydrosol contains a less intense woody smell but can still be used as a fixative.

## COFFEE



Coffee hydrosol contains a very intense and sharp aroma. Coffee contains around 1000 chemical compounds with various scents. One of the strongest compounds in coffee that provides it with its intense scent is 2-furfurylthiol.

## ORANGE



Orange oil has a very strong bitter scent. Mixed with other oils as a top note. Orange hydrosol is not as intense, but still contains the bitterness. Both provide a scent of freshness and promote a sensation of a sunny/warm day.

## EXPERIMENT

- Plant material (lavender, coffee, sandalwood, or orange) is evenly distributed and added into the container.
- Ice core is added to the unit and the whole device is placed inside the microwave.
- Full power is selected on a standard microwave and it is left to run for 6 minutes.
- After the 6 minutes, it is left to cool for 3 minutes. A small amount of ice core must be left after each run to ensure all residual vapors condense.
- Oil floats on top of the beaker. ¼ of the liquid is poured into a volumetric flask and oil starts to form a layer on top of the hydrosol.
- A pipette is used to remove the oil from the rest of the hydrosol.

## RESULT

- You will notice a difference in the intensity of the oil and the hydrosol. Oil contains more concentrated scent while the hydrosol has a less intense scent. If oil is being used to make a perfume it is better to use around 3-5 drops (depending on what note it is) unless you are looking for an intense scent of the plant you obtained the oil from. But if the hydrosol is being used, you can fill half of the vial with a particular scent and add other scents to it.



## Acknowledgments

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## References

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 "Essential Oil Extraction, Essential Oil Distillation Kits - OilExTech." *OilExTech.com Essential Oil Extraction*  
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