

Best Essential Oils and Their Health Benefits

An Essential oil is a concentrated hydrophobic liquid containing volatile – at normal temperatures – chemical compounds from plants. The term '**essential**' does not mean '**necessary**' or as with the terms essential amino acid or essential fatty acid which are so-called since they are nutritionally required by a given living in contrast to fatty oils.

Before the discovery of distillation, all essential oils were extracted directly from biomass (the bark, flowers, fruits etc.). They have been used therapeutically for thousands of years by Greeks Romans and Egyptians to remedy everything from skin conditions and injuries to fever and so many other diseases.

Extraction

Egyptians and Phoenicians Jews and Arabs, Indians and Chinese greeks and Romans and even Mayas and Aztecs all possessed innovative extraction processes, maceration, alembic distillation, etc. Hydrodistillation of fresh plant material is the most used technique to isolate essential oils.

Hydrodistillation

Hydrodistillation is an ancient technique for the extraction of essential oils, it is still being applied in several sectors such as food cosmetics and pharmaceutical industry.

Raw plant material such as flowers leaves wood bark roots seeds and peels are extracted by water distillation whilst soaked and boiled with water in a distillation apparatus for hydrodistillation. The mixture is heated and volatile

materials are carried away. Most oils are distilled in a single process. One exception is ylang-ylang (*Cananga odorata*) which requires a purification step through fractional distillation.

The recondensed water (plant water essence) may be sold as another fragrant product.

Other techniques

Other methods have been developed and introduced to extract Essential Oils :

Mechanical/Cold expression

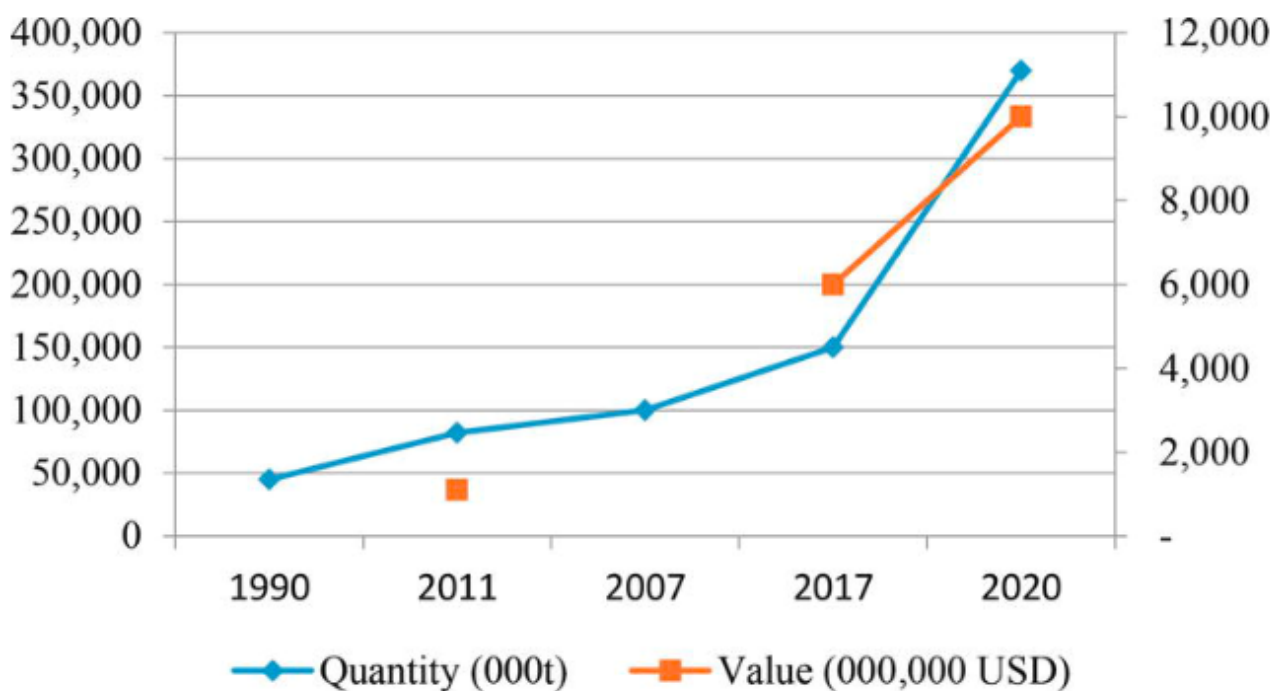
Solvent extraction

Ethanol is the most common bio-solvent obtained by the fermentation of sugar-rich materials such as sugar beet and. Its outstanding feature is the easy manipulation of the dielectric constant value of water that can be made to vary over a wide range just by changing the temperature and pressure. Ethanol is used to extract fragrant compounds from dry plant materials as well as from impure oils or concretes that have been produced firstly by organic solvent extraction expression or enfleurage. For instance, the extraction yield of essential oils from Japanese citrus was increased by 44% compared to the traditional extraction methods <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6154587/> . Problems of the traditional extraction techniques such as steam distillation lie in the huge quantities of plant material which are required to extract essential oils on a commercial scale.

Florasols extraction

Essential Oils production

According to various economic analyses, growth will continue and by the 2020s production is expected to reach 370,000 tonnes annually and be valued at more than \$10 Billion USD (current dollars) <https://www.intechopen.com/books/potential-of-essential-oils/essential-oils-market-and-legislation>



World production of essential oils (000 t; 000,000 USD).
Source: EFE0, ISMEA.

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Whichever oils you choose to use ensure that when purchasing said oils, you get the ones that are organically produced and that they don't include chemicals obtained during processing. Here's a list of 10 popular essential oils whose benefits are mostly centered on disease prevention. [Web site: https://draxe.com/essential-oil-uses-benefits/](https://draxe.com/essential-oil-uses-benefits/)

- **Peppermint:** Used to boost energy and help with digestion.
- **Lavender:** Used for stress relief.
- **Sandalwood:** Used to calm nerves and help with focus.
- **Bergamot:** Used to reduce stress and improve skin conditions like eczema.
- **Rose:** Used to improve mood and reduce anxiety.
- **Chamomile:** Used for improving mood and relaxation.
- **Ylang-Ylang:** Used to treat headaches, nausea and skin conditions.
- **Tea Tree:** Used to fight infections and boost immunity.
- **Jasmine:** Used to help with depression, childbirth, and libido.
- **Lemon:** Used to aid digestion, mood, headaches and more.