

How to Extract Oil
from
Citrus Fruits
*(Lemon Oil, Orange Oil,
Mandarin Oil and
Bergamot Oil)*



Introduction

Citrus essential oils are probably the least talked about of all essential oils. Yet when we consider that one of the key components in these oils is an antioxidant known as limonene, then they ought be widely discussed. Citrus oils also help to neutralise acid in your body and stimulate the immune system to fight infections. Another key feature of the citrus oils is that they have uplifting, invigorating and anti-depressant qualities.



Orange Oil

Orange skins contain most of the essential oils of the orange tree, and they're the source of the limonene, or orange oil, you find in most infused vodkas and other foods. Essential oils are fatty liquids that contain esters and other aromatic compounds that make up the special scent of a plant. The most prolific essential oils you see in stores, such as those extracted from citrus fruits like lemons and oranges, are usually abundant in the plant as well.

Bergamot Oil

Bergamot is a citrus fruit whose rind is used for extracting the Bergamot Essential Oil. Bergamot essential oil is a cold-pressed essential oil produced by cells inside the rind of a bergamot orange fruit. It is a common top note in perfumes. The health benefits of Bergamot Essential Oil can be attributed to its properties as a deodorant, vulnerary, vermifuge, antibiotic, antiseptic, antispasmodic, sedative, analgesic, antidepressant, disinfectant, febrifuge, cicatrisant, and digestive substance.

Lemon Oil

Lemons are one of the most popular citrus fruits in the world, and are widely used for culinary purposes, since they are a good source of vitamins and aid in digestion. Lemon oil works primarily with the digestive, immune, and respiratory systems, promoting healthy function in the body. Aromatically, it's invigorating in a wake-you-up sorta way. It's also one of the most popular essential oils and has about a gazillion uses.

Mandarin Oil

Mandarins are citrus fruits which are also known as Mandarin oranges or Tangerines. Mandarin essential oil is extracted by cold expression of the outer peel of the fruit; it has a light, fruity-citrus aroma, similar to Orange essential oil. Mandarin oil is balancing, uplifting and calming; its properties include being anti-septic, digestive and anti-depressant. Mandarin is also used in soaps, cosmetics, perfumes and as a flavoring agent in liqueurs and confectionery.

The flavours provided by citrus are among the most preferred in the world, and it is increasingly evident that citrus not only tastes good, but is also good for people. It is well established that citrus and citrus products are a rich source of vitamins, minerals and dietary fiber (non starch polysaccharides) that are essential for normal growth and development and overall nutritional well being. However, it is now beginning to be appreciated that these and other biologically active, non nutrient compounds found in citrus and other plants (phytochemicals) can also help to reduce the risk of many chronic diseases.

Appropriate dietary guidelines and recommendations that encourage the consumption of citrus fruit and their products can lead to widespread nutritional benefits across the population. All citrus fruit is acid fruit. The acid fruits are the most detoxifying fruits and excellent foods. Lemon oil is obtained from the fruits of citrus *Limonum*, Risso (Rutaceae). Although the majority of commercially available essential oils are extracted from the original botanical material by use of steam distillation, most citrus essential oils are extracted by pressing the rinds of the citrus fruits.

The oil of sweet orange is obtained from the fruits of citrus Aurantium Risso and the oil of bitter orange from fruits of citrus Bigaradia Risso (Auranciaceae). Orange Essential Oil is energizing and is usually well loved by men, women and children. Citrus fruit oils are cheaper than most other essential oils. Lemon or sweet orange oils that are obtained as by products of the citrus industry are even cheaper.

Some of the fundamentals of the book are botanical classification, classification of genus citrus, criteria for citrus classification, information on important citrus fruits, subgenus fucitrus (edible citrus fruits),

citrus cultivation, citrus fruits, kinnow mandarin, citrus fruit breeding, soil inspection for citrus family, nutrition for citrus world, proper harvesting of citrus, post harvesting of citrus fruits, etc.

This handbook on citrus fruits provides relevant information on most citrus crops, the basics of citriculture & production, pre & post harvest management, picking, storage etc. Selected topics on oil extraction of citrus fruits are also given to provide knowledge of the techniques used. This book will be helpful for technocrats, farmers, research scholar, institutions etc.

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Citrus Latifolia Tanaka (Tahiti or Persian Lime)

Citrus Limettioides Tanaka (Sweet Lime)

Citrus Jambhiri Lush (Rough Lemon; Jambiri)

Citrus Limetta Risso (Limetta of the Mediterranean)

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Orange Group

Citrus Aurantium Linn (Sour, Bigarade or Soville Orange)

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Cricket: Braehytrypes Portentosus Light

Longhorn Bettle: Oberea Mangalorensis

Flower Pests

Citrus Flower Moth : Prays Citri Milliers

Cacoecia Epicyrta Meyrick

Blossom Midge Sayneura Citri G & P

Fruit Pests

Fruit Sucking Moths (Noctuididae : Lepidoptera)

Calpe Emarginata

Distribution

Host Plants

Life History

Damage

Control

Fruit Flie

Distribution

Host Plants

Life History

Damage

Control

Fruit Sucking Bugs

Distribution and Host Plants

Life History

Damage

Control

Citrus Rind Borer: Prays Endocarpi Meyrick.

General Control Measures

39. Nematodes of Citrus

Citrus Root Nematode

Tylenchulus Semipenetrans Cobb. 1913

Host Range

Control Measures

Cultural Control

Biological Control

Resistant Rootstocks

Reniform Nematode (*Rotylenchulus Reimformis*)

Burrowing Nematode (*Radopholus Similies*)

The Lesion Nematode (*Pratylenchus Coffeae*)

Root-knot Nematode (*Meloidogyne Africanae*)

The Lance Nematode (*Hoplolaimus Indicus*)

Poncirus

Fortunella (Kumquats)

Citrus

**Niir Project Consultancy Services (NPCS)
can provide Process Technology Book on
Citrus Fruits Cultivation and
Oil Extraction**

See more

<http://goo.gl/GjD0ew>

<http://goo.gl/uxs5dq>

<http://goo.gl/TBd3ob>

<http://goo.gl/6sWv6Z>

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Niir PROJECT CONSULTANCY SERVICES

An ISO 9001:2008 Company

Who are we?

- *One of the leading reliable names in industrial world for providing the most comprehensive technical consulting services*
- *We adopt a systematic approach to provide the strong fundamental support needed for the effective delivery of services to our Clients' in India & abroad*



What do we offer?

- *Project Identification*
- *Detailed Project Reports/Pre-feasibility Reports*
- *Business Plan*
- *Industry Trends*
- *Market Research Reports*
- *Technology Books and Directory*
- *Databases on CD-ROM*
- *Laboratory Testing Services*
- *Turnkey Project Consultancy/Solutions*
- *Entrepreneur India (An Industrial Monthly Journal)*

How are we different ?

- *We have two decades long experience in project consultancy and market research field*
- *We empower our customers with the prerequisite know-how to take sound business decisions*
- *We help catalyze business growth by providing distinctive and profound market analysis*
- *We serve a wide array of customers , from individual entrepreneurs to Corporations and Foreign Investors*
- *We use authentic & reliable sources to ensure business precision*



Our Approach

Requirement collection



Thorough analysis of the project



Economic feasibility study of the Project



Market potential survey/research



Report Compilation

Who do we serve?

- *Public-sector Companies*
- *Corporates*
- *Government Undertakings*
- *Individual Entrepreneurs*
- *NRI's*
- *Foreign Investors*
- *Non-profit Organizations, NBFC's*
- *Educational Institutions*
- *Embassies & Consulates*
- *Consultancies*
- *Industry / trade associations*

Sectors We Cover

- *Ayurvedic And Herbal Medicines, Herbal Cosmetics*
- *Alcoholic And Non Alcoholic Beverages, Drinks*
- *Adhesives, Industrial Adhesive, Sealants, Glues, Gum & Resin*
- *Activated Carbon & Activated Charcoal*
- *Aluminium And Aluminium Extrusion Profiles & Sections,*
- *Bio-fertilizers And Biotechnology*
- *Breakfast Snacks And Cereal Food*
- *Bicycle Tyres & Tubes, Bicycle Parts, Bicycle Assembling*

- *Bamboo And Cane Based Projects*
- *Building Materials And Construction Projects*
- *Biodegradable & Bioplastic Based Projects*
- *Chemicals (Organic And Inorganic)*
- *Confectionery, Bakery/Baking And Other Food*
- *Cereal Processing*
- *Coconut And Coconut Based Products*
- *Cold Storage For Fruits & Vegetables*
- *Coal & Coal Byproduct*

- *Copper & Copper Based Projects*
- *Dairy/Milk Processing*
- *Disinfectants, Pesticides, Insecticides, Mosquito Repellents,*
- *Electrical, Electronic And Computer based Projects*
- *Essential Oils, Oils & Fats And Allied*
- *Engineering Goods*
- *Fibre Glass & Float Glass*
- *Fast Moving Consumer Goods*
- *Food, Bakery, Agro Processing*

- *Fruits & Vegetables Processing*
- *Ferro Alloys Based Projects*
- *Fertilizers & Biofertilizers*
- *Ginger & Ginger Based Projects*
- *Herbs And Medicinal Cultivation And Jatropha (Biofuel)*
- *Hotel & Hospitality Projects*
- *Hospital Based Projects*
- *Herbal Based Projects*
- *Inks, Stationery And Export Industries*

Sectors We Cover *Cont...*

- *Infrastructure Projects*
- *Jute & Jute Based Products*
- *Leather And Leather Based Projects*
- *Leisure & Entertainment Based Projects*
- *Livestock Farming Of Birds & Animals*
- *Minerals And Minerals*
- *Maize Processing(Wet Milling) & Maize Based Projects*
- *Medical Plastics, Disposables Plastic Syringe, Blood Bags*
- *Organic Farming, Neem Products Etc.*

Sectors We Cover *Cont...*

- *Paints, Pigments, Varnish & Lacquer*
- *Paper And Paper Board, Paper Recycling Projects*
- *Printing Inks*
- *Packaging Based Projects*
- *Perfumes, Cosmetics And Flavours*
- *Power Generation Based Projects & Renewable Energy Based Projects*
- *Pharmaceuticals And Drugs*
- *Plantations, Farming And Cultivations*
- *Plastic Film, Plastic Waste And Plastic Compounds*
- *Plastic, PVC, PET, HDPE, LDPE Etc.*



Sectors We Cover *Cont...*

- *Potato And Potato Based Projects*
- *Printing And Packaging*
- *Real Estate, Leisure And Hospitality*
- *Rubber And Rubber Products*
- *Soaps And Detergents*
- *Stationary Products*
- *Spices And Snacks Food*
- *Steel & Steel Products*
- *Textile Auxiliary And Chemicals*

- *Township & Residential Complex*
- *Textiles And Readymade Garments*
- *Waste Management & Recycling*
- *Wood & Wood Products*
- *Water Industry(Packaged Drinking Water & Mineral Water)*
- *Wire & Cable*

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