Bergamot

*Citrus aurantium* subspecies *bergamia - Rutaceae*

Native to tropical Asia, the tree is grown in Italy, Sicily and the Ivory Coast. It grows to a height of 5 metres, has dark green ovate leaves and fragrant star shaped flowers. The oil is expressed from the rind of the small fruits.

**Place of Origin**
Italy, Sicily, Ivory Coast

**Part of plant used**
outer rind of fruit

**Method of Extraction**
expression

**Yield**
0.5%

**Characteristics**

<table>
<thead>
<tr>
<th>Place of Origin</th>
<th>Part of plant used</th>
<th>Method of Extraction</th>
<th>Yield</th>
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<tbody>
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<td>Italy, Sicily, Ivory Coast</td>
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<td>expression</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

**Colour:** Greenish yellow

**Perfume notes:** Top

**Aroma**

**Chemical Composition**

<table>
<thead>
<tr>
<th>Esters</th>
<th>Linalyl acetate</th>
<th>%</th>
<th>Aldehydes</th>
<th>Citronellal</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30-60</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monoterpenes</th>
<th>limonene</th>
<th>%</th>
<th>Coumarins</th>
<th>bergapten</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>alpha-pinene</td>
<td>33</td>
<td></td>
<td></td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>beta-pinene</td>
<td>1</td>
<td></td>
<td>Monoterpanol</td>
<td>linalool</td>
<td>11-22</td>
</tr>
</tbody>
</table>

Bergamot oil is known to have around 300 constituents

**Properties:** Antidepressant, anti-spasmodic, bactericidal, calming, diuretic, digestive system tonic, antifungal, antiviral, carminative, lymphatic decongestant

**Precautions:** Bergamot is strongly phototoxic due to the bergapten content

IFRA recommends a dosage not exceeding 0.4% for application to skin exposed to strong sunshine

A treated or rectified oil is obtainable as bergapten-free oil. This is known as bergamot FCF. Its odour is inferior to the complete oil but it is not phototoxic
Citrus aurantium subspecies bergamia - Rutaceae

Indications

Circulatory

Musculo-skeletal

Digestive
IBS, flatulence, colic, indigestion

Nervous
anxiety, tension, stress, frustration, irritability, depression

Genito-Urinary / Gynaecological
Cystitus, thrush, leucorrhoea, PMT

Respiratory

Immune System
Antiviral, antiseptic, herpes, chicken pox, shingles

Skin
Acne, congested skin, cellulite, oily skin, lymphatic congestion lymphoedema, warts

Clinical Research

A Japanese study looked at a group of 20 depressed males. The group was split into those given antidepressant medication alone, and those exposed to a fragrance containing lemon, orange and bergamot oils whilst having their medication reduced over a number of weeks. Those in the fragrance group had reduced or eliminated their medication after 11 weeks whilst the group receiving only antidepressants still needed their usual doses. Hormone levels were also positively affected in the fragrance group, supporting the conclusion that citrus fragrance may improve homeostatic balance more than treatment with antidepressants.

Psychological Uses

Bergamot effectively dispels emotional tension, irritability and frustration. It allows us to loosen up and relax, leading to a feeling of well-being and serenity. It has the ability to soothe the nervous system; coupled with its light fragrance it will uplift the mind. This quality makes it invaluable in convalescence, where gentle encouragement and optimism is required. One of the best aromatic antidepressants.

Summary

Antidepressant, uplifting