**Melaleuca alternifolia**
Aka Ti-tree, T-tree, Narrow Leafed Paperbark

**DESCRIPTION AND BOTANICAL INFORMATION:** The Tea Tree plant is a small evergreen tree or shrub, native to Australia and found mainly in the New South Wales region of that country. It grows to about 20 feet in height and has papery bark and bluish-green needle-like leaves similar to cypress; it blooms with creamy white, yellowish, or purplish flowers. It thrives in swampy conditions.

There are about 150 species in the *Melaleuca* group and several of them are used in AT, including *M. leucadendron* (cajaput) and *M. viridiflora* (Niaouli). The genus name, *melaleuca*, comes from the Greek words “melos”, which means black and “leucos”, which means white, referring to the fact that the peeling bark has a black and white appearance.

Until recently, all the tea tree oil in the world came from Australia but not all Australian tea tree oil is good and there’s a huge variability in the quality of what’s available in the market. Now tea tree oil is produced in New Zealand and a small quantity is being produced in India but I don’t recommend use of these oils.

**FOLKLORE AND HISTORY OF USE:** The aborigines make a medicinal tea from the leaves and often use the blossoms to sweeten it so this is how it got its common name. Various preparations of the plants have long-been used by the bushmen for treatment of skin disorders and infections of various types. During World War II the Australian Medical Corps provided its soldiers with flasks of tea tree oil to help ward off skin infections and repel insects.

**EXTRACTION:** The essential oil of *Melaleuca alternifolia* is extracted by steam distillation of the twigs and leaves. A thousand pounds of plant material yields about 18 pounds of essential oil.
PHYSICAL AND AROMATIC PROPERTIES: The essential oil of tea tree is clear to pale yellow-green in color and has a fresh, warm camphoraceous odor that has a slightly spicy note. Aromatically, it blends well with lavender, clary sage, rosemary, pine, marjoram and many spice oils but I find that it can be difficult to blend with many florals and can spoil the aroma of a blend if too much is used.

MAIN CONSTITUENTS (TEA TREE AUSTRALIA):

PLEASE NOTE: TWO DIFFERENT SAMPLES OF AUSTRALIAN TEA TREE ARE SHOWN. Number 1 has far less 1,8 cineole than number 2 so is much less irritating to the skin.

TEA TREE OIL AUSTRALIA #1

**Compounds** (10)

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terpinen-4-ol</td>
<td>41.00</td>
</tr>
<tr>
<td>gamma-Terpinene</td>
<td>23.20</td>
</tr>
<tr>
<td>alpha-Terpinene</td>
<td>9.10</td>
</tr>
<tr>
<td>Terpinolene</td>
<td>4.40</td>
</tr>
<tr>
<td>para-Cymene</td>
<td>4.10</td>
</tr>
<tr>
<td>alpha-Pinene</td>
<td>2.60</td>
</tr>
<tr>
<td>alpha-Terpineol</td>
<td>2.20</td>
</tr>
<tr>
<td>1,8-Cineole</td>
<td>0.60</td>
</tr>
<tr>
<td>Limonene</td>
<td>0.50</td>
</tr>
<tr>
<td>beta-Phellandrene</td>
<td>0.50</td>
</tr>
</tbody>
</table>

TEA TREE OIL AUSTRALIA #2

**Compounds** (36)

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terpinen-4-ol</td>
<td>29.41</td>
</tr>
<tr>
<td>1,8-Cineole</td>
<td>16.50</td>
</tr>
<tr>
<td>gamma-Terpinene</td>
<td>11.54</td>
</tr>
<tr>
<td>para-Cymene</td>
<td>11.42</td>
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<tr>
<td>alpha-Terpineol</td>
<td>3.61</td>
</tr>
<tr>
<td>alpha-Pinene</td>
<td>2.80</td>
</tr>
<tr>
<td>Terpinolene</td>
<td>2.36</td>
</tr>
<tr>
<td>Aromadendrene</td>
<td>2.35</td>
</tr>
</tbody>
</table>
alpha-Cadinene 1.43
Ledene 1.03
alpha-Thujene 0.69
beta-Pinene 0.59
Myrcene 0.52
allo-Aromadendrene 0.45
beta-Terpineol 0.24
alpha-Gurjunene 0.23
p-Cymen-8-ol 0.13
Sabinene 0.12
Calamenene 0.10
alpha-Copaene 0.10
Linalool 0.10
alpha-Phellandrene 0.10
Piperitone 0.08
alpha,p-Dimethylstyrene 0.07
Piperitol 0.07
alpha-Cubebene 0.04
1,4-Cineole 0.01
1-Hexanol 0.01
beta-Elemene 0.01
alpha-Muurolene 0.01
alpha-Humulene 0.01
beta-Caryophyllene 0.01
Camphor 0.01
Nerol 0.01
Camphene 0.01
Terpinen-1-ol 0.01

WESTERN ACTIONS WITH EMPIRICAL SUPPORT:

Antibacterial (broad spectrum, including MRSA); antiviral, mainly on HS1; antifungal (candida et al); has been shown to relieve itching but anecdotally known to cause severe itching when applied with heat; anti-inflammatory; immune stimulant. On in vitro tests on smooth muscle, tea tree oil initially showed a spasmogenic effect followed by a strong spasmolytic effect; it ultimately caused a decrease in force of spontaneous contraction in mouse uterus. On in vitro tests of skeletal muscle, muscle tension was initially decreased and this was followed by delayed contracture. Inadequate data is available to draw conclusions about in vivo effects of tea tree oil on muscle.

A sampling of research:


**TRADITIONAL AROMATHERAPY ACTIONS:**

- Antibacterial
- Analgesic
- Anti-inflammatory
- Neurotonic
- Phlebotonic (varicose veins, hemorrhoids)
- Immunostimulant

**TYPICAL WESTERN INDICATIONS:**

Tea Tree essential oil destroys pathogenic organisms on the skin without harming the skin's natural balance so it's very good for things like acne, boils, abscesses, ringworm/athlete's foot, vaginal infections, and staph infections on the skin BUT DON'T USE IT ON BURNS as it may increase scarring (Price). It is very good for pressure ulcers and the necrotic skin lesions of cancer patients.

It's excellent for all kinds of respiratory infections, whether viral or bacterial, and it is said to have immuno-stimulating properties that compliment and work with its antibiotic and antiviral effects to help the body fight off infection.

It has been recommended for arthritis and rheumatic disorders and also for adrenal fatigue, neurasthenia, and recovery from prolonged illness, where there's debility.

**CHINESE MEDICINE CORRELATES**

Energy: warm and dry
Main Element: Metal (and fire)
Spheres of Action: Body, Mind, Spirit

**CM ACTIONS:**
Qi Tonic
Fortifies the P’o (Bodily Soul)
Fortifies the Shen

CM INDICATIONS:
Tea tree oil’s uses in CM are similar to its uses in Western Medicine. It’s highly regarded for its ability to tonify the qi in cases of chronic fatigue and nervous debility, especially in people with weak immune systems. As a Metal element oil, it’s especially useful for respiratory infections.

SUBTLE ACTIONS: Tea Tree is so powerful and widely recognized as an essential oil that acts on the body that its actions on the Mind/Spirit are often overlooked – but shouldn’t be.

Through its associations with the Metal Element/Lungs it fortifies the P’o (Bodily Soul) and helps to bring a more optimistic outlook while its secondary associations with Fire/Heart fortifies the Spirit (Shen) and invigorates the mind.

Tea tree essential oil blends well with lavender oil for skin problems and with eucalyptus and lemon and/or thyme for respiratory inhalations.

SUBTLE INDICATIONS: Gabriel Mojay recommends it for physically delicate people who struggle not only with their health but also with depression and feelings of hopelessness or doom or victimization.

BEST USES BY SYSTEM:
SKIN – boils, acne, nail fungus, oily skin, minor wounds, pressure ulcers, ring worm, inflamed skin conditions
MUSCULOSKELETAL COMPLAINTS – arthritis, rheumatism, aches and pains
NERVOUS SYSTEM – nervous exhaustion
RESPIRATORY SYSTEM – colds/flu, sinus infection, bronchitis, cough, sore throat
ENDOCRINE AND REPRODUCTIVE COMPLAINTS – vaginal infection and cystitis (sitz baths)
IMMUNE SYSTEM – lowered immunity
MENTAL/EMOTIONAL ISSUES – see subtle indications
OTHER: ear ache
SAFETY DATA: Non-toxic for topical use in reasonable amounts. It may cause skin sensitization and rare cases of contact dermatitis have been reported. Tea tree oil can produce severe itching in some people when combined with heat (as in a hot bath). It can burn the skin if repeatedly used undiluted on the same area of skin. Oxidized (spoiled) tea tree oil can be very irritating to the skin.