

# Essential Oil Blend & Toe Nail Fungi

## Abstract

A 58 year old male using over-the-counter ointments and prescription medication wasn't able to remove the fungi enveloping both of his large toe nails. The client was willing to try an essential oil blend of thyme, oregano, and cinnamon. After fourteen days, the fungi was completely gone. Further studies are recommended to determine how the essential oil blend affected the fungi.

## Case Description

Client (RM) is a 58 year old male, who wears sandals throughout the summer, has toe nail fungi covering  $\frac{3}{4}$  of each large toe nail and would like an essential oil blend to help kill the fungi.

RM is an active male who runs four times a week. He eats three nutritious meals a day, drinks one to two glasses of red wine a night and five to eight 8 oz glasses of water per day.

RM was given a prescription, which he could not remember it's name, from his doctor to help kill the fungi. One of the side effects of the prescription drug is potential liver damage. He tried the medication for the full prescribed forty-five days; however, he did not have any positive results.

## Literature Review

Thyme *Thymus vulgaris* steam or water distills the leaves and flowers to produce the essential oil. This plant can be found abundantly throughout the Mediterranean area.

Sokovic et al. (2008) conducted an *in vivo* evaluation of *Thymus vulgaris*'s toxicological and antifungal activity on 2-

month-old male Wistar rats. The animals were induced dermatomycetes – *Trichophyton mentagrophytes*, *T. rubrum*, and *T. tonsurans*. A 1% solutions of *Thymus vulgaris* essential oil, thymol and bifonazole were evaluated. After observing the rats for 37 days, all the *Thymus vulgaris* treated animals were cured.

Oregano *Origanum compactum* essential oil is produced by steam distilling the plant's leaves. The major producers of oregano are France, Germany, Turkey, and the United States.

Inouye et. al. (2006) examined the vapor activity of six essential oils, oregano being one of them, against a *Trichophyton mentagrophytes*. The oregano had the strongest effect – after 3 hours the fungi's mycelia were destroyed and after 15 hour exposure caused the cellular death.

Cinnamon *Cinnamomum zeylanicum* origins are Sri Lanka, Madagascar, and Ceylon, Jamaica, and Brazil. The essential oil is distilled from the plant's bark.

Ooi et. al. (2006) conducted a study on both *Cinnamomum verum* J.S. Presl. and *Cinnamomum cassia* Blume. It was found that both of them were equally effective in inhibiting the growth of several bacteria, fungi, molds, and dermatophytes.

### **Treatment Protocol/Methods**

RM was given the following essential oil blend in a 5 ml bottle for his toe nails: 2 drops of Thyme *Thymus vulgaris*, 1 drop of Oregano *Origanum compactum*, and 1 drop of Cinnamon *Cinnamomum zeylanicum*. (Schnaubelt, 1998, p. 112-113) Sesame oil *Sesamum indicum* and Camellia oil *Camellia japonica* was added to dilute the essential oil to 5%.

RM was instructed to apply the blend twice a day to his nail and nail bed only. He was told to discontinue use of the blend if he saw no clear improvements within 14 days. He was also informed of the following cautions and contraindications:

- Contraindicated during pregnancy and while breast-feeding.
- Avoid when liver disease is present.
- Avoid when hypertension is present.
- Do not use with homeopathic.
- Thyme, oregano, and cinnamon can burn and irritate the skin.

### **Client Response**

RM noticed the nail changing colors within the first two days of application. At the end of the two weeks, both nails looked normal and he doesn't see any signs of the fungi. He will definitely use this oil again if he has any nail issues.

### **Evaluation**

The oil blend met the client's needs. Further scientific study is required to determine how the essential oil blend affected the fungi.

### **References**

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