Young Living

Frankincense:

An ancient gift supported by modern science

ABOUT FRANKINCENSE ESSENTIAL OIL

Frankincense has a sweet, warm, balsamic aroma that is stimulating and elevating to the mind. Useful for visualising, improving one's spiritual connection, and centring, it has comforting properties that help focus the mind and overcome stress and despair. Frankincense is considered the holy anointing oil in the Middle East where it has been used in religious ceremonies for thousands of years. More recently, it has been used in European and American hospitals and is the subject of substantial research. Frankincense is also a valuable ingredient in skin care products for ageing and dry skin. The ancient Egyptians used it in rejuvenation face masks. Frankincense has an approximate ORAC of 6,125 (TE/L). TE/L is expressed as micromole Trolox equivalent per litre.

HOW TO ORDER

1. Visit www.youngliving.com.au to find Young Living frankincense products online.
2. Call our Customer Care Department on 07 3715 7333, Monday through Friday, 9:00 a.m. to 5:00 p.m (Queensland time).

To learn more about Young Living's frankincense products and to download a copy of this newsletter, please visit: http://youngliving.com/essential-oils/Sacred-Frankincense

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IS ALL FRANKINCENSE CREATED EQUAL?

Frankincense essential oil has been prized in both ancient and modern times for its incredible healing properties. Recently, essential oil circles around the world have debated an important question: Which of the forty-two known species of frankincense offers the greatest therapeutic benefit? Through expert academic studies and Gary Young's extensive world travels, Young Living has identified the two most researched and therapeutic frankincense species to be East African *Boswellia carteri* and Omani *Boswellia sacra*.

The research supporting this claim centres on three important factors: selection of species, place of origin, and the quality of chemical constituents found in each. This paper focuses on three of the most well-known species of frankincense and their respective merits: the aforementioned *Boswellia carteri* and *Boswellia sacra*, as well as *Boswellia frereana* from Somalia.

Gary Young—frankincense pioneer
Young Living's founder and president has personally made fifteen trips to the Middle East. The trips have allowed him to learn more about the history, trade, production, and chemical makeup of the most therapeutic species of frankincense. Read more about Gary's research and vision on his personal blog: www.dgaryyoung.com/blog/2010/808

BOSWELLIA CARTERI

Native to East Africa, *Boswellia carteri* is the most well-known and most studied among frankincense species because it contains many important natural constituents, including boswellic acid. One of the most important of these studies discusses the cell differentiating properties of frankincense. In this study, the authors, including Chinese scientist H.K. Lin, named the source of the oil used: 'Frankincense oil containing 1,200mg/ml frankincense gum resin was obtained from Young Living Essential Oils (Lehi, UT).' [1]

Researchers in Tokyo, Japan, discovered that the extract of*B. carteri* contains a number of triterpene acids like boswellic acids and incensole acetate that exhibited potent activities.[2]

The science behind spirituality

During one of his overseas trips in 2009, Young Living researcher Marc Schreuder formed an important relationship with Israeli scientist Arieh Moussaieff. Moussaieff created headlines around the world when he and an international team of researchers discovered unique capabilities of a constituent in frankincense called incensole acetate.

Incensole acetate may be the reason frankincense has been part of religious and cultural ceremonies dating back to ancient times. Moussaieff's team discovered that this chemical constituent triggered an ion channel in the brain with heretofore unknown effects. The areas of the brain affected are known to be involved in emotions. Incensole acetate had an anti-anxiety effect and significantly improved mood in the study.

Dr. Moussaieff's studies have shown that incensole acetate is in fact responsible for frankincense's remarkable spiritual effects.[11] One article about Dr. Moussaieff's work stated: 'In his doctoral work at the Hebrew University of Jerusalem, Moussaieff isolated the active compounds in the [frankincense] resin. When tested on mouse models of human head injury, he found that some of these substances provide protection for the nervous system. He later noted the resin's mood enhancement and antianxiety properties and, investigating further, found that they act on a previously unknown pathway in the brain that regulates emotion.' [12]

Another of the eleven *Boswellia carteri* studies found in a search of PubMed, the National Library of Medicine's website, explains how a purified mixture of boswellic acids from *Boswellia carteri* resin exhibits positive immune system effects.[3]

BOSWELLIA SACRA

Omani frankincense is regarded the world over as the rarest, most sought-after aromatic in existence. In Juliet Highet's book *Frankincense: Oman's Gift to the World,* she writes: 'The international aromatic trade has a grading system for frankincense depending upon size, colour, degree of transparency, and of course fragrance, but it is generally acknowledged that the premium resin comes from *Boswellia sacra*.' [4]

There is just one species of frankincense that is native to the southern Arabian kingdom of Oman: *Boswellia sacra.* Botanists like Ahmed Al-Harrasi and Salim Al-Saidi, scientists at the Department of Chemistry Sultan Qaboos University in Oman, are united in stating that no other frankincense species grows in Oman.

Mahmoud Suhail, MD, Young Living's partner in its Omani frankincense venture and a noted frankincense researcher, confirms this, saying, *'Boswellia sacra* is the only frankincense species native to Arabia.' Suhail bases his conclusion on documentation by the Royal Botanical Gardens at Kew, in England, one of the foremost scientific botanical institutions in the world. [5]

Young Living has recognised the benefits of *Boswellia sacra* in recent years due to its high levels of incensole acetate, known for its spiritual properties (see 'The science behind spirituality' at left). In 2009, Gary Young was granted special permission to build a Young Living distillery in Oman. Until this venture, no Omani frankincense had ever left the country, unless it was purchased by Saudi royals. Young Living is distilling *Boswellia sacra* essential oil in partnership with Dr. Suhail in Salalah, Oman—a one-of-a-kind relationship between a Western essential oil company and a local practitioner in Arabia.

BOSWELLIA FREREANA

While all frankincense species offer health advantages, *Boswellia frereana* has been shown to contain fewer of the healing gifts than the aforementioned *B. carteri* and *B. sacra*. The biggest drawback to *Boswellia frereana* is that it does not contain the powerful boswellic acids that have been the subject of more than 125 studies, according to a recent PubMed search. Researchers at Cardiff University have stated:

> 'Although *B. frereana* has the genealogy of the Boswellia species, little is known about the bioactive ingredients, except that it is devoid of the α- and β-boswellic acids that are characteristics of the other family members.' [6]

Another reference documenting the lack of boswellic acid in *B. frereana* is found in a review by Frank and Unger:

> 'The six boswellic acids. . . are the typical ingredients in frankincense from *B. carteri, B. sacra* and *B. serrata* but not in *B. frereana*.' [7]

Not only does *B. frereana* not contain any boswellic acids, it also lacks the important chemical constituent incensole acetate (see 'The science behind spirituality' at left).

Boswellia frereana grows exclusively in Somalia and is not found in Oman. Dr. Ermias Dagne, professor of chemistry at Addis Ababa University in Ethiopia, stated, 'There are six most common Boswellia species whose resins are widely traded . . . ' He lists: *'B. frereana*. . . known only from Somalia.' [8] Other studies confirm that, '*B. frereana* grows in the coastal region of Somalia.' [9] and that the distribution and habitat of *Boswellia frereana* is 'restricted to N. Somalia.' [10]

CONCLUSION

Based on credible research and analysis of the three key factors—selection of species, place of origin, and quality of chemical constituents—Young Living reaffirms that *Boswellia carteri* from East Africa and *Boswellia sacra* from Oman contain the most potent blend of naturally occurring constituents with the most desirable therapeutic benefits.

Although its wellness potential should not be dismissed, *Boswellia frereana* is inferior to *B. carteri* and *B. sacra* because it lacks the important chemical constituents required for the highest therapeutic benefit.

NOTES

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