

# Formulating with Woods





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*“Forests, the green lungs of our planet,  
perfume the air we breathe.*

*The trees, from their roots to their tops, contain their essential oils,  
their essences, their perfumes.*

*They are huge sources of inspiration for perfumers.”*

**Pierre Bénard**



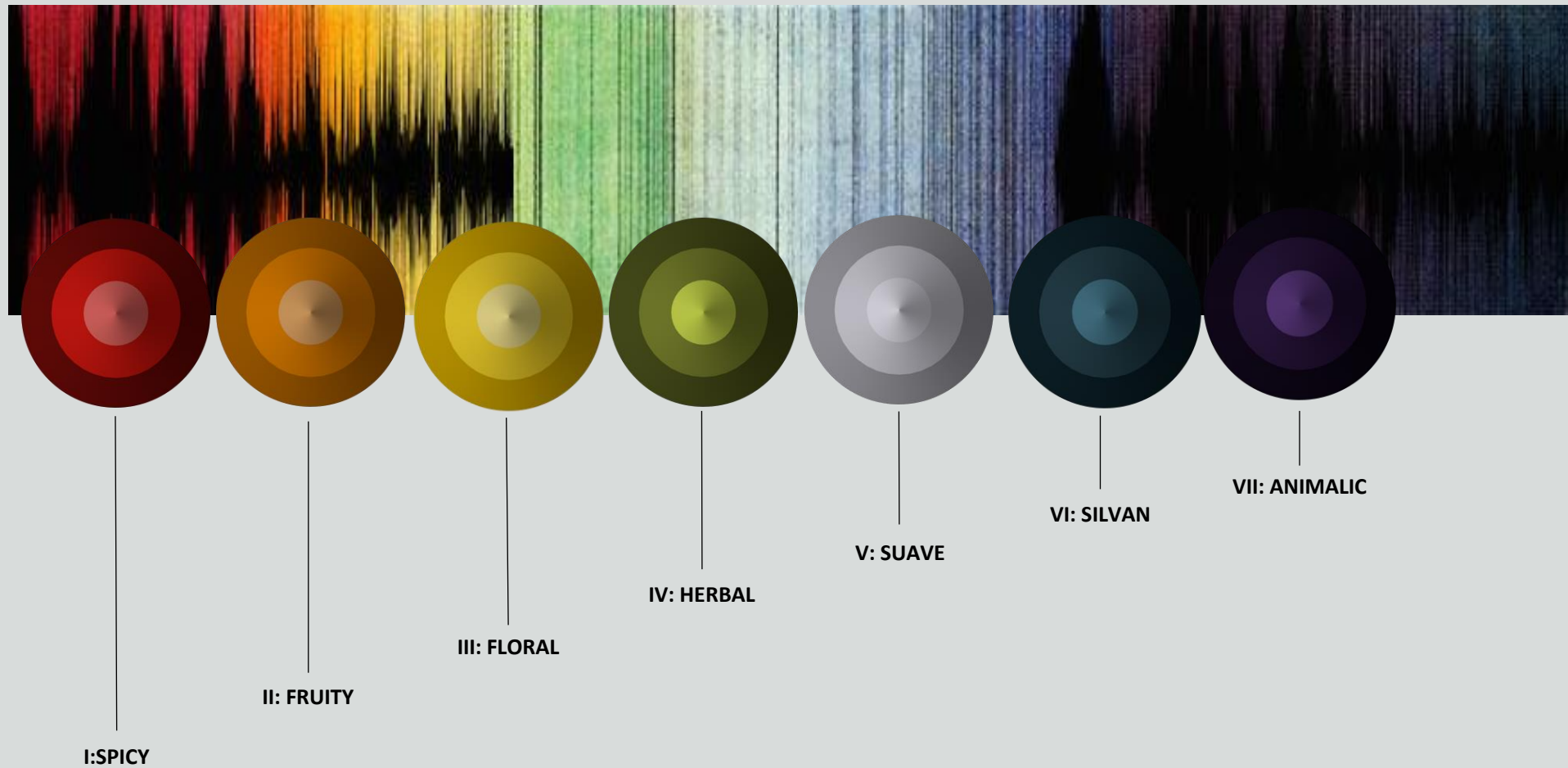
**QUINTIS**  
SANDALWOOD



**OSMOART**  
PARFUMS COULEURS & SONS

# SYSTEMATIC OF SCENTS

## SEVEN OLFACTORY AREAS



# OVERVIEW OF SILVAN

## WOODS & WOODY NOTES



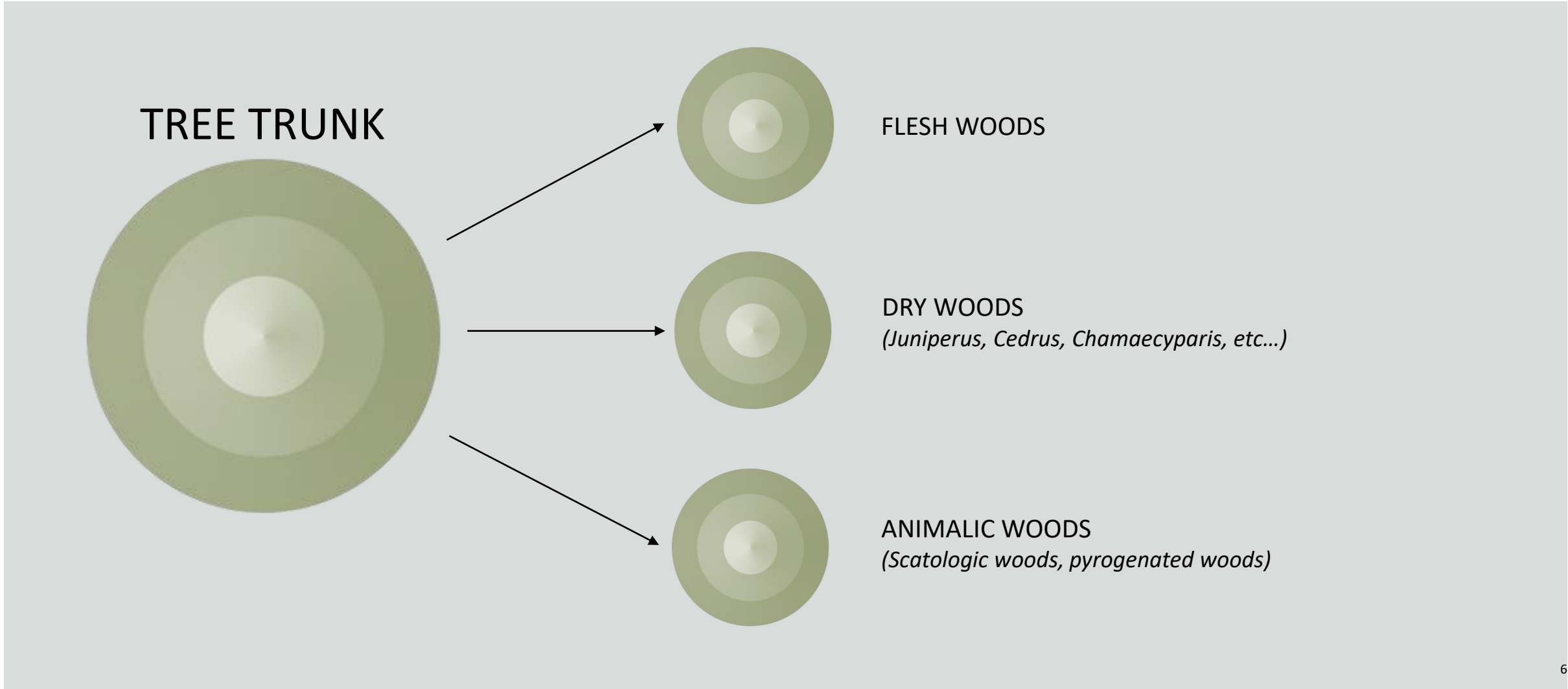
# TREE TRUNK

## TREE SPINE



# TRUNK WOODS

## LINEAR SCENTS



# IMMERSION IN THE FLESH WOODS

## SKIN WOODS



# SANDALWOOD GENUS

SANTALUM (15 SPECIES)

OLFACTION 1 : SANTALUM SPICATUM E.O (DOUBLE DISTILLED)

***Santalum album*** (Mysore sandalwood or white sandalwood).

***Santalum spicatum*** (Australian sandalwood)

***Santalum austrocaledonicum*** (Pacific sandalwood).

***Santalum lanceolatum*** (whose HE contains lanceol).

***Santalum yasi*** (from Fiji and Tonga).

***Santalum murrayanum*** (Western Australia, called Bitter quandong).

***Santalum acuminatum*** (Western Australia, called Sweet quandong).

***Santalum macgregorii*** (Papua New Guinea).

***Santalum insulare*** (French Polynesia).

...etc





# PERFUMER'S SANDALWOODS

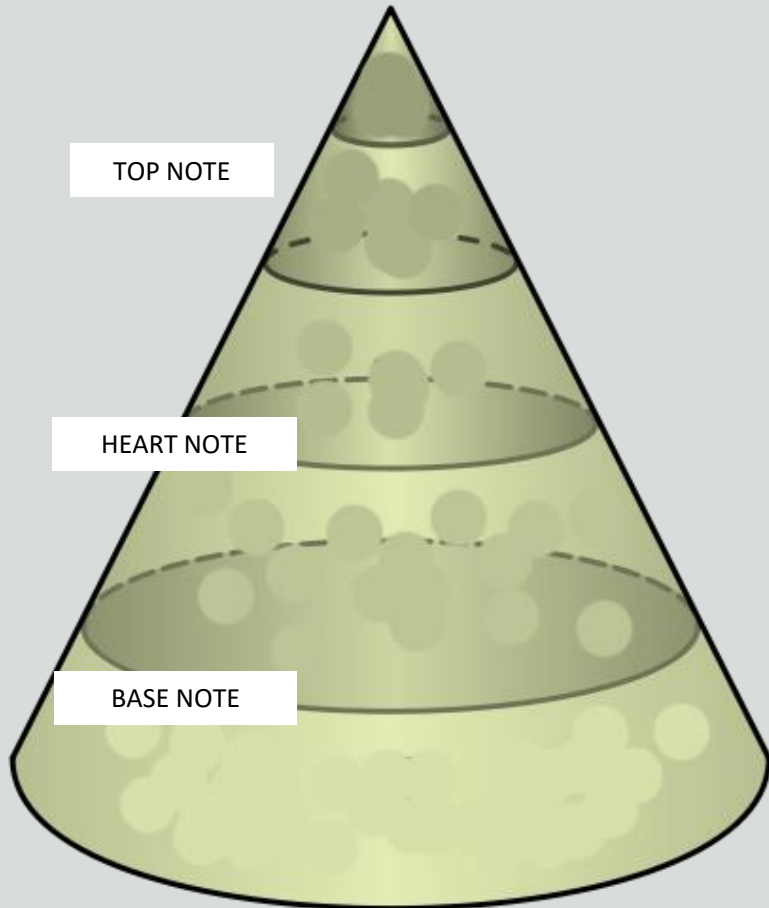
## DIFFERENTIATION

	AUSTRAL SANDALWOOD		INDIAN SANDALWOOD
Latin Name	<b>Santalum austrocaledonicum</b>	<b>Santalum spicatum</b>	<b>Santalum album</b>
Latin meaning	The term <i>austrocaledonicum</i> refers to New Caledonia.	<i>Spicatum</i> means "ear-shaped"	<i>Album</i> , in Latin "white", refers to the sapwood, pale green or white.
Origin	New Caledonia and Vanuatu.	Western Australia.	South India ( <i>Andhra Pradesh, Tamil Nadu, Karnataka</i> ) & Indonesia ( <i>Flores, Sumba, Timor</i> ).
Aspect	Tree up to 10 meters tall with gray bark and light green foliage.	Bush or small tree up to 6 meters high with grey-green foliage.	Tree 8 to 12 meters high, with evergreen oval leaves, of a brilliant green.
Main components	Alpha-Santalol, Béta-santalol, Alpha- <i>trans</i> -bergamotol, <b>Lancéol</b> , <i>Epi</i> -béta-santalol  Beta & Gamma – curcumene – 12 – Ol	Alpha-Santalol, Béta-santalol, Alpha- <i>trans</i> -bergamotol, <b>Nuciférals, Béta-curcumèn-12-ol, Gamma-curcumène, Farnésol</b>	Alpha-Santalol, Béta-santalol, Alpha- <i>trans</i> -bergamotol, <i>Epi</i> -béta-santalol
Olfactory notes	<i>Woody and velvety appearance</i>	<i>More earthy and raw smell</i>	<i>Round, creamy and milky notes</i>

# FIXATIVE

## IN THE WAKE OF SANDALWOOD

## OLFACTION 2 : SANTALUM ALBUM E.O (MATURED)



In perfumery, fixation is a process that promotes **the retention of the perfume for as long as possible.**

A fixative is a compound used to **equalize the vapor pressures, and therefore the volatilities of the raw materials** that make up a perfume and thus increasing **its tenacity and “sillage”**.

# DIAMOND SANDALWOOD

## NOSEDIVE INTO INDIAN SANDALWOOD

Sandalwood E.O is a fixing material but also a fragrant material **like vetiver, labdanum or patchouli.**

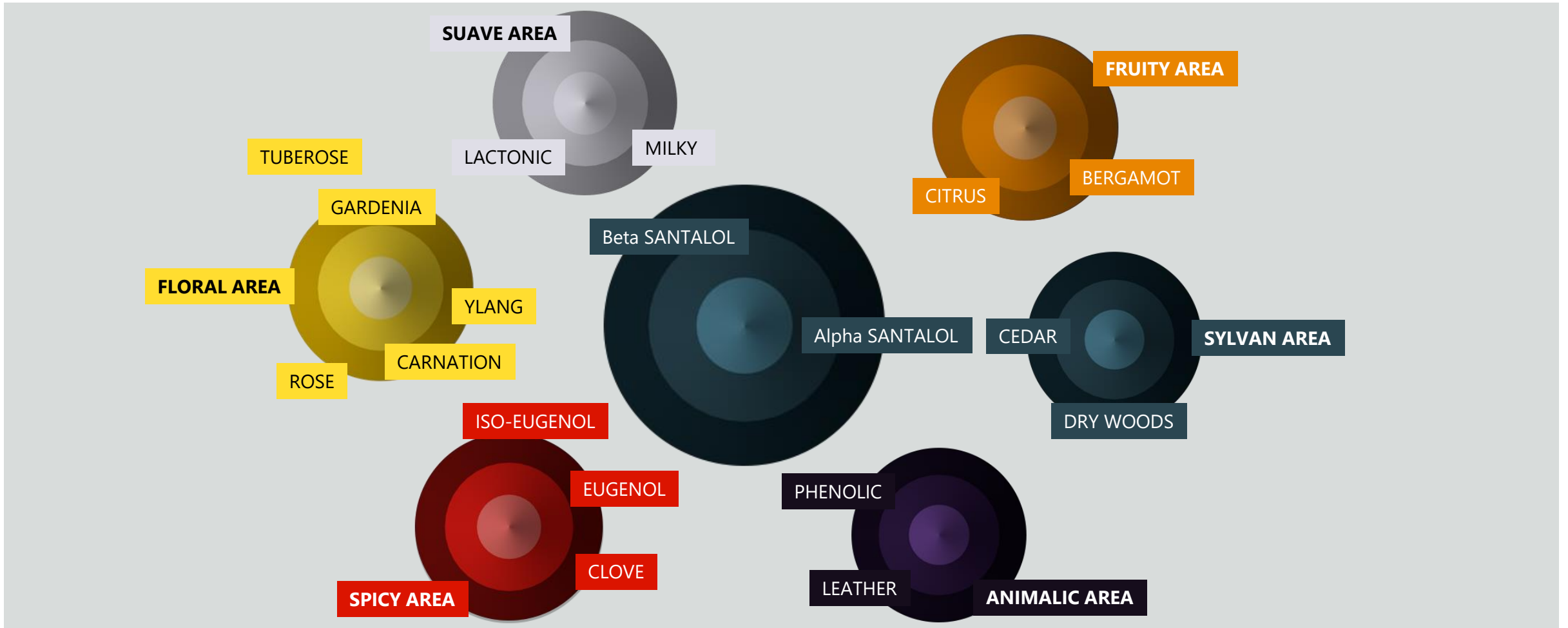
In the **history of perfumery**, patchouli was used for its fixation even before its smell.

In fact, today, patchouli is in most perfume compositions.



# SANDALWOOD MULTIFACETS

## TOWARDS DIFFERENT INSPIRATIONS



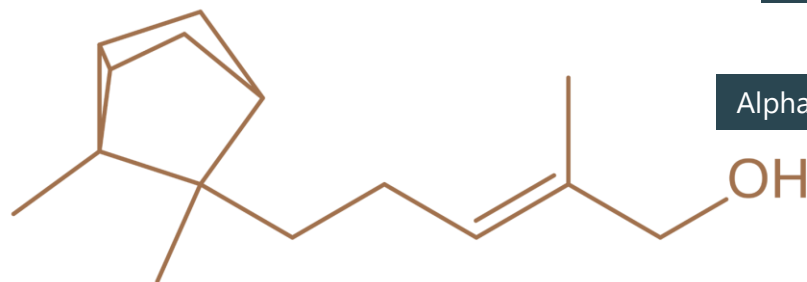
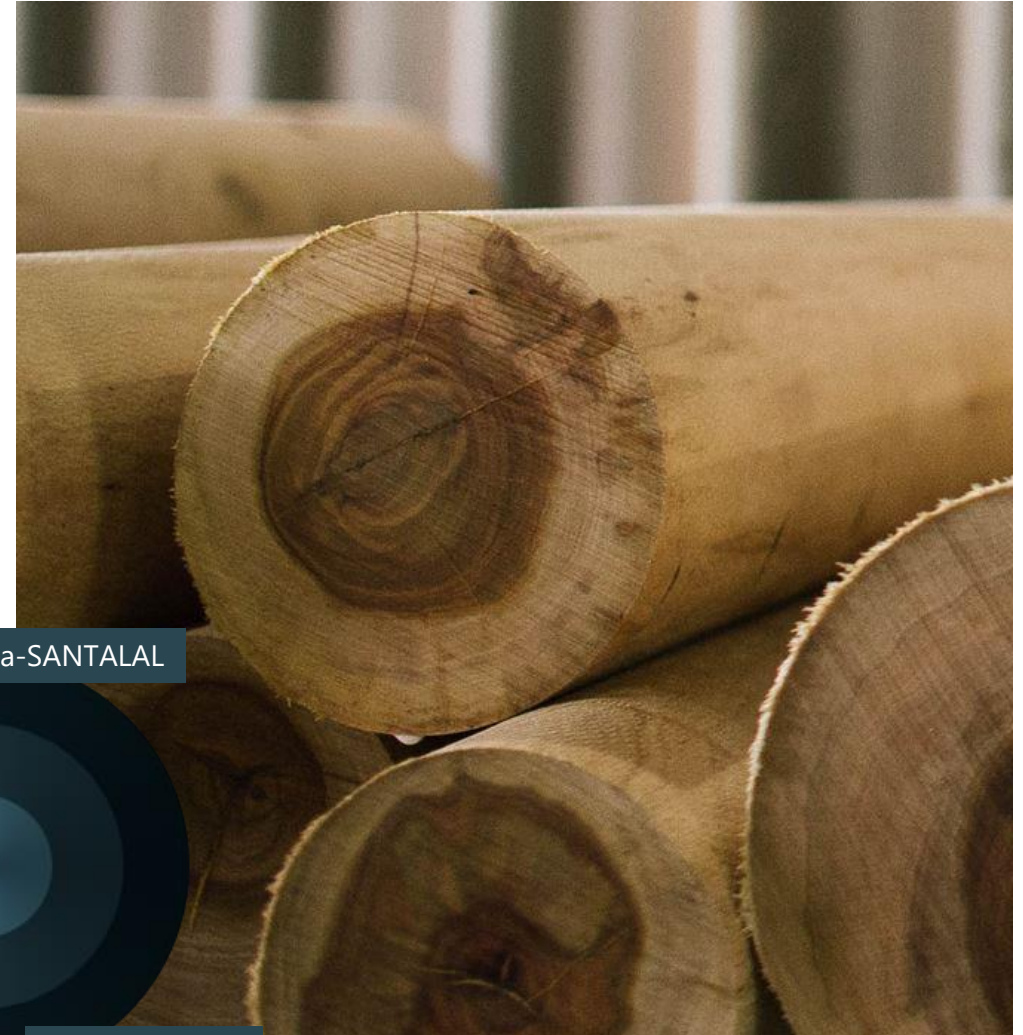
# A WOODY NOTE

## DRY WOOD

First, it's logical, that a **tree smells of wood**.

In sandalwood E.O we also notice a certain **dryness**.

These **dry woody notes** come from the molecules of *alpha-santalene*, *alpha-santalol* and *alpha-santalal*.



Alpha-SANTALAL

Alpha-SANTALENE

Alpha-SANTALOL

DRY WOODS

SYLVAN AREA

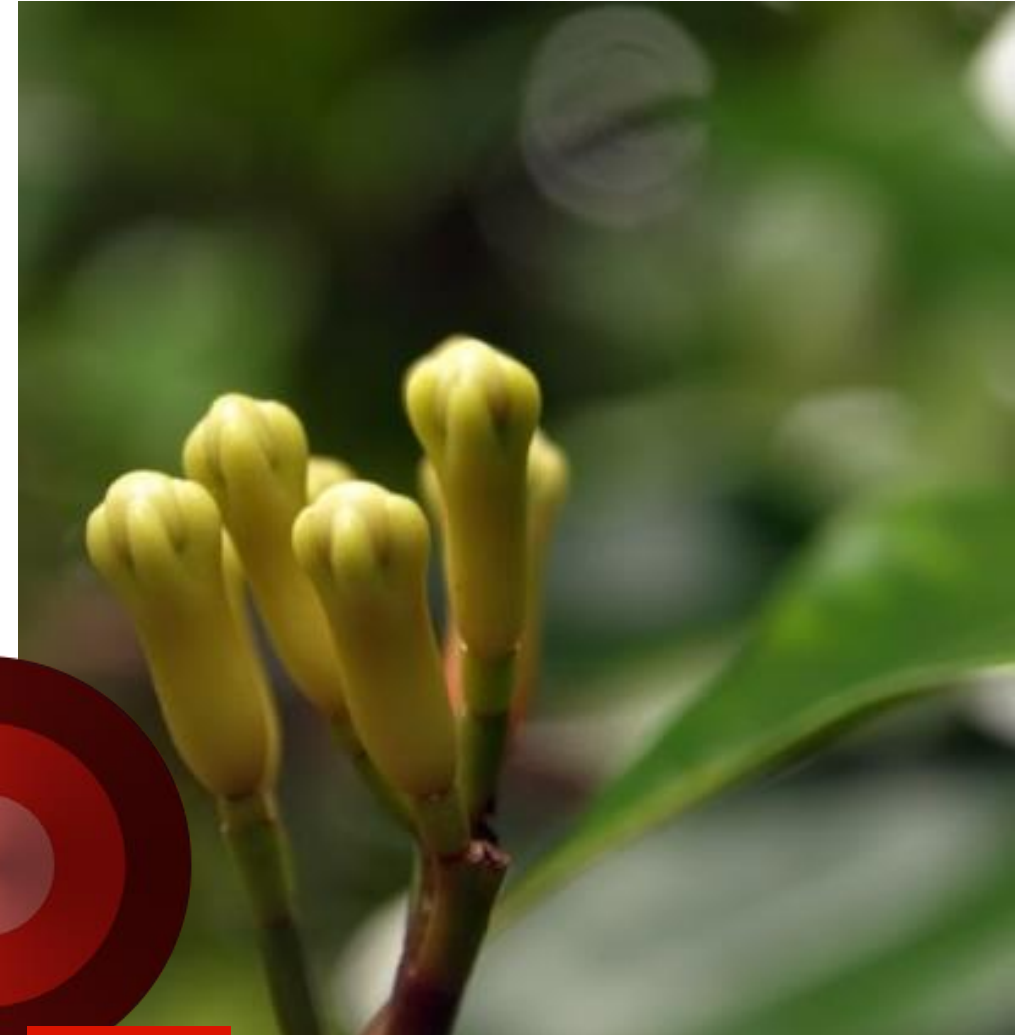
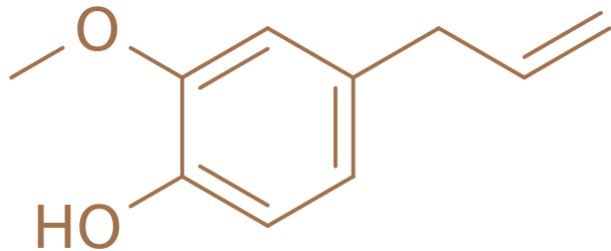
# SPICY SANDALWOOD

## PHENOLS

The **presence of phenols** gives some **leathery and smoky** aspects.

**Eugenol** and its derivative **Iso-eugenol** bring a **warm spicy** note which it nice to introduce in floral accords like **ylang-ylang, wallflowers and especially carnation**.

This is why the essential oil of sandalwood is excellent to prolong their **spicy, narcotic and exotic character**.



ISO-EUGENOL

EUGENOL

WARM SPICES

SPICY AREA

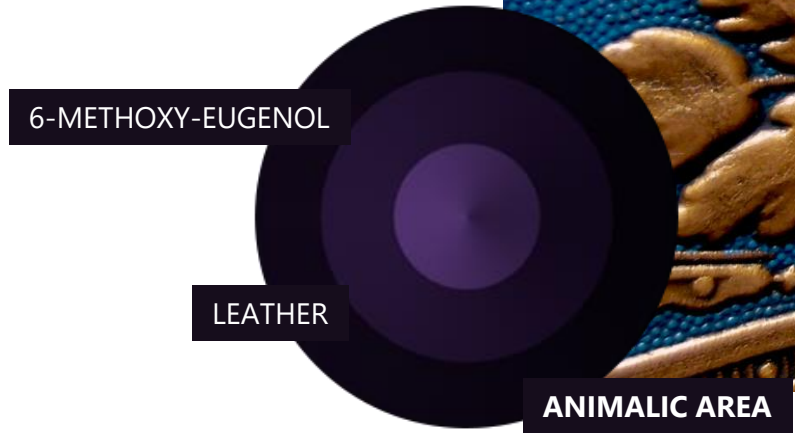
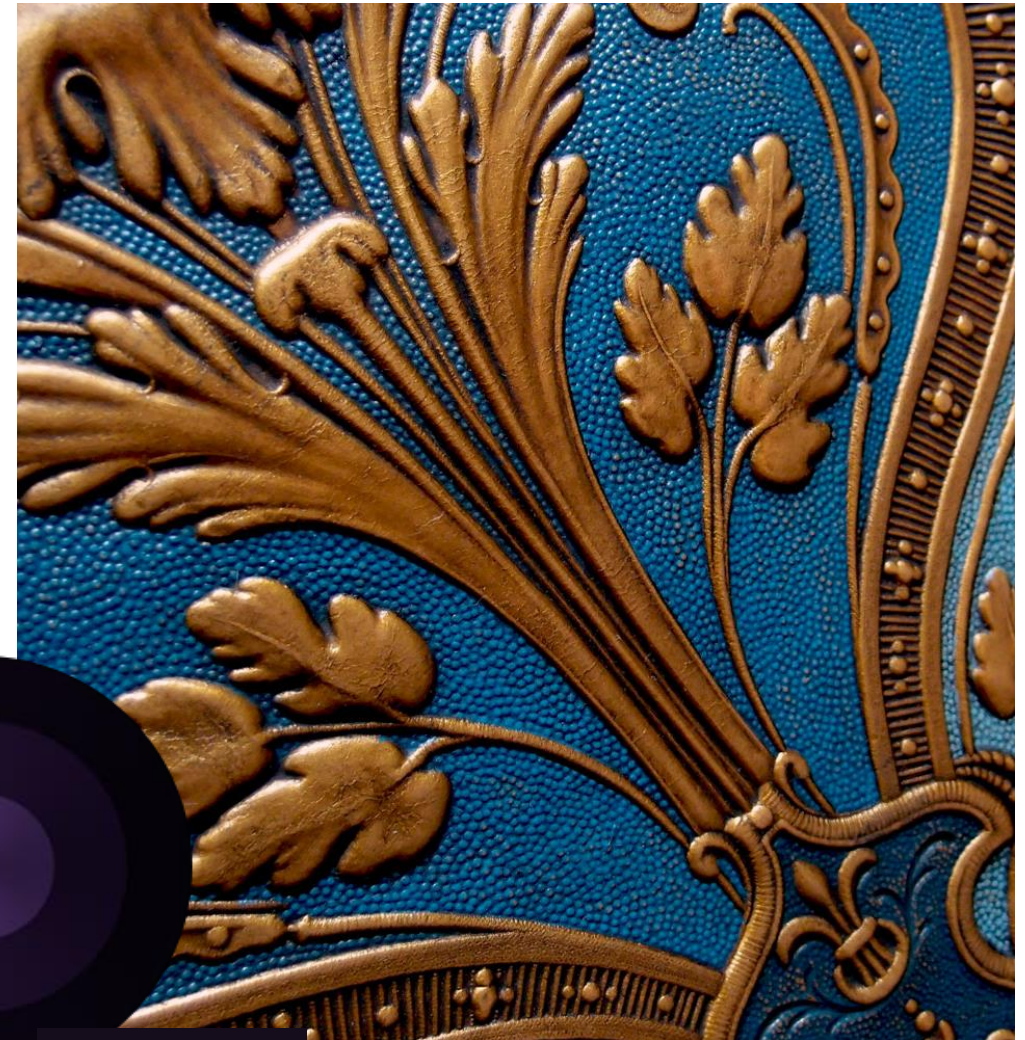
# LEATHERY SANDALWOOD

## CORDOBAN LEATHER

The phenol **6-methoxy-eugenol** brings notes of fire.

These **pyrogenic notes** are found in essential oils **obtained by dry distillation**, like birch or cade, used in the so-called "**Cuir de Russie**" accord.

But, the olfactory **association of sandalwood and leather** dates back to the Arab presence in Spain during the middle ages % where the famous **leather of Cordoba** was perfumed with sandalwood.



# A FLORAL WEDDING

## ARCHETYPE ACCORD

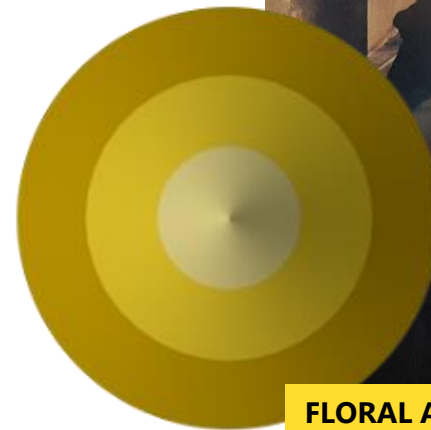
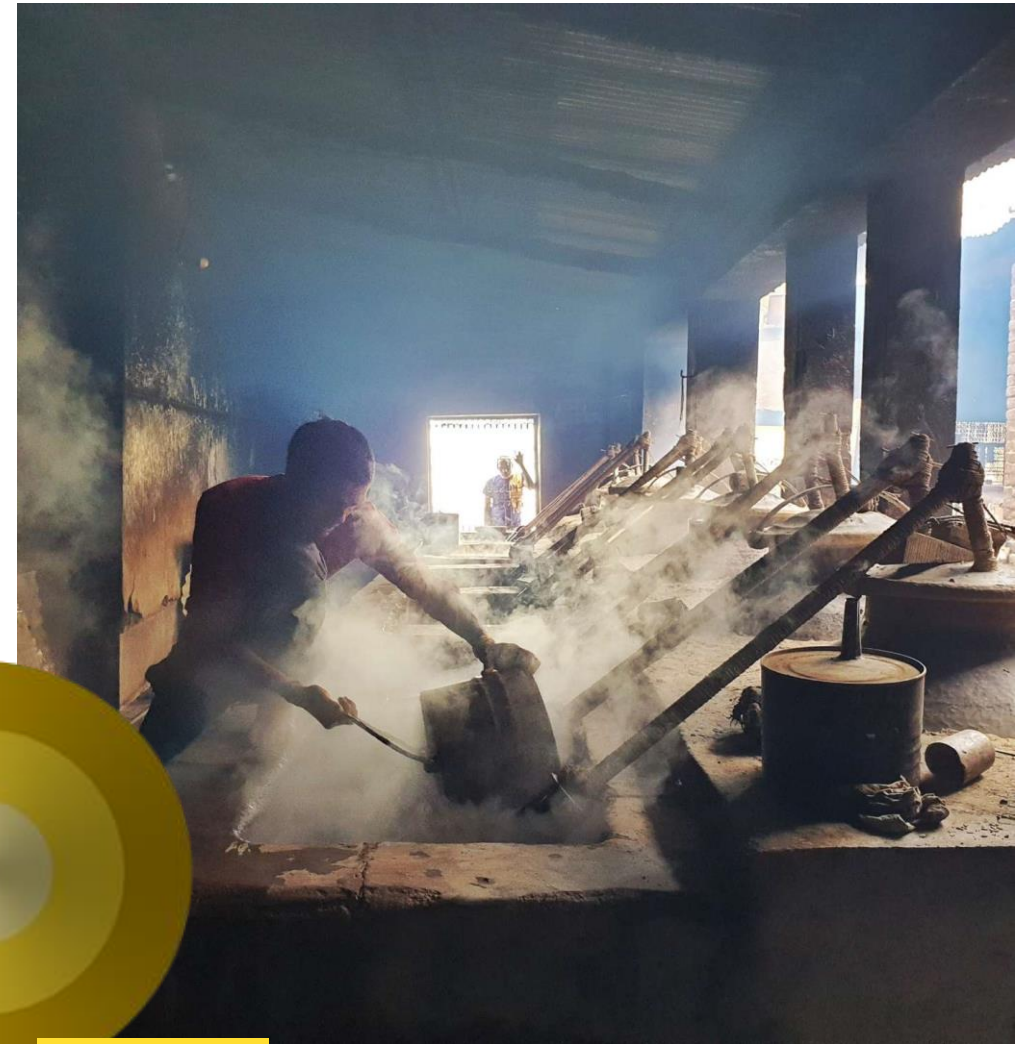
Sandalwood enhances floral accords !

I find sandalwood essential oil is reminiscent of the scent of the skin as well as the **silky petals of a rose.**

The accord **rose-sandalwood** has become an **archetype accord** reminiscent of the attars of traditional Indian culture.

Attars are made by **co-distillation of flowers and spices with essential oil of sandalwood.**

A kind of « **enfleurage** » !



FLORAL AREA

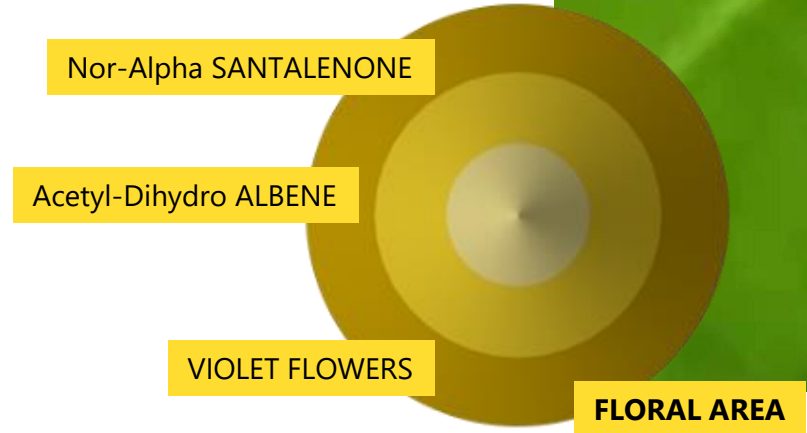
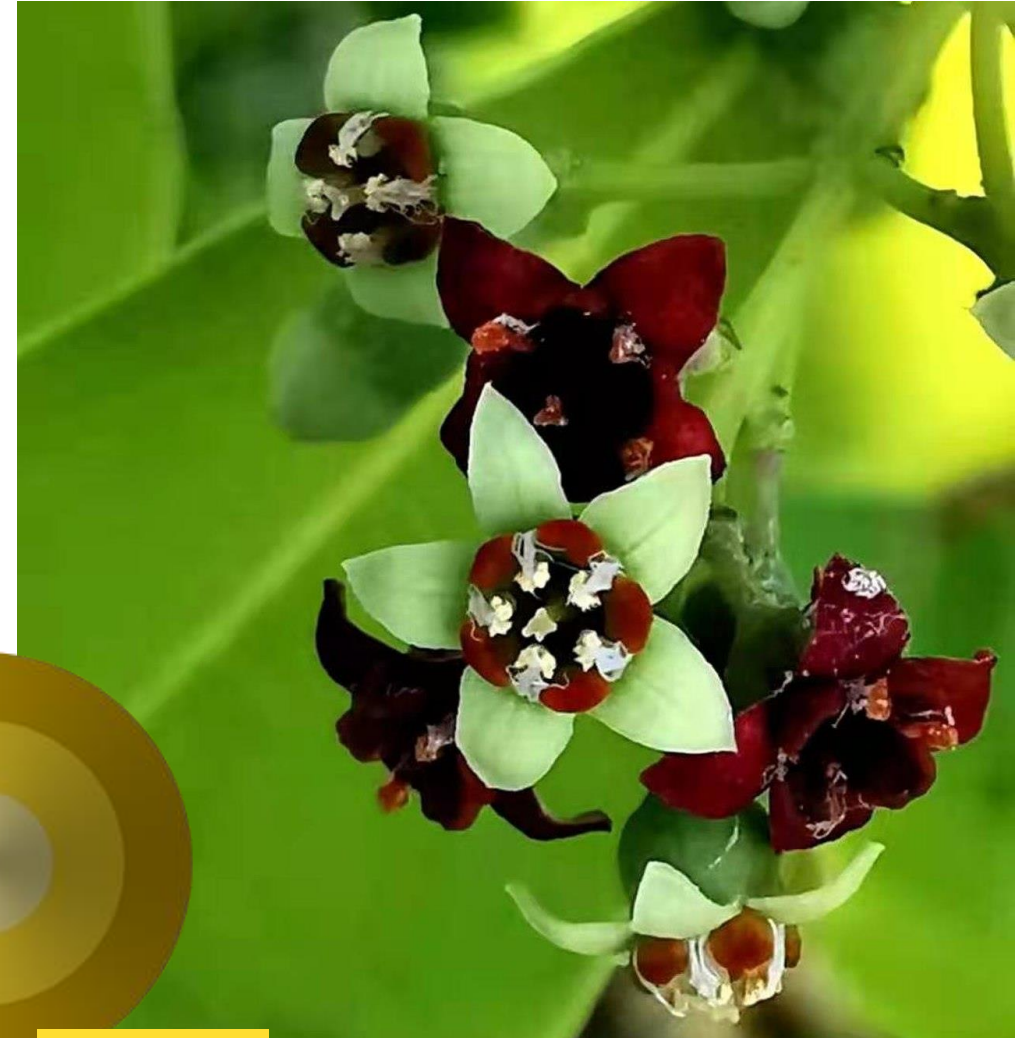


# FLOWERS OF SANDALWOOD

## VIOLET FLOWERS

What is less known is that sandalwood has strong **smelling ionone-like molecules**, such as the ***Nor-alpha Santalenone*** and ***Acetyl-dihydro-albene*** molecules.

It connects to such flower-ionones as **boronia and osmanthus**, products which contain **natural ionones**.



# POWDERY FLOWERS

## FLAKE FLOWERS

Its *para-methyl-acetophenone* molecule translates the flaky aspect of **powdery** and **aniseed flowers** like mimosa, hawthorn, lilac or black locust.



Para-Methyl-ACETOPHENONE

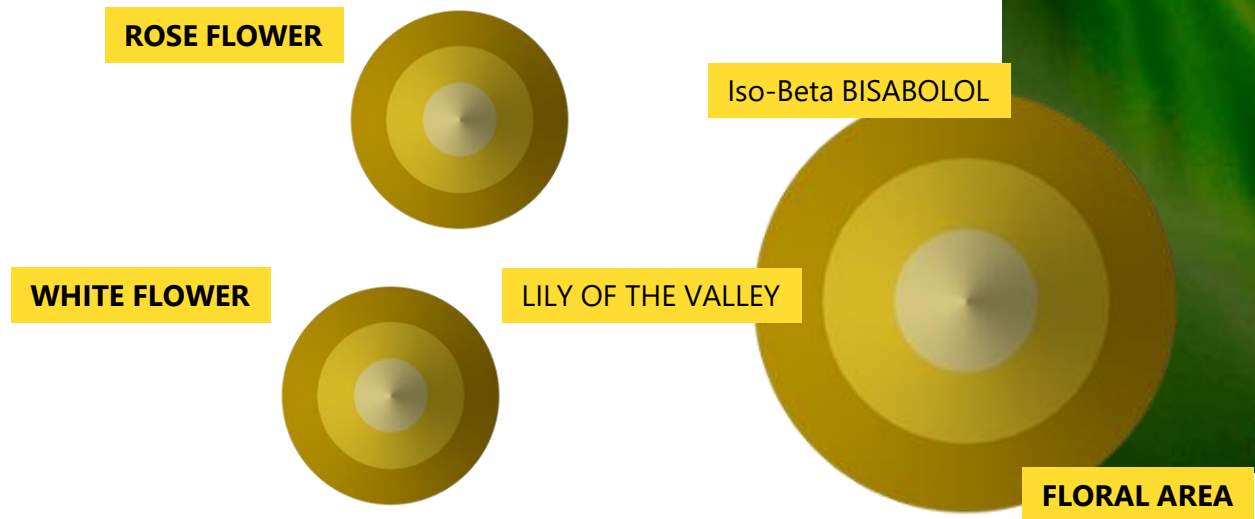
ANISEED FLOWERS

FLORAL AREA

# FLORAL WOOD

## WHITE & ROSE FLOWER ACCORDS

The *Iso-beta bisabolol* molecule has been isolated from sandalwood essential oils in Eastern India and Western Australia and only the four stereoisomeric forms (6R, 7R) have a strong, pleasant floral note towards lily of the valley.

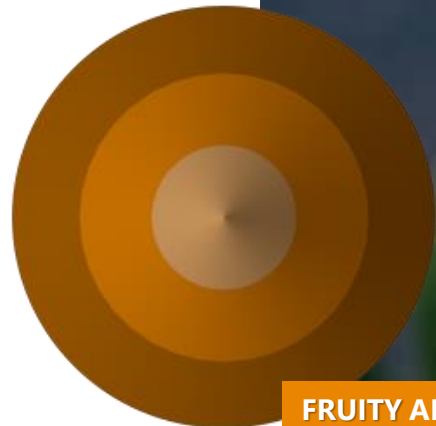


# MAGIC TREE

## GARDEN OF HESPERIDES

Although very few terpenes are needed to have a fresh citrus effect, **sandalwood E.O** accompanies them wonderfully.

In certain sandalwood essential oils , we find notes of **dried grapefruit skin**, like the **effect of *nootkatone*** in vetiver.



FRUITY AREA

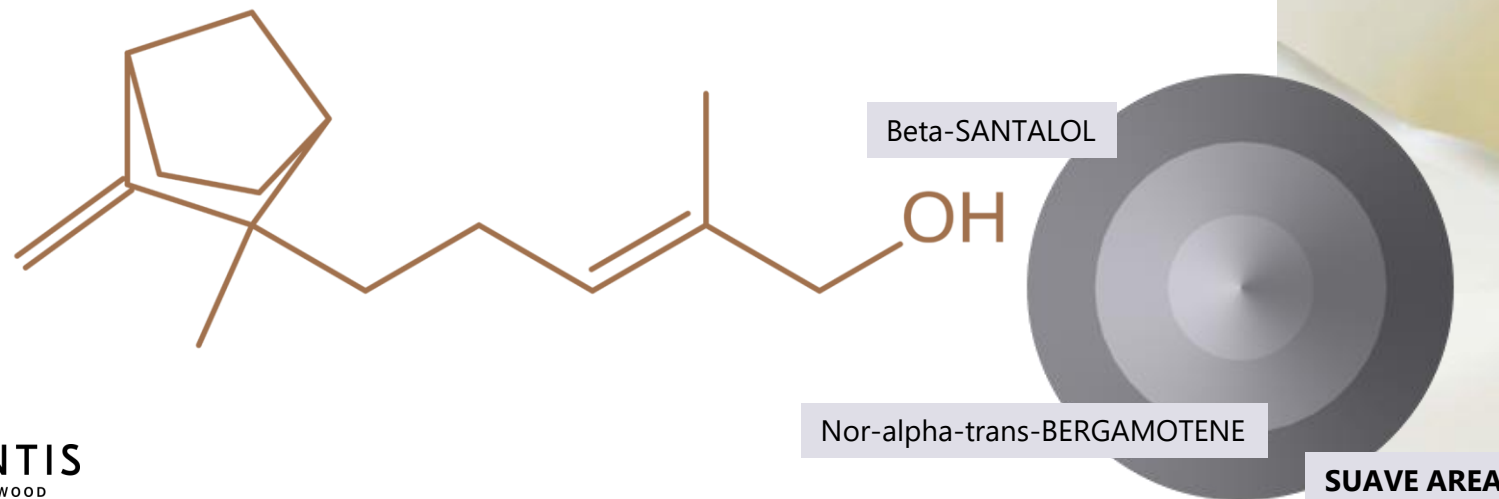
# MILKY EFFECT

## SUAVE NOTES

## OLFACTION 3 : SANTALUM ALBUM E.O (MILKY)

But, the perfumer's holy grail is this naturally **indomitable milky note!**

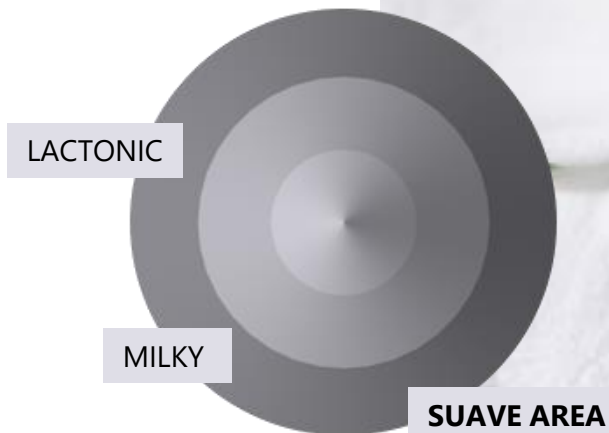
Mainly due to the content of ***beta santalol*** also to ***Nor-alpha-trans-bergamotene***.



# MILKY ACCORDS

## LACTONIC FLOWERS

This milky note only found in white sandalwood is very interesting with **white flowers** that have lactonic character, such as **gardenia and tuberose**, forever, my favorite flower!



# PERFUME THE SPACE

A MILKY WAY

*Pierre Bénard*

THANK YOU



**QUINTIS**  
SANDALWOOD

**OSMOART**  
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2020 WORLD  
PERFUMERY  
CONGRESS

The Sensory Event for Fragrance Leaders