

# Portuguese Certified Organic Prickly Pear Seed Oil: a powerful, multifunctional, 100% natural and pure cosmetic ingredient

Diálogos do Bosque • Herdade dos Catos - Gralheira CCI 1304 • 7050-636 Cortiçadas de Lavre | Portugal



26-27 SEPTIEMBRE | PALAU DE CONGRESSOS  
DE BARCELONA  
**2018** | FIRA 1 MONTJUÏC

## PRICKLY PEAR SEED OIL

The plant: *Opuntia ficus-indica* (Cactaceae)

Origin: Africa, Mediterranean countries, USA southwest, Mexico north

Flowers: big, colour - yellow, orange or red



# PRICKLY PEAR SEED OIL

*Opuntia ficus-indica*

- Ornamentation
- Nutritive
  - Human consumption (Fresh fruit)
  - Cattle forage
- Bioactive
  - Juice from the fruit: source of sweetner and natural colorants
  - Seeds from the fruit (30-40%): important ingredients like aminoacids, highly absorbable carbohidrates, minerals, vitamin C and fibers



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# PRICKLY PEAR SEED OIL



Emollient in cosmetic products

Barrier repair - Fatty acids high composition

Antioxidant - Phenols

Anti-inflammatory - Sterols

Regenerative effect - Tocopherol and linoleic acid

# PRICKLY PEAR SEED OIL



Anti-wrinkle effect - Tocopherol and Linoleic acid

Firming effect - Linoleic acid

Velvety skin sensation - Linoleic acid

Photoaging prevention - Ferrulic acid

Safety in cosmetics

SAMPLE

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do bosque



**PRICKLY PEAR SEED OIL**  
*100% pure & organic vegetable oil  
selected seeds - cold pressed*

**INGREDIENTS:** 100% Opuntia Ficus Indica Seed Oil  
**MANUFACTURED BY:** **DIALOGOS DO BOSQUE**, Lda  
Herdade dos Catos - Gralheira CCI 1304  
7050-636 Cort. Lavre | info@dialogosdobosque.pt  
**WWW.DIALOGOSDOBOSQUE.PT**  
**MADE IN PORTUGAL**

Best before:

Batch nr.

20mle



PT-BIO-05  
Portugal Agriculture

# PRICKLY PEAR SEED OIL: Diálogos do Bosque

**Phenol  
content**

High  
Content

Good  
antioxidant  
profile

444.40 mg equivalentes gallic acid/g



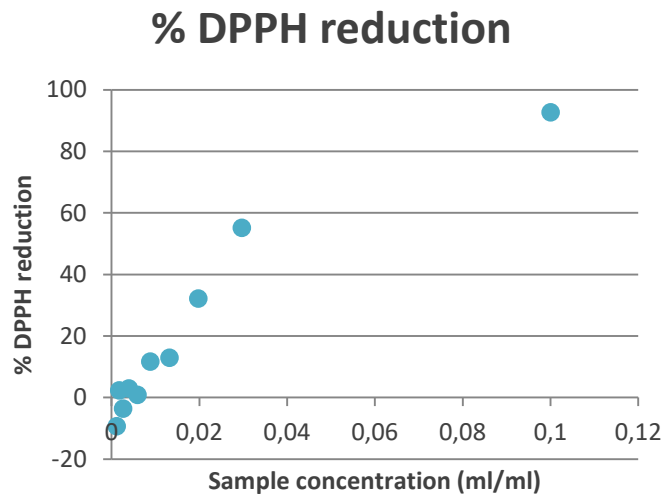
diálogos  
do bosque



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# PRICKLY PEAR SEED OIL: Diálogos do Bosque



Antioxidant activity index (Sherer et al 2009)

AAI < 0.5

AAI 0.5 – 1.0

AAI 1.0 – 2.0

AAI > 2.0

POOR

MODERATE

STRONG

VERY STRONG

EC50 (sample) = 27.91  $\mu$ l/ml ; AAI = 1.79

Extraction with methanol (vortex 5 minutes followed by centrifugation at 4500 rpm for 5 minutes; analysis of the top phase)

# PRICKLY PEAR SEED OIL: Diálogos do Bosque

## Phenol content

High Content

Good antioxidant profile

444.40 mg equivalentes gallic acid/g

## Linoleic acid

High content

Sensorial properties

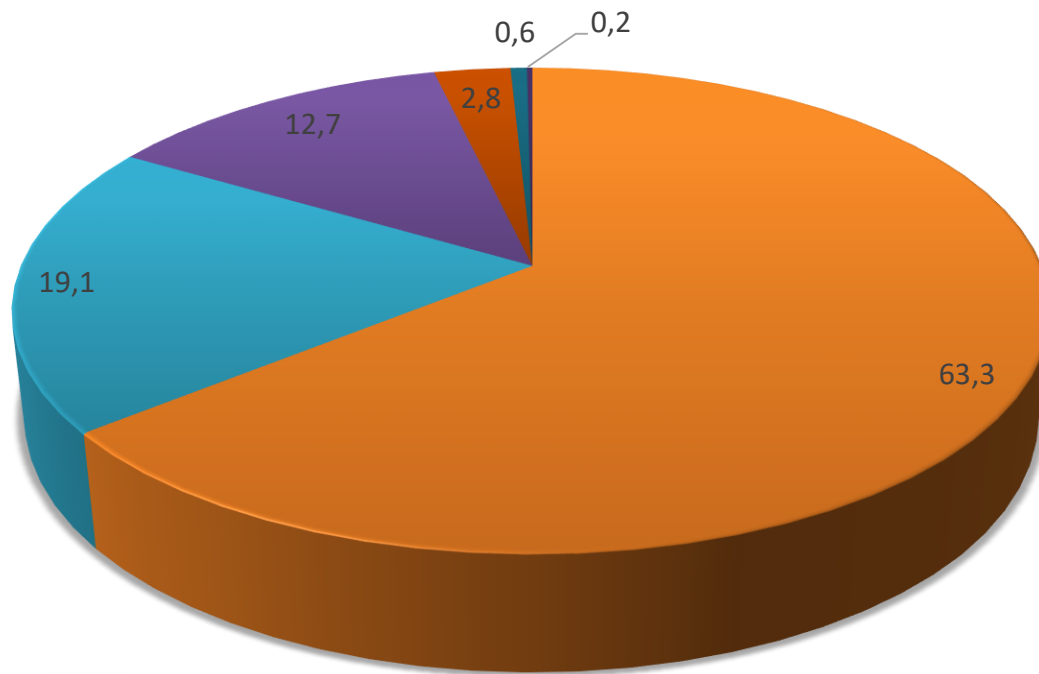
66.3% of total fatty acid composition

diálogos do bosque



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# PRICKLY PEAR SEED OIL: Diálogos do Bosque



Linoleic acid (C18:2)

Oleic acid (C18:1)

Palmitic acid (C16:0)

Stearic acid (C18:0)

Palmitoleic acid (C16:1)

Linolenic acid (C18:3)

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# PRICKLY PEAR SEED OIL: Diálogos do Bosque

<b>Appearance</b>	Clear and viscous yellowish liquid
<b>Color</b>	Yellow to green
<b>Odor</b>	Characteristic, greasy/oily with a nutty aroma
<b>Relative density</b>	0.897 (at 20°C)
<b>Refractive index</b>	1.4738 (at 22.4°C)
<b>Water solubility</b>	Insoluble in water Soluble in oils and ethanol
<b>Phenol content</b>	444.40 mg equivalents gallic acid / g sample
<b>Viscosity</b> (CPA-40Z; DV3TR, Brookfield)	53.34 cP (Newtonian fluid)



# PRICKLY PEAR SEED OIL: Diálogos do Bosque

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Sensorial properties

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## Biological production

Alentejo

Diálogos do Bosque



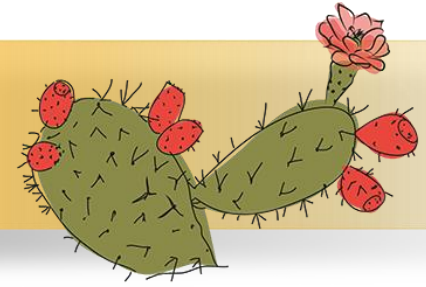
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# Diálogos do Bosque



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~ agricultura biológica ~

- Portuguese company, specialized in the production of Prickly seed oil since 2013
- Located at Alentejo - Portugal
- Biological Certified production
- Certified unit for the preparation and transformation of cosmetic ingredient
- Best agriculture practices: fertilization, watersupply, polinization
- High standard quality of the oil: process of seed separation from the fruit, sanitation and drying of the seeds
- Cold extration of the oil

# Diálogos do Bosque

## Concluding Remarks

Chemical profile with high content of linoleic acid and phenols

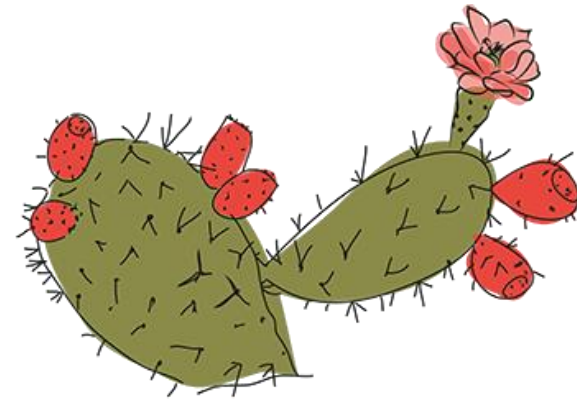
Diferent bioactivities focused on healthy skin claims - strong antioxidant

High quality standard conditions: from plant production to the oil extration

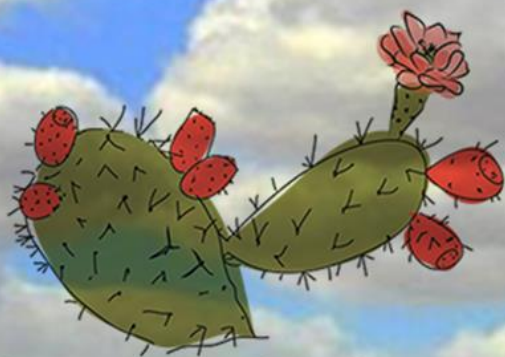
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