

# FEEDBACK

Model Forest of Provence and its work on lentisk pistachio



#### Summary

**Presentation of Provence Model Forest** 1

#### 2 Mobilization and transformation

- **Resource** mobilization 1
- Transformation into essential oil and hydrosol 2
- Items sent to the laboratory 3
- 3 Laboratory study



















#### 1. Presentation of Provence Model Forest

- The purpose of the association is to implement a partnership process aimed at promoting the sustainable development of Provençal forest areas with reference to the concept of model forest landscape.
- It was created at the initiative of the southern Provence-Alpes-Côte d'Azur region in 2013 (which heads its supervisory board), it is recognized as being of general interest.
- It has a little more than 80 members (public, private, associations, etc.)





#### Its perimeter

- 4 reference massifs: Massifs de l'Etoile, du Garlaban, the PNR de la Sainte-Baume, and the Massif des Maures, or 309,803 hectares and 77 municipalities.
- It is part of the international network of model forests (created in Canada), and an active stakeholder in the Mediterranean Model Forest Network.









#### An international network



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### Our 2021 actions

- Actions in favor of the sectors:
  - Animation around the cork oak tree: Working group, Cork oak portal, Magazine
  - Study on the valuation of the strawberry tree
  - Study on the potential of certain species with the Nice chemistry institute
  - Planting of more than 1000 vera pistachio trees and pistachio revival program in Provence
- Events and exhibitions
- Quercus Suber Art and Design Competition 2020
  - Cork oak weekend La Valette-du-Var.
- European projects
  - Med'Lentisk, on the valuation of lentisk pistachio
  - Forest'Ed, on forestry education
  - Cooperation and education as keys to sustainable development, on the sustainable management of forest areas and environmental education
  - Tiling to support the creation of a model forest in Catalonia
- Creation of a new website





#### Mobilization and transformation

- A. Resource mobilization
- Via a partnership with a
- known landscaped area, we
- were able to mobilize a truck
- of foliage.





















- **B. Transformation into essential oil and hydrosol**
- The steps below (transport, leaf stripping,
- placing in vat).

















## 3. Laboratory study

- All the elements of the previous slide were studied in the laboratory (activity test and constituents) and compared, to assess their potential.
- Several techniques and enzymatic tests

TEST	ACTIONS	ACTIVITIES
DPPH	Removal of excess free radicals by neutralization or decomposition.	Antioxidants
Tyrosinase	Regulation of the coloring of newly formed skin.	Whitening, skin repair, anti-stain, healing, complexion illuminator
Lipoxygenase	Involvement in the synthesis of inflammatory mediators, in cell growth or even in the expression of growth factors.	Anti-inflammatory, skin repair, soothing
Elastase	Degradation of the network of elastin fibers, collagen and other proteins of the extracellular matrix.	Anti-aging, skin elasticity, skin repair, lifting
Collagenase	Involvement in the degradation of collagen fibers.	Anti-aging, revitalizing, firming, restructuring
Hyaluronidase	Involvement in the degradation of hyaluronic acids.	Anti-aging, nourishing, moisturizing





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#### Histogram of the biological activities of hydroalcoholic extracts





#### Histogram of the biological activities of propylene glycol extracts

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ANTI-HYALURONIDASE

Histogram of the biological activities of essential oil and hydrosol



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#### To remember

- Five raw materials studied (dry, fresh leaves, buds, berries, bark) as well as essential oil and hydrosol
- Common quality: very good anti-aging activities. skin elasticity. firming. anti-inflammatory
- The most interesting: the leaves and
- the buds
- The most innovative and R & D approac
- possible: very little studied so far,
- the bud is revealed the most
- interesting (antioxidant activities,
- anti-aging, and anti-inflammatory).



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#### Model Forest of Provence and the lentiscus pistachio



# **THANK YOU**















