



**Integrating agroecology  
with the downstream:  
non-food value chains**

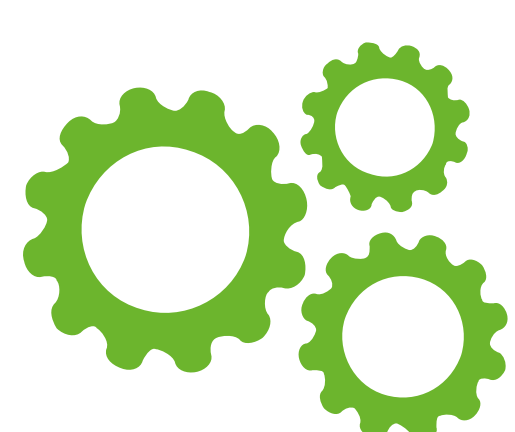


**AGRI  
Innovation** summit 2019

## Operational Group

### Development of guayule experimental plot in Languedoc-Roussillon Occitanie (France)

Implantation de parcelles de démonstration de culture de guayule en région Languedoc-Roussillon Occitanie



## Practical problem

in a context of abandoned wine land and limited water resources prove that guayule can be grown in the south of France, transfer of technology to farmers.



## Partners

Cirad, SCEA JP Duez, Bio-ORB-PPAM, GAEC Hautes Coumes, Mairie de Clairac, CA 66 PO.



## Calendar

Start: 01/01/2017  
End: 01/01/2019



## Budget

Total amount:  
€236,510

## Objectives of the project

- Initiate new alternative crop for the production of natural rubber in Europe
- Setting of 5 experimental sites with different soils and climates
- Study the impact of cultural practices (with or without irrigation), planting season, types of guayule varieties on the plant growth, rubber/resins content measurement (solvent extraction/ ASE, near infrared spectroscopy/NIRS), field mortality with wintering
- Adaptation to the climate of various lines of guayule
- Improve and monitor the steps of guayule cultivation from nursery to field for the production of biomass
- Transfer the knowledge of a research organization to farmers and cooperatives
- Production of biomass to supply an extraction pilot plant.

## Main activities

- Planting (season, nursery plant, direct seeding)
- Monitoring mortality, growth, bio-product content
- Support to experimental plots of farmers
- Production of biomass
- Training of farmers and students
- Local seminar, public communication.

## Expected results

- Guayule field demonstration.
- Improve agricultural practice
- Innovative commodities for EU
- Increase demand from farmers
- New extensions in other regions
- Link with the lavender production
- International conference in Montpellier in Nov 2019.

## Results so far/first lessons

- Eight experimental plots with an average of 1500 plants per site
- The nursery company (Nimaplants), has learnt how to grow guayule plants (up to 40.000)
- Best season of planting is in May
- Drop of plant mortality after the first year
- Slow growth depending on soil characteristics
- Weed control is a problem, mainly mechanical
- Training of students of agricultural colleges (IUT Perpignan, Montpellier SupAgro)
- Production of biomass for the extractor available
- Public communication (seminar, video, newspaper).

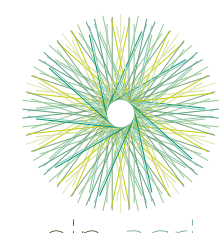
## Who will benefit

- Region Occitanie, implantation of a new crop
- Europe, as natural rubber is a critical material
- Farmers for the diversification of their farm
- Public with communication
- Local industry with production of latex
- Creation of jobs
- Start of a new company GUATECS

**Supported by:**



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