



THE ECOSYSTEM AT THE SERVICE OF BUSINESSES AND COMMUNITIES

2009 Star-up from Scientific Research Centers



Solicaz is an eco-engineering consulting firm that solves ecosystem degradation through bio-inspired approaches.

2016: Certified as Private Research



A Team of Doctors, Engineers, Technicians, Labourers
A cutting-edge Lab in Kourou
A native forest plant nursery in Macouria
A Business Development Identity in Paris





- Highly degraded soils restoration
- Chemicals fertilizers use reduction
- carbon emissions control through soil carbon sequestration
- Climate change mitigation



Mined-out lands reforestation



Biomass plantation and management for the RE sector



Agriculture and Timber industry expertise services



Land Use expertise services

HIGHLY DEGRADED SOIL RESTORATION PROCESS



SOIL FERTILITY RESTORATION



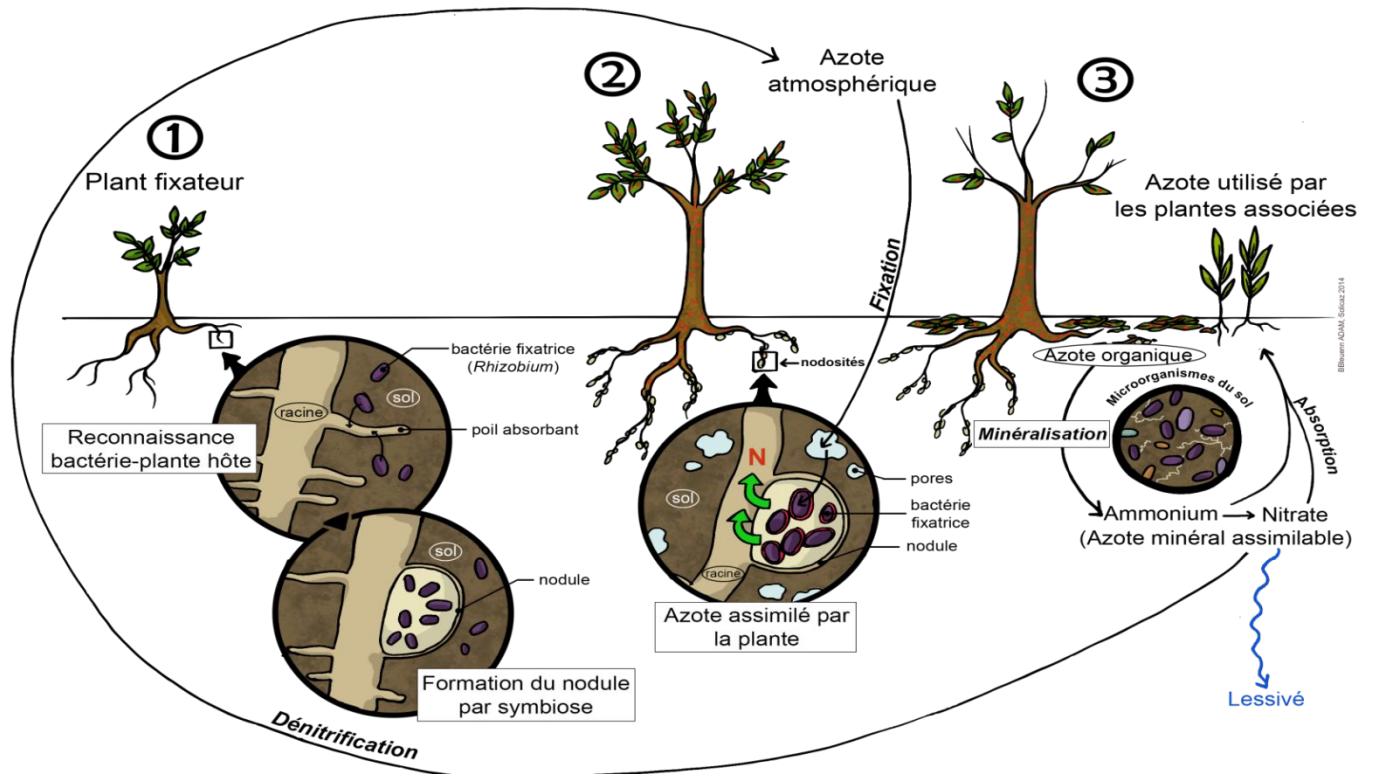
BIODIVERSITY RESTORATION



SOIL FERTILITY BOOST

HIGHLY DEGRADED SOIL RESTORATION CYCLE

Use of nitrogen-fixing plants to regenerate Azote into the soil



Efficient nitrogen-fixing plants come from the symbiosis between particular nitrogen-fixing bacteria and a fungus (mycorrhiza) that enhances nitrogen fixation, and the host plant.



HIGHLY DEGRADED SOIL RESTORATION METHODS



1

Soil Assessment & Analysis

2

Plants Production

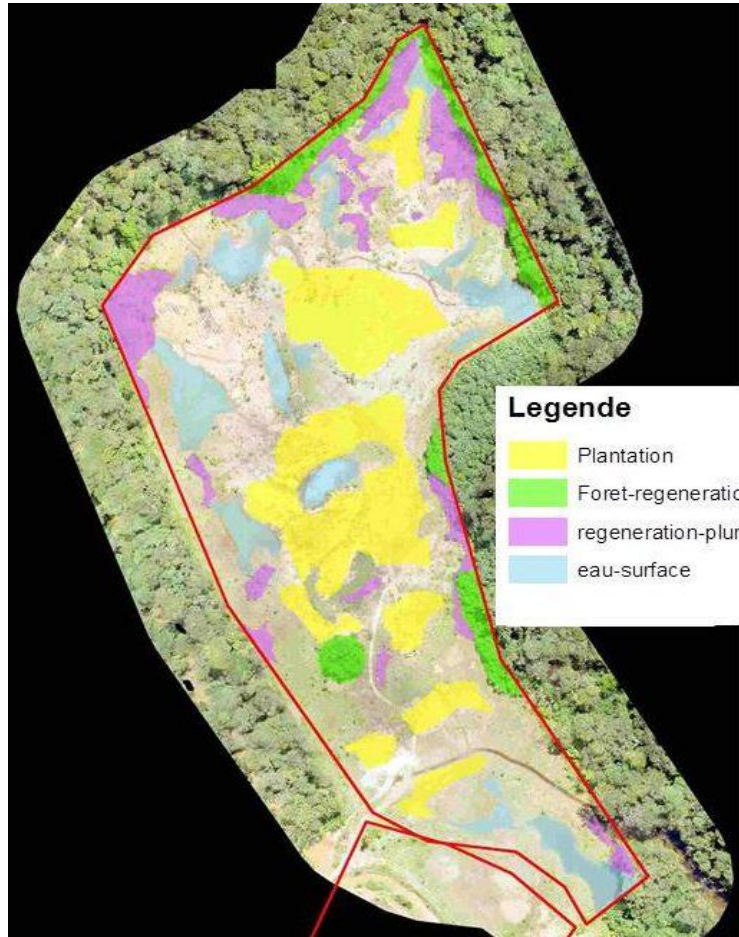
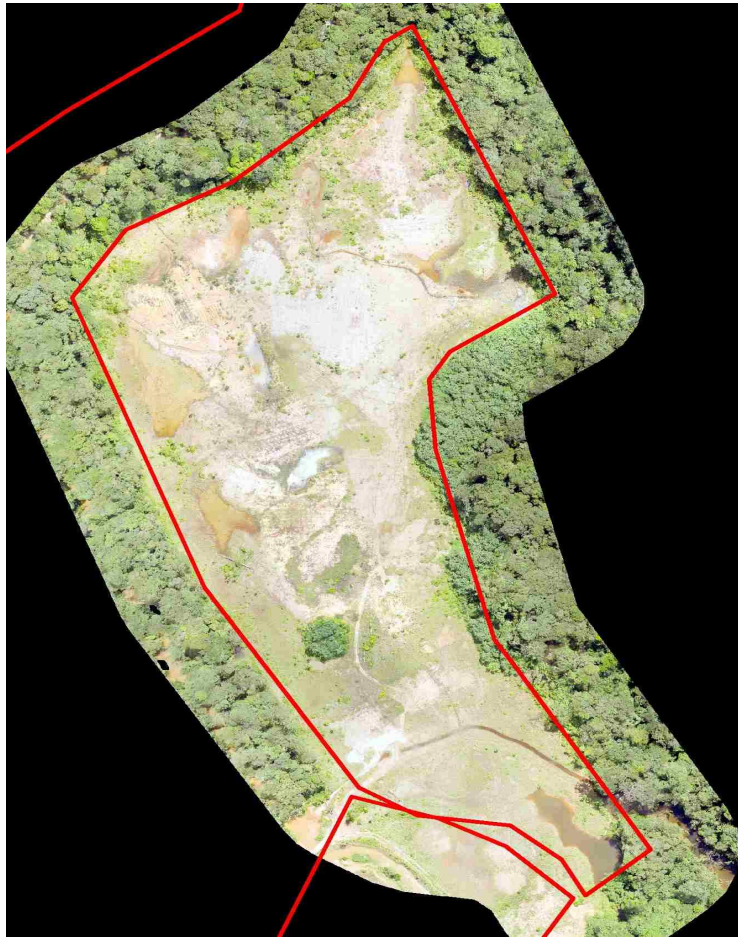
3

Plantation

4

Follow up and Control

1



Legende

- Plantation
- Foret-regeneration
- regeneration-pluristratfiec
- eau-surface



Creek deviation

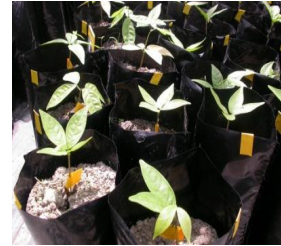


Land rehabilitation



Natural fertilization

1. SEEDS SELECTION FROM ENDEMIC NITROGEN-FIXING PLANTS
2. ULTIMATE SELECTION OF SEEDS AND PREPARATION
3. POTS PREPARATION WITH ADEQUATE SUBSTRATE
4. SOWING and/or CUTTINGS
5. MYCORRHIZATION CONTROL
6. NODULE PROCESS
7. GROWTH FOLLOW-UP
8. PLANTS CARE UP TO MATURITY (4-6 months)



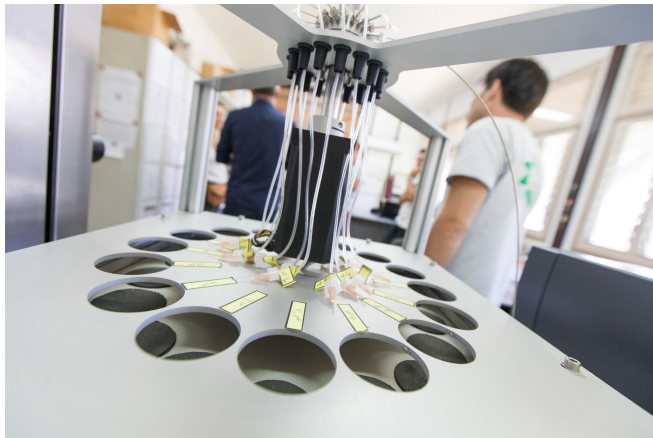
2

- ⇒ **heliophilous (look for sun light)**
- ⇒ **nitrogen-fixing capacity**
- ⇒ **Rapid growth performance**

- ⇒ **supply shadow**
- ⇒ **build a Nitrogen and Carbon forest litter**
- ⇒ **shelter fauna biodiversity**

**In order to
promote the pioneer forestry species to re-appear**

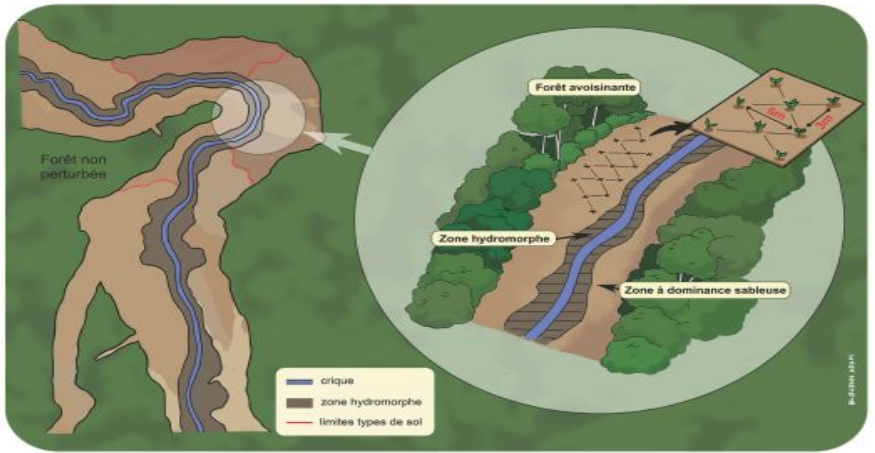




Lab Phase



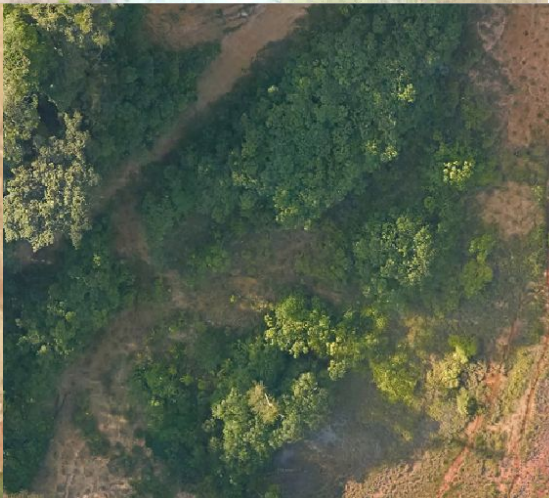
Nursery Phase





Aerial observation by drones to follow the plantation homogeneity

Ground observation to follow fauna biodiversity return



4 PHASE 4 : FOLLOW-UP & CONTROLS



2 years after



2.5 years after



2.5 years after

Site SMSE Guyane Française



1.5 years after



www.solicaz.fr

<https://www.youtube.com/watch?v=vaKFuYPBehM>

