COGENT gives the opportunity to **build international projects** in the most efficient way, and is the only way to get a global appraisal of coconut conservation.
Working together for tomorrow’s agriculture
An original research organization

• National public institution status, but a global mission

• Targeted research for development

• Based on 50 years’ experience in the field combined to an original approach
CIRAD worldwide

12 regional offices in the French overseas regions and abroad

A scientific hub in Montpellier
700 staff members based outside metropolitan France
One main operating principle: research in partnership

- Working together to establish and implement priorities
- Working in the South, where our partners are, in their laboratories or in their fields
- Building scientific capacity
Training the talents of the future: the need to link research and higher education

More than 300 PhD students supervised each year, 60% of them from the South

International Masters courses run with grandes écoles and universities

800 researchers and technicians received and trained each year
CIRAD and coconut sector

- Breeding, genomics (L. Baudouin, R. Bourdeix, JP Labouisse)
- Agronomy (X. Bonneau, J. Ollivier)
- LYTS (M. Dollet, F. Pilet)
- Biofuel (A. Liennard, G. Vaitilingom)
- Coconut wood (H. Baillères)
- Coconut processing and products quality (A. Prades)
- Carbon sequestration (O. Roupsard)
- Entomology (L. Ollivier)
- GIS (G. Coppens)
Morphometric analyses

Coconut water preparation

Kernel preparation

Partners: Vanuatu (CARFV), Ivory Coast (CNRA, University of Cocody)
Computer Coconut Digital Image Analysis

- **Coconut global Shape and Volume**
- **Meat & Cavity Shape**
- **Husk, Shell and Meat Thickness**

**Total duration of analysis = less than 1 min/picture**
Near Infra-Red Spectroscopy (NIRS)

- Moisture content
- Fat Content
- Protein Content
- Carbohydrates content...

Total duration of analysis = 5 min.

Davrieux et al., 2008
Impact of Variety and Stage of Maturity on CW volatile compounds

55 components detected / 41 identified
Ketones, alcohols, aldehydes, acids, esters, lactones...

Prades et al., JSFA, 2012
Vegetable oils as fuel for boats...Science fiction?

No, it’s running now in South of France!

With canola and sunflower oil

Alain Liennard
Thank you