

Welcome to the International Workshop on Crop Agrobiodiversity Monitoring

Agropolis International
23-25 March 2015



Introduction to the International Workshop on Crop Agrobiodiversity Monitoring

Elisabeth Arnaud – Bioversity International
Jean-Louis Pham – IRD/Agropolis Fondation



WHY

WHO

WHERE

FOR WHOM

WHAT

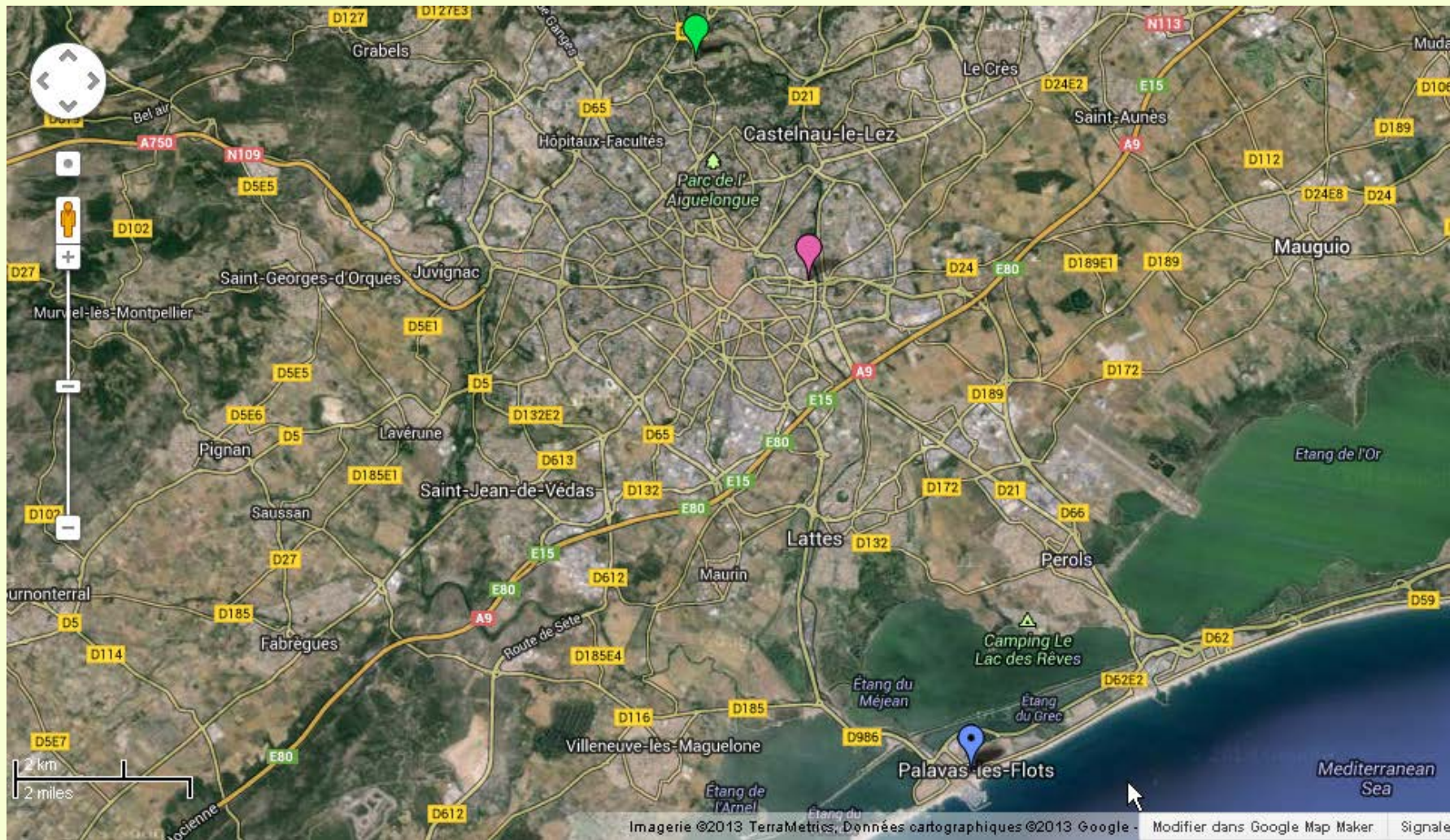
WHEN

HOW

WHERE are you ?

You are here





Montpellier : a diversity hotspot in Agriculture, Food, Biodiversity and Environmental Sciences

**4
universities**

- Montpellier (1 & 2) and 3, Nîmes and Perpignan

**10
higher
educational
institutes**

- Montpellier SupAgro, CIHEAM/IAM.M, AgroParisTech/ENGREF, ENSC.M, ESCAIA, ICRA, ISTOM, Sup de Co, EMA, CODIGE

**13 research
institutes**

- **National:** BRGM, CEA, Irstea (ex CEMAGREF), CIRAD, CNRS, IFREMER, INRA, INSERM, IRD
- **International:** Bioversity International, CSIRO, EMBRAPA, USDA

○ **2700** researchers and teachers

○ **5000** students

→ **10000** people overall

Montpellier : a diversity hotspot in Agriculture, Food, Biodiversity and Environmental Sciences

A trademark : **Agropolis**



Association of research and higher education institutes (*including Bioversity*) working in the field of **agriculture, food, biodiversity and environment**



- **Promote and support high-level research and higher education**
- **Broaden international research partnerships in agricultural sciences and sustainable development research**



- **Agropolis Resource Center for Crop Conservation, Adaptation and Diversity**

WHY

this workshop?

39. How can we develop agreed metrics to monitor progress towards sustainability in different agricultural systems that are appropriate for, and acceptable to, different agroecological, social, economic and political contexts?

The top 100 questions of importance to the future of global agriculture

Jules Pretty^{1*}, William J. Sutherland², Jacqueline Ashby³, Jill Auburn⁴, David Baulcombe⁵, Michael Bell⁶, Jeffrey Bentley^{7,8}, Sam Bickersteth⁹, Katrina Brown¹⁰, Jacob Burke¹¹, Hugh Campbell¹², Kevin Chen¹³, Eve Crowley¹⁴, Ian Crute¹⁵, Dirk Dobbelaere¹⁶, Gareth Edwards-Jones¹⁷, Fernando Funes-Monzote¹⁸, H. Charles J. Godfray¹⁹, Michel Griffon²⁰, Phrek Gypmantisiri²¹, Lawrence Haddad²², Siosiu Halavatau²³, Hans Herren²⁴, Mark Holderness²⁵, Anne-Marie Izac²⁶, Monty Jones²⁷, Parviz Koohafkan²⁸, Rattan Lal²⁹, Timothy Lang³⁰, Jeffrey McNeely³¹, Alexander Mueller¹¹, Nicholas Nisbett³², Andrew Noble³³, Prabhu Pingali³⁴, Yvonne Pinto^{35,36}, Rudy Rabbinge³⁷, N. H. Ravindranath³⁸, Agnes Rola³⁹, Niels Roling³⁷, Colin Sage⁴⁰, William Settle¹¹, J. M. Sha⁴¹, Luo Shiming⁴², Tony Simons⁴³, Pete Smith⁴⁴, Kenneth Strzepeck⁴⁵, Harry Swaine⁴⁶, Eugene Terry⁴⁷, Thomas P. Tomich⁴⁸, Camilla Toulmin⁴⁹, Eduardo Trigo⁵⁰, Stephen Twomlow⁵¹, Jan Kees Vis⁵², Jeremy Wilson⁵³ and Sarah Pilgrim¹

- **An International context**

- Convention on Biological Diversity (CDB) : Aichi biodiversity targets



Target 13

By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.

- Global information systems (GLIS, Divseek, Genesys, GBIF)
- *Need for multi-stakeholder decision-making tools*
- *Build collective knowledge*

- **An International context**

- Convention on Biological Diversity (CDB) : Aichi biodiversity targets
- Sustainable Development Goals (SDG)
- State of the World reports (PGRFA, Agrobiodiversity)
- International Treaty PGRFA consultation on Global Information System
- IPBES
- Global Alliance for Climate Smart Agriculture
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- **Beyond general statements : How to make this operational ?**
- **Bioversity and Agropolis are co-organizers**
 - Both engaged into agrobiodiversity research aside common partners
 - Major on-going and future initiatives :
 - CGIAR Research Programmes (CRPs)
 - ARCAD
 - Willingness to contribute to the debate and actions

Global Information System for *In situ* Conservation and On-farm Management of Plant Genetic Resources for Food and Agriculture

I

Input Paper

For the ITPGRFA Consultation on the Global Information System on Plant Genetic Resources for Food and Agriculture (COGIS-PGRFA)

Contributors (in alphabetical order):

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Nora Castaneda Alvarez (International Center for Tropical Agriculture, CIAT)

Ehsan Dulloo (Bioversity International)

Adam G. Drucker (Bioversity International)

Stef de Haan (International Potato Centre, CIP)

Devra Jarvis (Bioversity International)

Colin Houry (International Center for Tropical Agriculture, CIAT)

Jean Louis Pham (Agropolis Fondation and Institut de Recherche pour le Développement, IRD)

Dag Terje Endresen (GBIF-Norway, Natural History Museum at the University of Oslo)

Léo Valette (Bioversity International)

Ronnie Vernooij (Bioversity International)



The Platform on Agrobiodiversity (PAR), Agropolis International and UN Organization for Food and Agriculture (FAO) expressed their support to the vision of such a global information system for *in situ*/on-farm conservation.

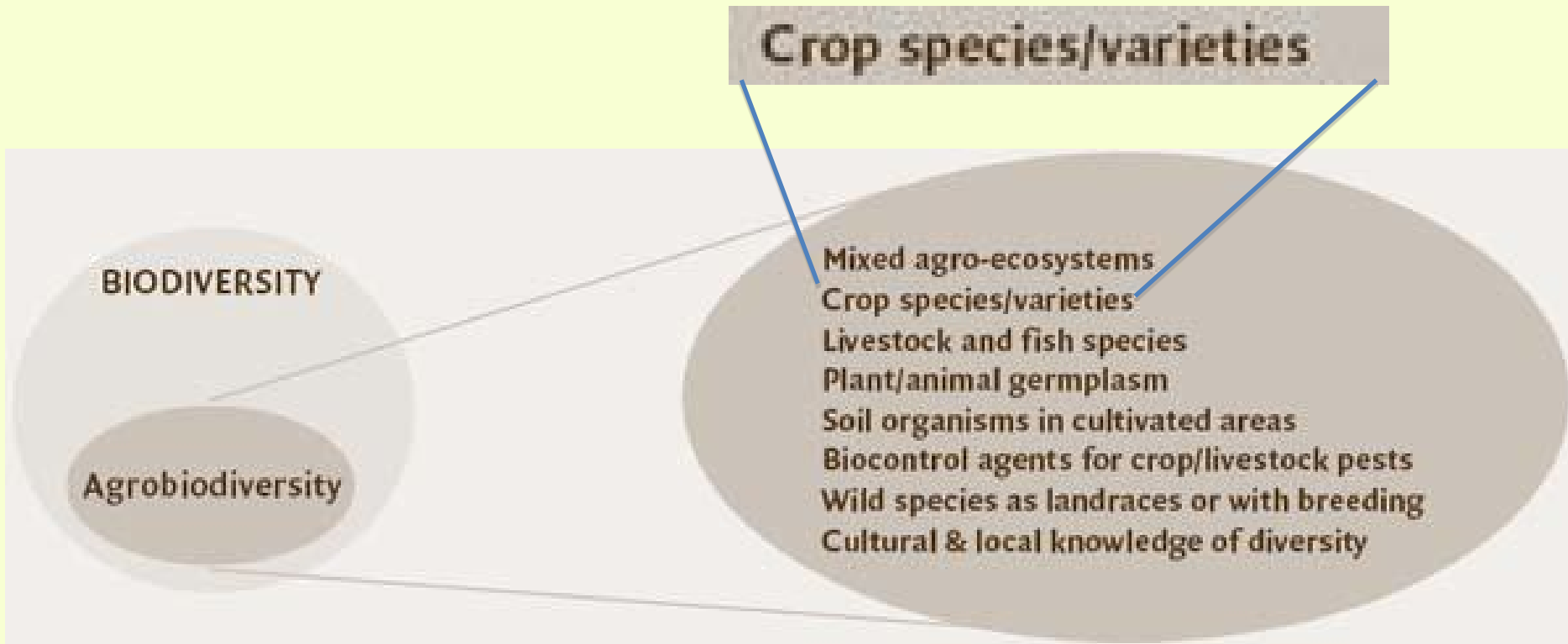
WHAT

is the workshop about ?

Change in the research and conservation targets

- **From 'Plant Genetic resources' to 'Agrobiodiversity'**
- **From the identification and conservation of the 'biological object' ...**
 - What is it ?
 - What to conserve?
 - Where?
- **... to the focus on its dynamics and functions**
 - Evolutionary processes
 - Ecosystem services to agricultural communities
 - Processes of diversification, losses, degradation
 - Sustainable value chain

Focus of the workshop





Issues

- What is crop agrobiodiversity monitoring ?
- **Why** monitoring (or not)?
- **What** to monitor?
- **Who** monitors?
- **For whom** to monitor?
- **Where** to monitor?
- **How** to monitor?
- ...

WHO are you ?

42 Participants + 3 e-Participants

10 Countries: Denmark, France, Ethiopia, Guinea, Italy, Kenya, Peru, Rwanda, Senegal, Sri Lanka

17 Organisations

Agropolis Fondation

Bioversity International

CIP

CIRAD

CNRS

Fondation pour la Recherche sur la Biodiversité

GBIF

Green Movement of Sri Lanka

INRA

IRAG

IRD

Institute of Biodiversity Conservation

ISRA

CERAAS

National Genebank of Rwanda

Platform for Agrobiodiversity Research

University Paris Ouest Nanterre

Many disciplines...



Geography

Remote sensing

In situ conservation on-farm

Ex situ conservation

Plant breeding

Agronomy

Anthropology

Genetics

Ethnobiology,

Seed systems

Community-based biodiversity
management

Ontology

Information systems,

- **Not a comprehensive coverage** of all disciplines needed in agrobiodiversity research
 - No economist
 - No policy specialist
 - ..
- **Not all stakeholders are represented**
 - Few community representatives
 - No policy maker
 - ..
- **Not always intentional, but an evidence that**
 - not all questions can be addressed in 3 days
 - we need first to focus on our own expertise (without losing a larger perspective)

WHAT

do we expect from this meeting?

- Key shared objectives & research questions
- Feasible plans and methods
- Core types of relevant indicators
- Stakeholders to engage
- Strategy for the engagement
- Options for collaborative project proposals
- Report - Paper

HOW

- **Programme**

- Dense
- Some flexibility

- **Working method**

- Stimulate brainstorming, ideas, looking forward
- Be more pragmatic, think ‘operational’, ‘practical’
- All opinions, ideas, questions and suggestions are welcome
- Everybody can and must contribute

- Working language : English-based...

- it is not the native language of many of us
- nevertheless, pls. avoid conversations in French !

Logistics

- Free wifi access
 - But please : no email, no web browsing during sessions!
 - Full attention and participation are required
- Meals
- Transportation
- Administrative matters

WHEN

**does the meeting
really start?**

