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● ● ● Institute of
Taxonomy



Barcoding in Europe

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EDIT



CETAF OBJECTIVES

- CETAF = Consortium of European Taxonomic Facilities



- CETAF Objectives

- Helping to shape the scientific agenda of the European Union
- Unlocking and delivering the knowledge (resource of our collections)
- Working together in taxonomic research: Integrating taxonomic research Strategies
- Developing the human resources needed for the future and valorising taxonomic work



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European Distributed Institute of Taxonomy

- A FP6 Network of Excellence issued from the CETAF
- Aims at integration of 26 taxonomic institutions, including the most important Natural History Museums and Botanical Gardens



EDIT Partnership

Netherlands

- University of Amsterdam
- National Herbarium Netherlands
- Natural History Museum Naturalis
- Centraalbureau voor Schimmelcultures

Denmark

- Natural History Museum

Germany

- Staatliches Museum für Naturkunde
- Freie Universität Berlin Botanical Garden and Botanical Museum
- Museum für Naturkunde der Humboldt-Universität

Belgium

- Royal Belgian Institute of Natural Sciences
- Royal Museum for Central Africa
- National Botanic Garden of Belgium

United Kingdom

- Royal Botanic Gardens, Kew
- Natural History Museum

France

- Muséum National d'Histoire Naturelle
- Institut National de la Recherche Agronomique

Spain

- Consejo Superior de Investigaciones Científicas

Poland

- Polish Academy of Sciences :
 - Museum and Institute of Zoology
 - Institute of Botany

Slovakia

- Slovakian Academy of Sciences
- Institute of Botany
- Comenius University

Hungary

- Hungarian Natural History Museum

Towards a European Distributed Institution of Taxonomy

- Objectives
 - Coordination of Taxonomy in Europe (600M€) into one coherent and ambitious European Research strategy
 - To optimize CETAF facilities
 - To disseminate and share results with all major international initiatives and organisations (GBIF, CBoL, GTI, CBD, ...)
- Includes
 - Taxonomy and classification of life
 - Molecular biology = barcode, phylogeny
 - Management of Collections and other taxonomic infrastructures
 - Biodiversity informatics and web services (50% of the budget)
- Managed by the Directors of the participating institutions
 - sitting together for the first time in two centuries -



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Components

Coordination And integration

EDIT coordination
and management

Resources

Integrating the expert
and expertise basis

Integrating the
infrastructure basis

Coordinating research

Products

Internet Platform
for Cybertaxonomy

Unifying Revisionary
taxonomy

Applying taxonomy
to conservation

Training and
Public Awareness

Making support effective for a global structure

- Support may be found at
 - Institution level
 - National level
 - European level
- **But** support usually goes to research projects, not infrastructures
- **But** integration is necessary at global level (single portal needed for users, BOLD, etc)
- Solution
 - National networks
 - EU network (ESF, EC)
 - IBoL / CBoL (Genome Canada, Sloan Foundation)



Integrating Barcoding in France

- Present barcode providers
 - Museum / CNRS labs (Museum CBoL member, leading lab)
 - INRA = Agronomic Research Institute CBGP lab (INRA CBoL member)
 - Genoscope = high throughput sequencing
- Potential barcode providers
 - CNRS labs engaged in environmental genomics
 - Other INRA labs

Integrating Barcoding in France

- Present and requested support (full cost, 4 years)
 - MNHN / CNRS labs = 1.5 M€
 - INRA = 1.8M€
 - CNRS = amount not decided yet
 - Genoscope = 400,000 sequences
- Some activities funded specifically for barcoding
 - Part of Museum molecular lab (leading lab) 1,8M€ 4 years
 - MarBoL grant (Sloan Foundation) 0,2M€ + core funding
- But most activity funded as part of research projects eg
 - Endemism in New Caledonia 1,5M€ / BC 0,315M€
 - Antarctic species flock 0,6M€ / BC 0,075M€
 - Etc.

Integrating Barcoding in France and beyond

- Needed for integration into ECBOL and IBOL
 - Consortium MNHN / INRA / CNRS / Genoscope
 - Engage non specifically barcode projects (eg CNRS labs engaged in evolutionary projects etc)
 - Engage other INRA labs
 - Coordination through a light umbrella structure, eg support from the Fondation pour la Recherche sur la Biodiversité
- Support searched mostly for additional costs



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