



BRC4Env, a network of Biological Resource Centres for environmental resources

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BRC4Env, a network of Biological Resource Centres for environmental resources

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• The network of Biological Resource Centres BRC4Env

BRC4Env (<https://www.brc4env.fr/>) is a **network of Biological Resource Centres and collections**, one of the 5 **specialized pillars** of the French **Research Infrastructure AgroBRC-RARE** (Ressources Agronomiques pour la Recherche, <http://www6.inrae.fr/agrobrc-rare/>).

BRC4Env aims at **providing** a strategic **delivery of agro-environmental bioresources** for excellent and large-scale, fundamental and applied **research in environmental and agricultural sciences**. These biological and/or genomic resources are sampled from **soils, sediments, waters, agricultural and forest ecosystems...** and preserved in organized collections. They actually include microbial, animal (invertebrates and vertebrates) resources. BRC4Env provides these resources available for researchers from academia, but also industry, technology and additional sectors (NGOs, public society...).

• The Biological Resource Centres of BRC4Env

BRC4Env currently comprises main BRCs and collections:

- The Centre for Soil Genetic Resources of the platform **GenoSol** associated with the **European Centre for Soil Conservation**, a national BRC for soils **unique in Europe** for the storage and conservation of genetic resources (DNA) and soils,
- The Biological Resource Centre **Egg Parasitoids Collection “EP-Coll”**, that aims to collect, characterize, maintain, investigate and share egg parasitoids strains,
- The collection of continental arthropods **CoArCol** (insects and mites collections), comprising series of specimens gathered from all over the world during the last 50 years, preserved dry or in fluid and DNA extracts,
- The historical collection of fish scales and tissues **Colisa**, merging historical samples collected by various research units and long-term observatories , and by “Agence Française pour la Biodiversité”,
- The freshwater microalgae culture collection (**Thonon Culture Collection**) holds more than 900 strains (Diatom, Chlorophyceae, Cyanobacteria...).

BRC4Env comprises several other biological collections (small mammals, nematods...). All these BRCs/collections can be used for the characterization of the environment, but also for other purposes (biocontrol...). The pillar is also open to new BRCs/collections.



• Associated analytical platforms and access to ecosystems



Analytical platforms are associated to BRC4Env for **resource characterization**, in:

- Environmental genomics, **GenoSol**
- Environmental chemistry, **LAS**
- Environmental biochemistry, **Biochem-Env**
- Cellular et molecular imaging, **Dimacell**



Access to ecosystems and **in natura sites** is allowed by:

- The Research Infrastructure **AnaEE-France**
- The Research network in ECOTOXICOLOGY-TOXICOLOGY **RECOTOX**

