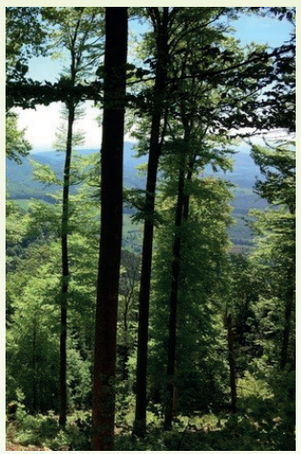
FOREST

The Forest pillar is a unique biological resources centre, present on three INRAE sites: Avignon, Bordeaux and Orleans. Its objective is to collect, conserve, characterise and distribute forest biological resources which are of interest to research, together with their associated phenotyping and genotyping data, in order to make them available to the scientific community.



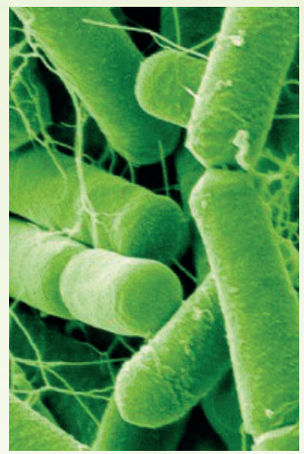
These biological resources consist of collections of trees ex situ, seed and pollen lots, DNA samples, leaves or needles. Ten or so forest species are included: poplars, oaks, wild cherry, wild service trees, ash, chestnut and maple for broadleaf; pines, larch, cedars, firs, cypress, thuja, cryptomeria for conifer.

https://pilierforet.inra.fr

AgroBRC **RARe** French Agronomic BRC Infrastructure

MICRO-ORGANISMS

The Micro-organism pillar of RARe consists of the CIRM (International Centre for Microbial Resources), a «Group of Scientific Interest» composed of collections of microorganisms (bacteria, yeasts and filamentous fungi). CIRM is a member of MIRRI, the European Research Infrastructure on the ESFRI roadmap (http://mirri.org).



Managed by INRAE, CIRM consists of five BRCs, all ISO 9001 certified. These BRCs store over 22,000 strains of plant-associated bacteria, animal and human pathogenic bacteria, food bacteria, yeasts and filamentous fungi. The missions of CIRM are to manage and make its collections accessible to the international scientific community and the sectors concerned.

https://www6.inra.fr/cirm

RARe

AN AGRONOMIC FEDERATION OF FRENCH BIOLOGICAL RESOURCE CENTERS (BRCs)

http://www.agrobrc-rare.org

All sectors of agriculture are concerned:
plant and animal productions, food industry, non-food applications of biomass, clean tech biotechnology.

French research institutions active in agronomy and biology (INRAE, CIRAD, IRD, CNRS) and their partners (technical institutions, higher education institutions) have set up Biological Resource Centers, most of which have received the IBiSA BRCs label. Currently, more than thirty BRCs store millions of resources:

- genomic resources (LAC libraries, tissue and DNA banks),
- breeding samples of 36 families of plants (seeds, plants) and 22 animal species (sperm, embryos),
- 1,300 species of bacteria, yeasts or fungi and 10,000 soil samples hosting microbial consortia.

To discover all these resources:
https://urgi.versailles.inra.fr/rare

PLANTS

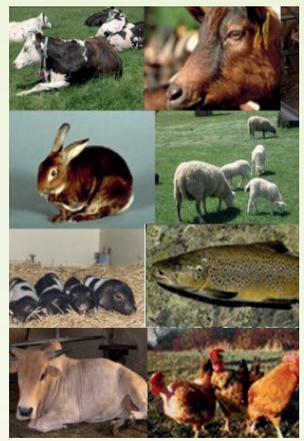
The Plant pillar provides access to genomic resources maintained by the National Center for Plant Genomic Resources (CNRGV) and to genetic resources maintained by the network of Biological Resource Centers of French research and higher education institutions in the field of agronomy.

Plant biological resources are the essential material for not only enhancing the diversity of existing crop varieties, but also developing new ones in a context where agriculture needs to adapt by developing new technical itineraries linked to changeable environmental conditions and new economic and ecological priorities.

http://florilege.arcad-project.org/fr https://cnrgv.toulouse.inra.fr/fr

ANIMALS

The Animal pillar brings together five BRCs that manage genomic or reproductive resources for domestic animal species raised in France (mammals, birds, fish, shellfish). It concerns both farmed and companion animals, in partnership with breeders' associations or breeding companies. It supports research on genetic diversity, selection and biomedical models.



The 'Investing for the Future' project «CRB-Anim» (ANR-11-INBS-0003, from 2012 to 2022) supports the development of new methods for cryopreservation of reproductive resources, the enrichment and the genomic characterization of collections.

http://crb-anim.fr
https://crb-anim.fr/access-to-collection

ENVIRONMENT

The Environment pillar (BRC4Env) currently comprises three BRCs and several collections which manage various biological resources sampled from cropped or natural ecosystems. The network maintains and distributes these resources, as well as their associated data, for the researchers from academic community, private companies and civil society.

Resources comprise collections of environmental matrices (soils and DNAs), collections of invertebrates, vertebrates and microorganisms whose management or dissemination are not directly depending on human action. They are used to describe and characterise the different component of the environment, develop processes for biocontrol of plant pests, and understanding interactions between hosts and parasites.

https://www.brc4env.fr