

## Third National Report of Belgium to the Convention on Biological Diversity

### C. ARTICLES OF THE CONVENTION

#### Article 9 - *Ex-situ* conservation

67. <input checked="" type="checkbox"/> On Article 9(a) and (b), has your country adopted measures for the <i>ex-situ</i> conservation of components of biological diversity native to your country and originating outside your country?	
a) No	
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	X
d) Yes, comprehensive measures are in place (please provide details below)	

Further information on the measures adopted for the *ex-situ* conservation of components of biodiversity native to your country and originating outside your country.

The **Belgian Co-ordinated Collections of Micro-organisms** (BCCM) holds about 34,700 filamentous fungus or yeast strains, 18,000 bacterial strains, 1,900 plasmids (as pure DNA) and 14 unique cDNA libraries ([www.belspo.be/bccm](http://www.belspo.be/bccm)). The BCCM consortium consists of four complementary culture collections at the service of the scientific and industrial communities:

- BCCM/IHEM at Brussels holds 7,700 strains, representing 336 genera and 1,007 species of filamentous and yeast-like fungi of public health and related environmental interest;
- BCCM/MUCL at Louvain-la-Neuve holds over 27,000 strains, representing 1,094 genera and 3,627 species of filamentous and yeast-like fungi of all major taxonomic groups, mainly of biotechnological and agro-industrial importance. The herbarium contains about 40,000 species;
- BCCM/LMG at Ghent holds over 18,000 bacterial strains, representing 260 genera and 1,508 species, encompassing plant-associated and phytopathogenic bacteria, bacteria of medical and veterinary importance, marine bacteria and various groups of biotechnological importance;
- BCCM/LMBP at Ghent holds over 1,900 plasmids and 14 unique cDNA libraries derived from a variety of organisms.

The collections contain micro-organisms native to Belgium as well as organisms originating from other countries. In the latter case, the cultures are often exchanged in the framework of a scientific co-operation project with (an) institute(s) of the country of origin.

The BCCM has co-ordinated the concerted action 'MOSAICC, Micro-organisms, Sustainable Use and Access Regulation, International Code of Conduct'. This project has been financed by the European Commission's Directorate General for Research and translates the principles of the Convention on Biological Diversity into practical procedures designed to facilitate access to and transfer of microbial genetic resources. The MOSAICC Code of Conduct can be consulted at [www.belspo.be/bccm/mosaicc](http://www.belspo.be/bccm/mosaicc) (see also Articles 15 et 16).

In the framework of a bilateral agreement with the Kingdom of Morocco, BCCM has launched a project with a network of Moroccan laboratories and the Moroccan Centre of Co-ordination and Planning of Scientific and Technical Research, and with the support of the Belgian Development Cooperation. This project aims to establish a national Moroccan culture collections network, with a view to the *ex-situ* preservation of the Moroccan microbial diversity and the sustainable development of the country in fields like public health, agriculture, etc.

**Fruit tree *ex-situ* collections** are very important in Belgium both at the formal and informal (NGO's) level. Total amount of accessions at national level: *Malus* – 4,300; *Pyrus* – 3,600; *Prunus* – 1,600. Other important collections of plant genetic resources used for agriculture are held e.g. for *Rosa sp.*, *Azalea sp.*, *Triticum spelta*, *Phaseolus sp.*, forage plants, etc.

The **International Network for the Improvement of Banana and Plantain** (INIBAP), a programme of the International Plant Genetic Resources Institute (IPGRI), maintains the largest *ex-situ in vitro* collection of banana (*Musa*) germplasm in the world. This international collection, which was established in 1985, is housed at the INIBAP Transit Centre, hosted at the Laboratory of Tropical Crop Improvement, KULeuven ([www.agr.kuleuven.ac.be/dtp/tro/itc.htm](http://www.agr.kuleuven.ac.be/dtp/tro/itc.htm)). The collection holds 1,136

accessions, consisting of wild relatives (15%), landraces and natural cultivars (75%) and improved materials (10%). In 1994, this collection was placed under the auspices of FAO within the International Network of *Ex Situ* Collections and is held in trust by INIBAP for the benefit of the international community.

The **National Botanic Garden of Belgium** manages a wild Phaseoleae/Phaseolinae germplasm collection. It has been designated by the 'International Plant Genetic Resources Institute' (IPGRI), as a reference collection for wild species of *Phaseolus* (in 1979) and of *Vigna* (in 1983). The main objective is to secure long-term conservation in the form of seed samples. The collection contains 1,687 accessions representing 205 taxa. *Phaseolus* and *Vigna* are the most highly represented genera with respectively 33 species (695 accessions) and 61 species (818 accessions). Most accessions are made for the consultation of wild or weedy materials (79%).

The National Botanic Garden of Belgium collected seeds from characteristic and endangered species in the different phytogeographical districts of Belgium. The ongoing long-term conservation of about 600 seed samples is assured by the storage at  $-20^{\circ}\text{C}$ .

Plants of 18,000 taxa are cultivated in the open air collections or in the greenhouses. Even if most of them are only represented by a few specimens, they are sometimes the last representatives of rare and endangered species.

The Antwerp Zoo and Wild Animal Park Planckendael of the **Royal Zoological Society of Antwerp** (RZSA) contribute to the *ex-situ* conservation of wild animal species, through their coordination of and participation in conservation breeding programmes. They coordinate the programmes for the okapi (*Okapia johnstoni*), bonobo (*Pan paniscus*), golden-headed lion tamarin (*Leontopithecus chrysomelas*), Congo peafowl (*Afropavo congensis*), European black vulture (*Aegypius monachus*), Mexican military macaw (*Ara militaris mexicana*) and Fisher's tourako (*Tauraco fischeri*), and participate in many more programmes. In addition, the Centre for Research and Conservation of the RZSA performs scientific research in the fields of conservation biology, ethology, veterinary medicine and functional morphology with among others a strong focus on solving problems in the fields of *ex-situ* conservation of biodiversity. Planckendael also participated in the reproduction programme of Sahelo-Saharan antelopes for a reintroduction project under CMS.

**68.**  On Article 9(c), has your country adopted measures for the reintroduction of threatened species into their natural habitats under appropriate conditions?

a) No	
b) No, but potential measures are under review	X
c) Yes, some measures are in place (please provide details below)	
d) Yes, comprehensive measures are in place (please provide details below)	

Further comments on the measures for the reintroduction of threatened species into their natural habitats under appropriate conditions.

**Flemish Region:** the Flemish legislation on species conservation includes measures to be taken into account for the reintroduction of species, such as impact assessment on ecology and on other species in the introduction area and careful preparation through breeding programmes to avoid releasing specimens from in-breeding population.

Technical and financial support is provided to the Sahelo-Saharan antelopes programme under CMS for reintroduction and rehabilitation of antilopes in northern African countries.

**69.**  On Article 9(d), has your country taken measures to regulate and manage the collection of biological resources from natural habitats for *ex-situ* conservation purposes so as not to threaten ecosystems and *in-situ* populations of species?

a) No	
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b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	X
d) Yes, comprehensive measures are in place (please provide details below)	
Further information on the measures to regulate and manage the collection of biological resources from natural habitats for <i>ex-situ</i> conservation purposes so as not to threaten ecosystems and <i>in-situ</i> populations of species.	
Flemish Region: a specific permit has to be requested from the Nature Division. One of the conditions to obtain a permit is that <i>in-situ</i> biodiversity is not endangered in any way by the collection of biological resources.	

**Box XLVIII.**

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.