

Third National Report of Belgium to the Convention on Biological Diversity

C. ARTICLES OF THE CONVENTION

Article 7 - Identification and monitoring

19. On Article 7(a), does your country have an ongoing programme to identify components of biological diversity at the genetic, species, ecosystem level?

a) No	
b) Yes, selected/partial programmes at the genetic, species and/or ecosystem level only (please specify and provide details below)	X
c) Yes, complete programmes at ecosystem level and selected/partial inventories at the genetic and/or species level (please specify and provide details below)	

Further comments on ongoing programmes to identify components of biodiversity at the genetic, species and ecosystem level.

There are ongoing inventory and monitoring programmes for major species groups indicated for a comprehensive range of species and major ecosystems as well as major programmes in some sectors at the genetic level. Indicators have been developed and are in place. (More information can be found in the thematic report 'Indicators for biological diversity in Belgium' (2001), available on the B CHM website at <http://www.naturalsciences.be/bch-cbd/belgium/contribution/documents.htm>)

No coherent information system is available in Belgium or in the different regions, although some initiatives, mainly at the regional level, to remedy to this situation are underway. For the moment however, most inventories and monitoring activities are still conducted by separate university laboratories or research institutions in the frame of ongoing research projects or on request of administrations or agencies. No global database is available and each research group holds its own data.

In 2003, the country study 'Biodiversity in Belgium' was published. It constitutes a comprehensive inventory on all groups of animals, plants, fungi and micro-organisms as well as on habitats present in Belgium, being among others a major tool to identify future identification and monitoring needs.

Walloon Region: an Observatory of Fauna, Flora and Habitats (OFFH) has been set up at the Nature, Forests and Wood Research Centre of the Walloon Region. It takes care of collecting and characterising data relating to biological diversity, which is done through the collaboration between a wide range of naturalists, scientists and officials of the Nature and Forestry Division.

The basic assignments of the OFFH are: organising and co-ordinating the collection and analysis of biological data in order to gather information about the state of biodiversity in the Walloon Region; defining the main lines of a strategy for its conservation and assess its effectiveness; standardising, recording and managing biological data collected within the scope of agreements or subsidies by the Walloon Region; disseminating information, encouraging interaction and organising exchanges between specialists, nature lovers, authorities, universities and the general public.

The aim for the years to come is to continue to develop four work programmes:

1) The 'Inventory and Monitoring of Biodiversity – Monitoring of the state of the environment through bio-indicators' (ISB-SURWAL) Programme: the general aim is to describe and monitor the distribution of species belonging to various major biological groups. The regularly monitored biological groups are birds, dragonflies, butterflies, orchids, reptiles, amphibians and bats. Monitoring is organised in collaboration with naturalist associations. This choice allows a wide range of expertise to be maintained (many collaborators, diversity of monitored taxa and widespread coverage of the territory) and enables naturalist associations to be helped in developing their activities. The network of collaborators formed in this way is also regularly questioned by authorities (requests for opinions, expert appraisal of areas, lists of species, etc.).

2) The 'Inventory and Monitoring of Habitats' (ISH) Programme: the general aim is to make an

inventory and monitor the distribution of habitats. This programme is in the process of being developed. It will lead, on the one hand, to standardising the way in which habitats are described and mapped out and, on the other hand, to monitoring the evolution of landscapes. An ambitious project for the inventory and monitoring of habitats combining ground plotting and satellite data is being prepared.

3) The 'Inventory of Sites of Great Biological Interest' (SGIB) Programme: the general objective is to gather information concerning areas that harbour species and habitats of great biological interest and integrate it into a standardised system. After having gathered existing information together, a second phase will be implemented to assess priorities as far as initiatives for the conservation and management of the natural heritage are concerned.

4) The 'System of information on Biodiversity in the Walloon Region' (SIBW) Programme: the aim is to disseminate information collected within the scope of the first three programmes and all available, pertinent 'non-sensitive' information. Information is filed in order to provide a real tool for helping authorities in decision-making and an information tool for the general public, by disseminating raw information or by indicating the sources where detailed information can be obtained (bibliography, experts, associations, etc.). The objective is to continue to integrate all available information into a standardised information processing system and above all to structure information flow to ensure that it is updated.

The programmes define a set of biodiversity state indicators as well as indicators of the situation of the Walloon environment (bio-indicators), and meet the requirements of the Office for Nature and Green Space Conservation, those of the Walloon Senior Nature Conservation Council or of international bodies such as the European Union or the Council of Europe.

Furthermore, the following monitoring is carried out: the permanent inventory of forest resources that include biodiversity parameters, the follow up of trees' health, the follow up of the biological quality of watersheds by the biotic index method, based on macro-invertebrates. More focused studies are carried out to respond on more specific issues.

The indicators used are essentially:

- state indicators: evolution of indicators of their status (IUCN categories) of the above mentioned species, biotic index of watercourses, defoliation % of trees;
- pressure indicators: evolution of the occupation of soils, in particular in urban areas, indicators concerning other compartments of the environment;
- responses indicators: % of protected areas, measure for biodiversity conservation and sustainable use outside protected areas.

The results are available on the biodiversity website of the Walloon Region, in scientific reviews, in naturalist NGO's newsletters and in a widely distributed rapport on the state of the Walloon Environment.

Flemish Region: inventories of the main ecosystems and habitats are included in the Nature Reports 1, 2, 3 and 4 (1999, 2001, 2003 and 2005, www.nara.be). An integrated information system and an overall database on scientific research are under further development.

The Flemish Institute of Nature Conservation (IN) is a research institute of the Flemish Government. It is responsible for reporting on the state of nature in the Flemish Region. It is also in charge of a number of inventories, the Biological Evaluation Map (BEM), and a number of Red Species Lists. The Institute of Nature Conservation and the Institute of Forestry and game Management coordinate a number of inventory and monitoring programmes on invertebrates, plants, fish, amphibians, reptiles, birds and a number of mammal species; this includes the development of appropriate database systems and web access applications.

Brussels Capital Region: inventory and monitoring of major species groups is going on since 1992 in the framework of the information and monitoring network of the flora and fauna of the Brussels Capital Region. Until now, no specific set of bioindicators has been selected. Red lists are under preparation for some major species groups (avifauna, herpetofauna, higher plants, macrofungi). Investigations are carried out by research institutes, universities and some NGO's. Database systems are under development, distribution atlases in preparation.

Inventories of main ecosystems and habitats, as well as their evaluation and classification, have also been made: inventory of sites of high biological value, the Biological Evaluation Map. An integrated

information system has been developed.

North Sea: inventory and monitoring activities of components of the Belgian part of the North Sea are conducted by different actors, such as the Royal Belgian Institute of Natural Sciences (through the Marine Ecosystem Management Department and some specific projects on the biodiversity of the Hinder Banks and of ship wrecks by the Invertebrates Department), the marine laboratory of the Ghent University and the Flanders Marine Institute.

The **Royal Belgian Institute of Natural Sciences**, through the research work of its different departments, participates actively in the inventory and survey of the fauna and habitats of Belgium. Moreover the RBINS regularly organises symposia and conferences and publishes atlases, bulletins, study documents through which information on species inventories, red lists, indicator species and monitoring processes is provided.

The **National Botanic Garden of Belgium** has a long standing tradition in inventory and monitoring activities that are leading to the updating and editing of floras for a number of major groups like phanerogams, fungi, mosses, liverworts and algae, as well as databases assembling distributional data regarding these groups. 'Florabank' (AMINAL, IN, NBGB, UGent) e.g. will allow the publication of an atlas of the flora of the Flemish Region in 2005.

The National Botanic Garden's monitoring produces red lists, mostly in collaboration with the Regions [with(in) the Flemish Region: phanerogams and mosses, with(in) the Brussels Capital Region: Lichenes, some fungal groups at country level]. For ectomycorrhizal Fungi (indicator group for forest quality) a limited number of permanent plots have been followed in the three regions of the country.

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. The *Musa* germplasm management project is an inventory programme at genetic level since a major objective of the programme is the identification and characterisation of all components at species and sub-species level of the genus *Musa*. This international collection, which was established in 1985, is housed at the INIBAP Transit Centre, hosted at the Laboratory of Tropical Crop Improvement of the KU Leuven, Belgium (www.agr.kuleuven.ac.be/dtp/tro/itc.htm), where related research activities, mainly at genetic level, are performed.

A major research programme focused, from 1975 onwards, on the **native fruit tree genetic resources** inventory, their conservation (2,600 accessions, mostly landraces), evaluation and characterisation for practical uses (nurseries, fruit processing, etc.) and in a breeding programme.

Wild apple (*Malus sylvestris* subsp. *sylvestris*) is a very rare tree species in the Flemish Region, with only some hundreds of individuals still present. In a forest near Leuven (Meerdaalwoud) and in the most eastern part of the Flemish Region (Voerstreek), apples occur in small populations but most of the trees are individual remnants in a forest. A gene bank will be constructed in order to conserve this endangered species. A study aims at the genetic characterisation of the present individuals and populations and the discrimination of wild genotypes from individuals related to cultivars.

The *Malus* research is part of an ongoing inventory programme of forest tree species at the genetic level [pedunculate oak (*Quercus robur*), sessile oak (*Quercus petraea*), hornbeam (*Carpinus betulus*) and wild apple (*Malus sylvestris* subsp. *Sylvestris*)], funded by the Flemish Forest and Green Areas Division (AMINAL, Ministry of the Flemish Community). Other related projects at the Department of Plant Genetics and Breeding are the inventory of the genetic diversity of riverbank vegetation [reed (*Phragmites australis*), yellow flag (*Iris pseudacoris*) and cattail (*Typha latifolia*)] and the study of genetic diversity within natural populations of ryegrass (*Lolium perenne*).

20. On Article 7(b), which components of biological diversity identified in accordance with Annex I of the Convention, have ongoing, systematic monitoring programmes?

a) at ecosystem level (please provide percentage based on area covered)	X
b) at species level (please provide number of species per taxonomic group and percentage of total known number of species in each group)	X

c) at genetic level (please indicate number and focus of monitoring programmes)	X
Further comments on ongoing monitoring programmes at the genetic, species and ecosystem level.	
See question 19.	

21.  On Article 7(c), does your country have ongoing, systematic monitoring programmes on any of the following key threats to biodiversity?	
a) No	
b) Yes, invasive alien species (please provide details below)	X
c) Yes, climate change (please provide details below)	X
d) Yes, pollution/eutrophication (please provide details below)	X
e) Yes, land use change/land degradation (please provide details below)	X
f) Yes, overexploitation or unsustainable use (please provide details below)	X
Further comments on monitoring programmes on key threats to biodiversity.	
<p>b) some programmes are ongoing for some species or species groups in some habitats. An enhanced coordination seems necessary.</p> <p>c) monitoring of emissions of greenhouse gases (see www.climat.be/inventemis/inventaire1.html). Regarding monitoring of climate change effects, information is gathered in national communications on climate (www.environment.fgov.be/Root/tasks/atmosphere/klim/pub/natcom/set_fr.htm).</p> <p>d) monitoring of the water quality, and thus also of pollution and eutrophication, is conducted throughout the country, often based on a biotic index.</p> <p>e) information on land use changes are given through the monitoring programmes and actualisation of Biological Evaluation Maps, actualisation of GIS layers for the preparation of changes in land destination plans, project based vegetation mapping, monitoring of contracts under the Ruram Development Programme.</p> <p>f) the Monitoring Section of the Sea Fisheries Department investigates the effects of man-made perturbations on the benthic-demersal ecosystem (mostly in the Belgian coastal waters and on the Belgian Coastal Shelf), from the community level down to the molecular level of individual organisms.</p>	

22.  On Article 7 (d), does your country have a mechanism to maintain and organise data derived from inventories and monitoring programmes and coordinate information collection and management at the national level?	
a) No	
b) No, but some mechanisms or systems are being considered	
c) Yes, some mechanisms or systems are being established	
d) Yes, some mechanisms or systems are in place (please provide details below)	X
e) Yes, a relatively complete system is in place (please provide details below)	

Further information on the coordination of data and information collection and management.

No coherent information system exists for the country, but the regions and research institutes develop(ed) their own systems. Some examples:

- the **Walloon Region** has launched its own biodiversity website, working as a proper Walloon Clearing-House Mechanism website (mrw.wallonie.be/dgrne/sibw). The site is hosted by the Nature, Forests & Wood Research Centre. This website provides a very wide and complete information on a.o. the status of species and habitats in the Region, protected areas, Walloon and European nature conservation legislation, research institutions and universities, institutional and non institutional stakeholders, public awareness and education. It points to interesting links at European and Belgian level such as the Belgian CHM, the Biodiversity Resources in Belgium server, etc. The Walloon Region supports the initiative to use the Belgian CHM website to display information on the implementation of the EU Habitats and Birds Directives in Belgium;
- for the **Flemish Region**, the Institute of Nature Conservation, the Institute for Forestry and Game Management and the Flanders Marine Institute develop and maintain a number of database systems, based on the inventory and monitoring programmes they coordinate. Some of these databases are being linked to the centralised Flemish database of environmental data (MMIS);
- the website of the **Belgian Biodiversity Platform** (www.biodiversity.be/bbpf) provides for information about biodiversity research in Belgium and abroad. This site gives also access to thematic forums that promote sustainable ecosystem management and links to the existing national biodiversity websites (the Belgian Clearing-House Mechanism, BCCM and Belnet/BIODIV);
- the project BIODIV '**Biodiversity Resources in Belgium**' is an inventory of biodiversity resources in Belgium (www.br.fgov.be/biodiv) containing (meta)data on specialists, research programmes at universities, institutes and elsewhere, collections, botanic gardens, zoos, museums, existing databases and their contents, lists of publications and recommended literature, associations, journals and administrations involved in the study and conservation of the diversity of living organisms in all its aspects;
- the **Brussels Capital Region**: the Brussels Institute for Management of the Environment has developed a database and geographic information system, based on the data collected from the inventory and monitoring programmes.

23.  Does your country use indicators for national-level monitoring of biodiversity? (decision III/10)

a) No	
b) No, but identification of potential indicators is under way (please describe)	
c) Yes, some indicators identified and in use (please describe and, if available, provide website address, where data are summarised and presented)	X
d) Yes, a relatively complete set of indicators identified and in use (please describe and, if available, provide website address, where data are summarised and presented)	

Further comments on the indicators identified and in use.

Flemish Region: the most important indicators related to nature that have been used for evaluation of, and reporting about, nature conservation action plan and management activities are:

- % of the country surface designated as nature reserve or nature management site;
- surface for which land uses have been changed into 'nature' or 'forest';
- % of the country surface where critical level of pollution is exceeded;
- surface involved in agro-environmental projects + monitoring of the impact on species and habitats;

- number of projects for rehabilitation or development of natural systems;
- degree of 'intactness' or 'rehabilitation' of the natural structure of water and river systems;
- trends of populations of indicator species;
- % of species groups that is identified as 'red list species';
- number and impact of species management plans.

More indicators for the evaluation of nature policies are being developed. The Flemish Nature Report (2005, www.nara.be) developed a full set of 'nature' indicators (www.natuurindicatoren.be).

Walloon Region: the indicators used are essentially:

- state indicators: evolution of indicators of their status (IUCN categories) of the above mentioned species, biotic index of watercourses, defoliation % of trees;
- pressure indicators: evolution of the occupation of soils, in particular in urban areas, indicators concerning other compartments of the environment;
- response indicators: % of protected areas, measure for biodiversity conservation and sustainable use outside protected areas

The results are available on the biodiversity website of the Walloon Region, in naturalist NGO's newsletters and in a widely distributed rapport on the state of the Walloon Environment.

Brussels Capital Region: the Brussels Institute for Management of the Environment (BIME) collects and analyses environmental data for the Brussels Capital Region. For the BIME, the development and use of sustainable development indicators is one of its priority research projects. Biological diversity indicators are included in the research. Several indicators are thought relevant, and are either being developed or already in use, including:

- status of the flora and fauna, *i.e.* species per group;
- area of green spaces;
- area of ponds and length of rivers;
- influence of economical production on biological diversity;
- protection of the flora and fauna, *i.e.* protected and threatened species, protected areas, areas of high ecological interest, Natura 2000 areas.

More information can be found in the thematic report 'Indicators for biological diversity in Belgium' (2001), on the B CHM:

bch-cbd.naturalsciences.be/belgium/implementation/documents/thematicreports/indicators/indicators.htm

Box XLIII.

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

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

Decisions on Taxonomy

24.  Has your country developed a plan to implement the suggested actions as annexed to decision IV/1? (decision IV/1)

a) No	
b) No, but a plan is under development	
c) Yes, a plan is in place (please provide details below)	X
d) Yes, reports on implementation available (please provide details below)	

Further information on a plan to implement the suggested actions as annexed to decision IV/1.

The **Royal Belgian Institute of Natural Sciences** (RBINS), being the Belgian National Focal Point to the GTI, in close cooperation with other Belgian Institutes such as the Royal Museum for Central Africa (RMCA) and the National Botanic Garden of Belgium (NBGB), and funded by the Belgian Development Cooperation, has designed an operative strategy that aims at constructing positive feedback-loops in capacity building for taxonomy and collection management.

The core of the Belgian approach is embedded in building transparent bilateral and multilateral synergies that not only promote scientific partnerships, collection valuations and optimal resources utilisations, but also envisages maximal supply of information and tuition. The modus to attain this goal is twofold:

- the top-down approach builds on the extensive expertise of Belgian taxonomists that have been extensively researching in developing countries. Here Belgian experts with knowledge of local taxonomic impediments are funded by the Belgian GTI NFP to carry out taxonomic research in the developing country on the single condition that their research project has clear-cut capacity building components (e.g. training that enables local people to identify taxa, build and manage a reference collection for the country, etc.);
- the second approach is demand-driven and is based on the taxonomic needs as directly expressed by individuals or institutions from the developing world to the Belgian Focal Point to the GTI. These needs are captured through an internet-based call for proposals that is widely publicised through active participation in key international meetings (e.g. SBSTTA, COP) and complementary international forums (e.g. BioNET INTERNATIONAL, National GTI Focal Points, CITES workshops, etc.). Selected candidates are invited to the RBINS, the RMCA, the NBGB or other competent Belgian taxonomic research units where they receive both taxon-specific and non-taxon specific courses. The former are provided by experts from the above-mentioned scientific institutions while the latter are provided by Belgian GTI NFP team. Non-taxon specific training modules include theoretical introductions to the more relevant biological disciplines as commonly employed by the contemporary taxonomist (e.g. components and measurement of biodiversity; species and classification concepts; cladistics; evolution; nomenclature), databasing, as well as on funding bodies, international conventions and writing in taxonomic research (from proposal to taxonomic paper). In addition to training in Belgium, applicants can also request the Belgian GTI NFP to organise a short-term regional training course in developing countries. In this case the non-taxon and taxon specific training is complemented with field trips allowing to teach sampling and inventory techniques.

At the same time, Belgium participates as an observer to the meetings of the 'GTI coordination mechanism', supervised by the Secretariat of the CBD, during which taxonomic needs at the global level are discussed. No assessment has been completed yet in this context.

25. ◊ Is your country investing on a long-term basis in the development of appropriate infrastructure for your national taxonomic collections? (decision IV/1)

a) No	
b) Yes (please provide details below)	X

Further information on investment on a long-term basis in the development of appropriate infrastructure for your national taxonomic collections.

The last decades, Belgium's **Federal** scientific institutions have started with the digitisation of their taxonomic collections. Progress is disproportionate over the different institutions. The Belgian Federal Government decided on a multiyear funding for the digitisation of collections belonging to the ten Federal scientific institutions. For 2005, € 2,200,000 has been foreseen. From 2006 to 2014,

€ 4,300,000 will be available each year. The collections of RBINS and RMCA are part of this huge project.

An overview of Belgium's natural history collections can be found at:

<http://bch-cbd.naturalsciences.be//belgium/biodiversity/faunaflorahabitats/collect.htm>

Taxonomic societies, naturalist associations and independent experts are consultable through the database 'Biodiversity resources in Belgium' available under the following link:

<http://www.br.fgov.be/BIODIV/>

Information on Belgium's collections of micro-organisms (bacteria, plasmids, fungi and yeasts) is centralised through the Belgian Co-ordinated Collections of Micro-organisms (BCCM), a consortium of four complementary research-based culture collections. It's holdings can be accessed under the following link: <http://bccm.belspo.be/>

The Belgian Biodiversity Platform further serves as the Belgian contact node for the Global Biodiversity Information Facility (formally termed Be-BIF). More information available under:

<http://www.biodiversity.be/>

26.  Does your country provide training programmes in taxonomy and work to increase its capacity of taxonomic research? (decision IV/1)

a)	No	
b)	Yes (please provide details below)	X

Further information on training programmes in taxonomy and efforts to increase the capacity of taxonomic research.

Belgium has in recent years developed complementary training programmes in taxonomy. They are here retaken from Franklin & Van Goethem (eds) (2004: 10) and refined where necessary:

- the DGDC-RBINS capacity building project gives grantees from developing countries training in taxonomy and collection management. The following non-taxon specific (*i.e.* good practices in taxonomy) modules have so far been prepared by the **Belgian Focal Point to the GTI**. These didactic modules are best not considered final teaching packages as they are for each training session adjusted *ad hoc* and *ad hominem*. (1. Taxonomic Capacity Building for the Developing World - An Introduction to the Belgian GTI Focal Point, 2. The Diversity of Biodiversity, 3. An Introduction to Species Concepts, 4. Classification, 5. An Introduction to Cladistic Analysis, 6. Evolution - Historical Overview, 7. An Introduction to Zoological Nomenclature, 8. Tools for Taxonomic Research, 9. An Introduction to Databases, 10. Biodiversity Internationally ...Political Context - Funding Opportunities, 11. An Introduction to taxonomic publication);
- ABIC (African Biodiversity Information Centre), developed by the **Royal Museum for Central Africa**. Grants for specialised training sessions (3 months) in various taxonomic groups. Operational start in 2001;
- FishBase by the Royal Museum for Central Africa. Grants for training in the taxonomy of African freshwater fishes and the use of FishBase. Starting from 2005, five trainees for three months each year;
- the **VLIR** and **CIUF** receive funding from the Belgian Development Cooperation to develop international courses (usually 1 year), international training programmes (usually 1 to 6 months) and short training initiatives (5 days to 2 weeks). Some of these training initiatives specifically targets taxonomy. Examples include the Postgraduate International Nematology Course organised by the Ghent University (<http://allserv.rug.ac.be/~nsmol/pinc.htm>); the MSc in Ecological Marine Management organised by the Free University of Brussels VUB and University of Antwerp (<http://www.ecomama.be/>); the MSc in Aquaculture organised by the Universities of Liège and Namur (<http://www.ulg.ac.be/aacad/prog-cours/sciences/FSCDESIntAqua.html>);
- the '**Belgian Coordinated Collection of Micro-organisms**' (BCCM) provides individual and group training sessions on micro-organisms.

27.  Has your country taken steps to ensure that institutions responsible for biological diversity

inventories and taxonomic activities are financially and administratively stable? (decision IV/1)		
a)	No	
b)	No, but steps are being considered	
c)	Yes, for some institutions	X
d)	Yes, for all major institutions	

28.*¹ Is your country collaborating with the existing regional, subregional and global initiatives, partnerships and institutions in carrying out the programme of work, including assessing regional taxonomic needs and identifying regional-level priorities? (decision VI/8)

a) No	
b) No, but collaborative programmes are under development	
c) Yes, some collaborative programmes are being implemented (please provide details about collaborative programmes, including results of regional needs assessments)	X
d) Yes, comprehensive collaborative programmes are being implemented (please provide details about collaborative programmes, including results of regional needs assessment and priority identification)	

Further information on the collaboration your country is carrying out to implement the programme of work for the GTI, including regional needs assessment and priority identification.

Active contribution to the paper called 'Supporting European taxonomy - current state and possible future actions' submitted by the European Platform for Biodiversity Research Strategy (EPBR) to the European Commission in December 2003.

Participation in the position paper 'Biodiversity and Europe: the contribution of taxonomy and the European taxonomic facilities' produced by the Consortium of European Taxonomic Facilities (CETAF). For this paper, some assessment of taxonomic needs has been undertaken.

Needs of GTI focal points have been discussed during the meeting 'Building Capacity for the Global Taxonomy Initiative (GTI) in a larger Europe', organised by Germany on 21-23 June 2004 on the Isle of Vilm. The Belgian GTI focal point took part in this meeting and presented how it developed its own activities.

More information is available in:

- Franklin A., Segers H., Samyn Y., Réveillon A., Van Goethem J.L. 2005 (submitted). Taxonomic capacity and implementation of the Global Taxonomy Initiative in Belgium. *Proceedings of the Workshop 'Building Capacity for the Global Taxonomy Initiative (GTI) in a larger Europe', Vilm, Germany, 21-24.06.2004;*
- Franklin, A. & Van Goethem, J.L. (eds), 2004. Report on Implementation of Programme of Work for the Global Taxonomy Initiative. Royal Belgian Institute of Natural Sciences, Brussels, 25 pp.

29. * Has your country made an assessment of taxonomic needs and capacities at the national level for the implementation of the Convention? (annex to decision VI/8)

a) No	
b) Yes, basic assessment made (please provide below a list of needs and capacities identified)	X
c) Yes, thorough assessment made (please provide below a list of needs and capacities identified)	

Further comments on national assessment of taxonomic needs and capacities.

¹ The questions marked with * in this section on Taxonomy are similar to some questions contained in the format for a report on the implementation of the programme of work on the Global Taxonomy Initiative. Those countries that have submitted such a report do not need to answer these questions unless they have updated information to provide.

Between 1998 and 2002, questionnaires were sent to Belgian and foreign experts in view of preparing the country study 'Biodiversity in Belgium' (*). There were questions on the number of species (for a given taxon) found in Belgium, the trends in species numbers, the causes for species increase or decrease, the regions with highest species richness, the existence of species lists, the status of taxonomical knowledge, the number of specialists for the given taxon in Belgium and in neighbouring countries, the existence and localisation of collections, etc. If no Belgian expert could be identified for a target group, the questionnaire was sent to experts in neighbouring countries or even to specialists worldwide. For zoological taxa, 316 questionnaires were returned, 194 being completed by Belgian experts and 122 by foreign specialists. A summary, per taxon, of the information gathered via these questionnaires can be found in 'Biodiversity in Belgium'. These questionnaires are not 'taxonomic needs assessments' *per se*, but provide information for the groups for which answers were received.

In October and December 2001, two symposia (**) were organised, one on the Belgian flora and one on the Belgian fauna. Their objectives were to evaluate the status of knowledge, assess the needs in taxonomic research and highlight the priorities for future work.

A short overview of Belgian taxonomic capacity has been carried out by the Belgian Biodiversity Platform (now integrated into Bio-in-Bel) for the European Platform for Biodiversity Research Strategy (EPBRS). It has been published as part of a paper called 'Supporting European taxonomy - current state and possible future actions' (***)).

(*) Peeters, M., Franklin, A. & Van Goethem, J.L. (eds), 2003. Biodiversity in Belgium. Royal Belgian Institute of Natural Sciences, Brussels: 416 pp.

(**) Peeters, M & Van Goethem, J.L. (eds), 2002. Proceedings of the Symposium 'Status and trends of the Belgian fauna with particular emphasis on alien species', Brussels, 14.12.2001. Bulletin of the RBINS, Biologie, Vol. 72 – Supplement, 297 pp.

(**) Rappé, G., Busschots, K. & Robbrecht, E. (eds), 2003. Proceedings of the Symposium 'Botanical Biodiversity and Belgium's expertise', National Botanical Garden of Belgium, Meise, 19-20.10.2001, Scripta Botanica Belgica, 24, 214 pp.

(***) Dimitrova, D. (ed.), 2003. Supporting European taxonomy - current state and possible future actions. EPBRS meeting held under the Italian Presidency in Florence, 20-24 November 2003.

30. * Is your country working on regional or global capacity building to support access to, and generation of, taxonomic information in collaboration with other Parties? (annex to decision VI/8)

a) No	
b) Yes, relevant programmes are under development	
c) Yes, some activities are being undertaken for this purpose (please provide details below)	
d) Yes, many activities are being undertaken for this purpose (please provide details below)	X

Further comments on regional or global capacity-building to support access to, and generation of, taxonomic information in collaboration with other Parties.

- 1) Regional capacity building (EU-funded):
- * support access to taxonomic information/collections:
 - European Network for Biodiversity Information (ENBI);
 - SYNTHESYS integrates former programmes that granted access to national collections, including ABC (Access to Belgian Collections, 2001-2004) at the RBINS. RMCA and NBGB also contribute to SYNTHESYS;
 - * support generation of taxonomic information: most EU-funded projects include a capacity-building component.
- 2) Global capacity building:

* support access to taxonomic information/collections (both projects are funded by the Belgian Development Cooperation. Since 2004, they are developing synergies):

- ABIC (African Biodiversity Information Centre), by the Royal Museum for Central Africa. Grants for scientific study visits, for pre-doctoral candidates and recognised taxonomy experts. Operational start in 2001;
- DGDC-RBINS capacity building project, by the Royal Belgian Institute of Natural Sciences. Grants for scientific study visits for professionals ranging from technicians & parataxonomists to experts. Funding also available for visits to the Royal Museum for Central Africa and the National Botanic Garden. Operational start in 2004

* support generation of taxonomic information:

- the Belgian Development Cooperation funds universities, via the Flemish and French Community Interuniversity Councils (VLIR and CIUF), to carry out research projects on biodiversity in developing countries. Some of these research projects include a taxonomic component;
- the VLIR and CIUF offer scholarships to participate in international courses (MSc level) held in Belgium. These scholarships are available for developing country applicants. VLIR also provides PhD scholarships to promising graduates of its international courses. Both VLIR and CIUF offer travel bursaries for Belgian and European students registered at a Flemish and French-speaking universities for travel to a developing country. For all these programmes, topics do not exclude taxonomy but there must be a strong developmental component;
- the Belgian Science Policy Office finances bilateral cooperation projects with Central and Eastern European countries and a few other countries such as China. Some of these projects have a taxonomic component;
- the Belgian Science Policy Office finances the Belgian contribution to GBIF, which includes a capacity-building component;
- the 'Belgian Coordinated Collection of Micro-organisms' (BCCM) provides capacity building for micro-organisms, through bilateral contract agreements and research projects (e.g. with Morocco and China).

31. * Has your country developed taxonomic support for the implementation of the programmes of work under the Convention as called upon in decision VI/8? (annex to decision VI/8)

a) No	
b) Yes, for forest biodiversity (please provide details below)	X
c) Yes, for marine and coastal biodiversity (please provide details below)	X
d) Yes, for dry and sub-humid lands (please provide details below)	X
e) Yes, for inland waters biodiversity (please provide details below)	X
f) Yes, for mountain biodiversity (please provide details below)	X
g) Yes, for protected areas (please provide details below)	X
h) Yes, for agricultural biodiversity (please provide details below)	X
i) Yes, for island biodiversity (please provide details below)	X

Further comments on the development of taxonomic support for the implementation of the programmes of work under the Convention.

Some research projects in relation to **forest biological diversity** (listed alphabetically by titles, non exhaustive list):

- Biodiversity of fishes in Gabon rainforest, 1998-2002, RMCA
- Biodiversity of litter ant communities of the Ceará (Brazil), 2001-, ULB
- Botanical biodiversity of inselbergs from continental Equatorial Guinea, Central Africa, 1999-, ULB
- Calculating the biodiversity of regions in tropical Africa by means of the moth fauna (Lepidoptera), 1993-, RMCA
- Checklist of forest macrofungi in the Brussels Capital Region
- Development of a red list of macrofungi in the Flemish Region, 1998-, UGent

- Development of a checklist of macrofungi and slime moulds in the Flemish Region, UGent & Vlaamse Mycologen Vereniging
- Chorology, taxonomy and systematics of european native orchidaceae, 1970-, UCL
- Distribution and frequency of bryophytes in the Flemish Region, 2004-2010, NBGB
- Ecology of Acari (Arachnida) and Collembola (Insecta) in soil and canopy in African habitats, ongoing, RMCA
- Ecology of ground beetles (Coleoptera) in forests in the Flemish Region, ongoing, UA, RBINS, IN, IBW, UGent
- Evolutionary biology, taxonomy and biogeography of termites in South America and Papua New Guinea, 1982-, ULB, RBINS
- Ex situ conservation of rare and endangered vascular plant species in Belgium, 2000-, NBGB
- Faunistic study of terrestrial organisms in the Comoro archipelago with emphasis on bird population studies, ongoing, RMCA
- Faunistic, synecological and zoogeographical study of the spiders (Araneae) of Belgium, 1974-, RBINS
- Faunistics of various insect groups and terrestrial molluscs in Belgium, RBINS
- Identification keys to African spider families and subfamilies (1993-1997) and genera (1997-), RMCA
- Identification of lignified tissues by its anatomical characteristics, ongoing, RMCA
- Integrating bryophytes in the forest management plan: lessons from a grid-mapping in the Forest of Soignes (Belgium), ?-2001, ULg
- Levels and dynamics of intra-specific genetic diversity of tropical trees for conservation and sustainable management, 1997-2001, EU project, Flanders Inter-university Institute for biotechnology
- List of arboreal lichens in the Brussels Capital Region
- Mycocoenological study of forests in Belgium, 1995-2005, NBGB
- Phylogeny of the flowering plants with special emphasis on asterids and Dioscoreales, 1981-, KULeuven
- Revision of Aspleniaceae (Pteridophyta), ongoing, UGent
- Seed bank of wild plants specific for the phytogeographical districts of Belgium, 1989-, NBGB
- Silviculture and biodiversity of Scots pine forests in Europe, 1997-2000, EU project, UGent
- Study of the diversity of various insect communities in tropical environments, rainforests in particular, ongoing, RBINS
- Study of the spider fauna with respect to the restoration of tropical rainforest in Ivory Coast, 1993-, RMCA
- Systematics and ecology of Basidiomycetes, in particular the Gasteromycetes and lignicolous fungi, in Europe and Papua-New Guinea, ongoing, ULg
- Systematics and taxonomy of groups of macrofungi in tropical South-East Asia, 2000-, UGent
- Systematics, taxonomy and ecology of tropical Acanthaceae and Rubiaceae, permanent programme, NBGB
- Systematics, taxonomy, ecology and ethnomycology of macromycetes (Fungi) of tropical Africa, 1997-, NBGB, UGent
- Taxonomic revision and phylogeny of several (20+) genera in the family Cyperaceae, 1974-, UGent
- Taxonomic revision and phylogeny of the genus *Peperomia* worldwide, 2002-, UGent
- Taxonomic revision of the flora of Central and West Africa: Convolvulaceae, Orchidaceae, Poaceae, Marantaceae, Dioscoreaceae, Eriocaulaceae, Burseraceae, Anthericaceae, ongoing, ULB
- Taxonomy and phylogeny of birds in central and West Africa, 1974-, RMCA
- Taxonomy and systematics of reptiles and amphibians of tropical forests, ongoing, RBINS
- Taxonomy of orchids and other monocotyledons in Central Africa, ongoing, NBGB
- Taxonomy of various groups of insects in Africa (Coleoptera, Diptera, Hymenoptera), ongoing, RMCA
- XYLOBIOS: Diversity, ecology and roles of saproxylic organisms in Belgian deciduous forests, 2000-2005, CRNFB, FUSAGx, UCL, RBINS

Some research projects in relation to **marine and coastal biological diversity** (listed alphabetically by titles, non exhaustive list):

- Belgian shipwrecks: hotspots for marine biodiversity (BEWREMABI project), 2003-2006, UCL, UGent, RBINS, RBINS-MUMM, VLIZ
- Biodiversity and taxonomy of marine alien species, ongoing, RBINS-MUMM
- Biodiversity of 3 representative groups of the Antarctic Zoobenthos (BIANZO), 2002-2006, RBINS, ULB, ULg, UGent
- Biodiversity of brine shrimp *Artemia* populations: the Laboratory of Aquaculture & Artemia Reference Center is coordinating several international research projects, UGent
- Biodiversity of crustacean taxocoenoses in the Southern Ocean, 1996-2000, RBINS
- Biodiversity of microbial mats in Antarctica, 1998-2001, EU project, ULg
- Biogeography and systematics of Halymeniaceae in the Indian Ocean, 2000-2003, UGent
- Biology of Sponge Natural Products, 1998-2001, EU project, ULB
- Crustacea from the Yucatan Peninsula (Mexico), 1995-, RBINS
- Ecological research on Diptera in the Belgian coastal dunes, ongoing, RBINS
- European Marine Genetic Diversity (EUMAR), 2002-2004, EU project, RBINS
- Implementation and networking of large-scale long-term marine biodiversity research in Europe (BIOMARE), 2000-2002, EU project, UGent
- Marine Biodiversity and Ecosystem Functioning (MARBEF), 2004-2008, UGent, VLIZ
- Marine ostracods of a coral island in Papua New Guinea, 1999-2002, KULeuven
- Molecular diversity of marine invertebrates, 2000-2004, UGent
- Molecular systematics and phylogeny of holothuroids, 2000-2002, VUB
- Morphology, taxonomy, phylogeny and systematics of marine freeliving Nematoda, ongoing, RBINS
- Systematics and evolutionary biology of marine macro-algae in the Indo-Pacific Region, 2001-2004, UGent
- Taxonomic database of the North Sea meiofauna, 2001-2002, UGent
- Taxonomic, phylogenetic and biogeographic studies of Plantae, Fungi and Protoctista, 1998-2000, UGent
- Taxonomy and sustainable use of Holothuroidea in the Comoros, ongoing, RMCA, RBINS
- Taxonomy and zoogeography of holothuroids, 1985-, RBINS
- Taxonomy of Bacillariophyta, Nematoda, Crustacea, Rotifera, 2000-2003, UGent, RBINS
- Taxonomy, ecology and anatomy of selected Gastropoda in Papua New Guinea, ongoing, RBINS
- Taxonomy, phylogeography, population and eco-genetics of European marine and terrestrial molluscs, ongoing, RBINS
- Use of sclerosponges as biorecorders of environmental changes, ongoing, RBINS

Some research projects in relation to **dry- and subhumid land biological diversity** (listed alphabetically by titles, non exhaustive list):

- A world monograph of the lichen genus *Gyalectidium* (Gomphillaceae), published 2001, ULg
- Distribution and frequency of bryophytes in the Flemish Region, 2004-2010, NBGB
- Diversity patterns of organisms in ephemeral rock pools in arid regions in USA, Botswana and Australia, 2003-, KULeuven
- Diversity patterns of organisms in ephemeral wetlands in South Africa, 2003-, KULeuven
- Mycorrhizal symbiosis of trees, mainly in Europe and Africa, 1968-, FUL
- Non-marine Ostracoda (Crustacea) of southern Africa, 1987-, RBINS
- Plant diversity in grassland and on field margins in Tunisia, 1996-2005, UGent
- Seed bank of wild plants specific for the phytogeographical districts of Belgium, 1989-, NBGB
- Systematics, taxonomy and ecology of tropical Acanthaceae and Rubiaceae, permanent programme, NBGB

- Systematics, taxonomy, ecology and ethnomycology of macromycetes (Fungi) of tropical Africa, 1997-, NBGB, UGent
- Taxonomy and cladistics of spiders (Araneae), mainly from Africa, 1984-, independent expert at RMCA
- Taxonomy and eco-geography of lichenised and lichenicolous fungi, ongoing, ULg
- Taxonomy and ecological biogeography of large branchiopods (Crustacea) from ephemeral pools in arid and semi-arid areas, 1987-, KULeuven
- Taxonomy, behaviour and rearing of mites (Acari) associated with stored seeds in northern Iran, 1997-2000, RBINS
- World or regional monographs of selected groups of lichens, 2002-, NBGB

Some research projects in relation to **inland water biological diversity** (listed alphabetically by titles, non exhaustive list):

- Biodiversity and human impact in shallow lakes, 2000-2003, EU project, KULeuven, UGent
- Biodiversity of fishes in Gabon rainforest, 1998-2002, RMCA
- Biodiversity of microbial mats in Antarctica, 1998-2001, EU project, ULg
- Biodiversity, taxonomy and biogeography of rotifers (Rotifera), ongoing, RBINS
- Biodiversity, taxonomy and phylogeny of catfishes from Africa and SE Asia, 1997-2002, RMCA
- Database of freshwater molluscs in Belgium, 1989-, RBINS
- Diversity and speciation of Ostracoda (Crustacea) in ancient lakes, 1990-, RBINS
- East African fish diversity project, 1999-2004, RMCA
- Ecology and faunistics of Chironomidae (Diptera, Insecta), 1976-, RBINS
- Fish biodiversity in the coastal zone in West Africa, 2000-2002, RMCA
- Fish biodiversity on Mayotte island, 1993-2001, RMCA
- Freshwater algae of Belgium, ongoing, NBGB
- Freshwater algae of tropical regions, ongoing, NBGB
- Lake Baikal (Chironomidae, Oligochaeta, Amphipoda, etc.), 1990-, RBINS
- Lake Malawi/Nyasa/Niassa Biodiversity Conservation Project, 1996-2000, RMCA
- Morphology and systematics of copepods (Crustacea) of Belgium, 1988-, RBINS
- Multidisciplinary research on the diversity of fishes from the Congo Basin; the fishes of the Lower Congo and the Malebo Pool, 2004-2008, RMCA
- Protocols for the Assessment and Conservation of Aquatic Life In the Subsurface (PASCALIS), 2002-2004, EU project, RBINS
- Structure and functioning of aquatic communities in inland waters in USA, Botswana, South Africa, Zimbabwe, Ethiopia, Bolivia and Australia, ongoing, KULeuven
- Study of aquatic bryophytes for the survey and monitoring of water quality, ongoing, ULg
- Support to the Population Biology Laboratory of the Marien Ngouabi University in Brazaville for the study of biodiversity and conservation of freshwater fishes of Congo-Brazaville, 2002-2006, RMCA
- Taxonomic, phylogenetic and biogeographic studies of Plantae, Fungi and Protoctista, 1998-2000, UGent
- Taxonomy and systematics of cichlids (Pisces) from Lakes Malawi/Niassa, Tanganyika, and Kivu, ongoing, RMCA, RBINS
- Taxonomy, phylogeny and evolution of aquatic mosses, ongoing, ULg, UCL
- Taxonomy, systematics and ecology of aquatic Oligochaeta (Annelida), 1991-, RBINS
- Trophic ecology of the demersal fish community of Lake Malawi/Niassa, Central Africa, 1998-2002, EU project, RMCA, RBINS
- Zoological inventory of the river Meuse (W-Europe) and its tributaries, ongoing, FUNDP

Some research projects in relation to **mountain biological diversity** (listed alphabetically by titles, non exhaustive list):

- Biodiversity (angiosperms, fungi) of the Mont Doudou, Gabon, Nat. Geogr. Soc., 2004-2007, NBGB
- Biodiversity of Taita Hills in southeastern Kenya, ongoing, UA, RMCA
- Diversity of benthic diatom communities in New Zealand alpine aquatic systems, 2001-, UGent
- Ecology and phytogeography of alpine vegetations (Jura, Alps, Pyrenees, Sierra Nevada, Corsica, Peloponnesos), 1965-, FUNDP
- Myxomycetes (Fungi) in Western Europe, especially Belgium and nivicolous species in the French Alps, 1986-, Royal Antwerp Mycologists Circle
- Taxonomy, phytosociology and phytochorology of the mountainous massif Jebel Uweinat (desert of Libya), 1964-2001, NBGB
- Taxonomy and phylogeny of the Andean scirpoids (Cyperaceae), 1999-2004, UGent

Some research projects in relation to **protected areas** (listed alphabetically by titles, non exhaustive list):

- Conservation biology of Habitat Directive species of plants in Belgium, permanent programme, NBGB
- Conservation of bryophytes in the Flemish Region with special emphasis on Red List, 1990-2010, NBGB
- Diversity and abundance of bryophytes, and applications to the conservation and management of ecosystems, ongoing, ULg
- European crop wild relative diversity assessment & conservation forum, 2002-2005, EU project, FUSAGx
- Inventory of the freshwater and brackish water fish fauna of the protected nature reserve Mayombe in Congo-Brazzaville, 1991-2003, RMCA
- Monitoring of species diversity and vegetation development in strict forest reserves as important reference tools for nature-based forest management, ongoing, IBW
- Phytodiversity in relation with ecological and patrimonial values, 2002-2006, UCL
- SADC/GEF Lake Malawi/Nyasa/Niassa Biodiversity Conservation Project, 1996-2000, RMCA
- Seed bank of wild plants characteristic for the phytogeographical districts of Belgium (seed samples of representative of rare or endangered species of the different phytogeographical regions of Belgium are stored at -20 C. This ex situ conservation is considered to contribute to the global strategy of nature conservation), 1989-, NBGB
- Survey and monitoring of all terrestrial life in the Flemish Region, 2000-, IN
- Survey and monitoring of sites of biological importance (SGIB) in the Walloon Region, ongoing, CRNFB
- Survey of endemic birds in protected areas of Comoro Republic and Mayotte, 1985-, RMCA
- Survey of flora and vegetation of nature reserves in the Brussels Capital Region

Some research projects in relation to **agricultural biological diversity** (listed alphabetically by titles, non exhaustive list):

- ACONITE (Association pour la Cartographie d'Organismes Naturels et les Inventaires Taxonomiques et Ecologiques) – Study of the Apoidea in their role of pollinators, 2004-, FUSAGx, UMH, CNRFB
- Biodiversity of wild and semi-domesticated species of Vasconcellea in Ecuador, 1999-2003, UGent
- Diversity patterns of zooplankton communities in pools in an agricultural landscape, 2003-, KULeuven
- Ecology of Acari (Arachnida) and Collembola (Insecta) in soil and canopy in African habitats, ongoing, RMCA
- European crop wild relative diversity assessment & conservation forum, 2002-2005, EU project, FUSAGx
- Evaluation and use of beneficial entomofauna in vegetable open fields, ongoing, FUSAGx

- Germplasm collection, characterisation and crop development of locally used fruit species in southern Ecuador, ongoing, UGent
- Morphology, taxonomy, phylogeny and systematics of plant parasitic Nematoda, ongoing, RBINS
- Musa germplasm collection for International Network for the Improvement of Banana and Plantain (INIBAP), ongoing, KULeuven
- Pathogenic nematodes (Invertebrata) in arable crops in Belgium, 1987-, CLO
- Phaseoleae - Phaseolinae seed collection - IPGRI reference collection for wild *Phaseolus* and *Vigna* species, 1988-, NBGB
- Systematics and biogeography of bees (Hymenoptera Aculeata, Apoidea), ongoing, UMH
- Systematics and host plant specificity of African fruit flies (Diptera, Tephritidae), ongoing, RMCA
- Taxonomy and identification of Bacillus (Eubacteria) and relatives, 1989-, UGent
- Taxonomy and systematics of Braconidae (Ichneumonoidea, Hymenoptera, Insecta) from tropical and palaeartic areas, 1995-, FUSAGx, RBINS
- Taxonomy, adaptations, habitat and behaviour of oribatid mites (Oribatida); developmental stability in the spider mite Tetranychus urticae (Prostigmata), 1972-, RBINS
- Taxonomy, behaviour and rearing of mites (Acari) associated with stored seeds in northern Iran, 1997-2000, RBINS
- The soil fauna: the other last biotic frontier, ongoing, UCL

Some research projects in relation to **island biodiversity** (listed alphabetically by titles, non exhaustive list):

- Biogeography of Madagascar: origin and radiation of the Rubiaceae, 2004-, KULeuven, NBGB
- Taxonomic and ecological studies of various zoological and botanical groups on Laing Island, Papua New Guinea, 1976-, RBINS, ULB, UGent, ULg and others
- Taxonomy and faunistics of the Holothuroidea from the Union of Comoros, 2003-2007, RMCA, RBINS.

32. * Has your country developed taxonomic support for the implementation of the cross-cutting issues under the Convention as called upon in decision VI/8?

a) No	
b) Yes, for access and benefit-sharing (please provide details below)	
c) Yes, for Article 8(j) (please provide details below)	X
d) Yes, for the ecosystem approach (please provide details below)	
e) Yes, for impact assessment, monitoring and indicators (please provide details below)	X
f) Yes, for invasive alien species (please provide details below)	X
g) Yes, for others (please provide details below)	

Further comments on the development of taxonomic support for the implementation of the cross-cutting issues under the Convention.

Article 8(j): some research projects (listed alphabetically by titles, non exhaustive list):

- Database concerning traditional veterinary medicinal plants in Sub-Saharan Africa, 1994-, UCL
- Ethnobotany (medicinal plants, vernacular names) and tropical horticulture in Central Africa, ongoing, NBGB
- Ethnomycology in Africa, UGent
- Ethnomycology, especially of West and Central Africa, 1973-, FUL
- Germplasm collection, characterisation and crop development of locally used fruit species in southern Ecuador, ongoing, UGent

- Inventory of wild edible fruits in the savanna of northern Ivory Coast, 1996-2002, FUSAGx
- Medical ethnobotany of Quechua farmers and Yuki-indians in Cochabamba, Bolivia: medicinal plant diversity, medicinal plant use and indigenous classification, UGent
- Medicinal plants from the forest region of Dja as suspected malaria antagonists (Cameroun, Central Africa), 1999-, ULB
- Systematics, taxonomy, ecology and ethnomycology of macromycetes (Fungi) of tropical Africa, 1997-, NBGB
- Valorisation of medicinal plants in Africa, 1986-, ULB

Monitoring programmes in place for various groups of organisms. This monitoring is carried out at the regional level. In addition, research projects target the use of specific taxa as bio-indicators. Some research projects (alphabetical, non exhaustive list):

- Ants in leaf-litter as bio-indicators, 1998-, RBINS
- Biodiversity in shallow lakes (taxon diversity, genetic diversity, resting egg banks), 2000-2003, KULeuven
- Biometry of seabirds and bio-monitoring of seabird mortality as an indicator of oil pollution, ongoing, IN, RBINS-MUMM
- Biomonitoring, faunistics, population genetics, bio-indicator research on carabid beetles (Carabidae, Coleoptera) in Belgium, with implications for nature conservation, ongoing, RBINS
- Birds as bioindicators in Albertine Rift, Comoros, and other African Countries, 1985-, RMCA
- Butterflies (Lepidoptera) as indicators for evolution in the tropical rainforest of East and West Africa, 1993-, RMCA
- Development of indicators and indices for forest plant species diversity and the consequences of fragmentation on forest plant species in Flemish forests (Belgium), 1998-2001, KULeuven
- Diatom indices in water quality assessment and biomonitoring of lotic freshwaters, 1980-, UCL
- Dolichopodidae (Diptera) as bio-indicators in nature conservation, 1990-, RBINS
- Forest parasitoids as biodiversity indicators in spruce plantations, 1998-, ULB
- Inventarisation and identification of invertebrates as ecological indicators in Flemish forest reserves, 2000-2002, RBINS
- Invertebrate animals as bio-indicators in the Flemish Region, ongoing, IN
- Sclerosponges (Porifera) as biorecorders of environmental changes, ongoing, RBINS
- Spiders as bio-indicators within the framework of nature conservation in the Flemish Region, 1986-, IN
- Structural and functional biodiversity of copepod (Crustacea) communities on the Belgian Continental Shelf (North Sea), 1998-2003, UGent
- Study of aquatic bryophytes for the survey and monitoring of water quality, ongoing, ULg
- Taxonomy and phylogeny of birds in central and West Africa, 1974-, RMCA
- Trophic ecology of the demersal fish community of Lake Malawi/Nyassa, Central Africa. INCO-DC project 1998-2002, RMCA, RBINS

Alien species: research programmes mainly. Some examples:

- Alien crustacean and molluscan species in Belgium, ongoing, RBINS
- Alien fruit fly species (Diptera, Tephritidae) in East Africa, ongoing, RMCA
- Floristics of non-indigenous vascular plants (especially weeds and invasive taxa) in Europe, ongoing, UGent
- Freshwater macrozoobenthos biodiversity and assessment of the biological quality of watercourses in the Walloon Region, 1990-, CRNFB
- INPLANBEL, invasive plants in Belgium: patterns, processes and monitoring, NBGB, UA, ULB, FUSAGx, 2003-2006
- Invasive bryophytes in Belgium, 1998-2010, NBGB
- Invasive species of freshwater molluscs in Belgium, 1996-, RBINS

- Marine invertebrate fauna of W-Europe, especially Cirripedia and Molluscs; alien species, 1973-, RBINS-MUMM
- Phylogeography, population and eco-genetics of European marine and terrestrial molluscs, ongoing, UA
- Taxonomy and ecology of weeds, especially Polygonaceae, 1987-, ULB