



منظمة الأغذية  
والزراعة  
للأمم المتحدة

联合国  
粮食及  
农业组织

Food  
and  
Agriculture  
Organization  
of  
the  
United  
Nations

Organisation  
des  
Nations  
Unies  
pour  
l'alimentation  
et  
l'agriculture

Продовольственная и  
сельскохозяйственная  
организация  
Объединенных  
Наций

Organización  
de las  
Naciones  
Unidas  
para la  
Agricultura  
y la  
Alimentación

### Item 7.1 of the Provisional Agenda

## COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

### Twelfth Regular Session

Rome, 19 -23 October 2009

## POLICIES AND PROGRAMMES OF RELEVANT INTERNATIONAL ORGANIZATIONS WORKING IN THE FIELD OF MICRO-ORGANISMS FOR FOOD AND AGRICULTURE

### TABLE OF CONTENTS

	<i>Paras.</i>
I. Introduction	1
II. International organizations and agreements for the conservation and utilization of micro-organism diversity	2 - 9
III. International networks	10 - 12



## I. INTRODUCTION

1. This document provides an overview of policies and programmes of international organizations, agreements and networks, working in micro-organism diversity of relevance to food and agriculture.

## II. INTERNATIONAL ORGANIZATIONS AND AGREEMENTS FOR THE CONSERVATION AND UTILIZATION OF MICRO-ORGANISM DIVERSITY

2. The Convention on Biological Diversity (CBD) has taken a lead role in the development of an international initiative relevant to micro-organism diversity for food and agriculture: the International Initiative for Conservation and Sustainable Use of Soil Biodiversity. This initiative is implemented as a cross-cutting initiative within the CBD's programme of work on agricultural biodiversity, and is an excellent tool to harmonize work and enhance cooperation amongst international organisations for the conservation and sustainable utilization of micro-organisms of relevance to food and agriculture. This initiative also provides a good opportunity for the application of the ecosystem approach.<sup>1</sup> For more information on the initiative, see CGRFA-12/09/Inf. 15.

3. In 1998, the OECD officially established the so-called Biological Resource Centre (BRC) initiative. The programme's main objective is to establish a global Biological Resource Centres network that will enhance access to biological resources and foster international collaboration in this area. Best practices for Biological Resource Centres were developed in consultation with the scientific community, to serve as a target for the quality management of cultures collections. The OECD recommended the user community of the best practice guidelines, including the collections of the WFCC, to consider how to jointly work towards the implementation of the set out best practices.

4. The Budapest Treaty on the International Recognition of the Deposit of Micro-organisms for the Purposes of Patent Procedures of the World Intellectual Property Organization is a key international instrument in the conservation and sustainable utilization of micro-organisms. In the Budapest Treaty, several culture collections serve as repositories of biological resources for the purpose of implementing Intellectual Property Rights, and in some cases, supporting the enablement or description for patentability. For micro-organisms, other cells and genetic elements, these collections are defined as International Depository Authorities (IDAs).

5. Biological control, including through the sustainable use of micro-organisms is an essential part of agriculture and falls exactly within FAO's mandate. Since the mid 1960s, FAO has actively promoted the use of biological control agents in the context of IPM programmes to increase the sustainability of farming systems by improving the resilience of agro-ecosystems. IPM programmes have proven to be economically and socially sustainable as they have reduced farmers' dependence on procured inputs, and have been institutionalized at the farm community and local government levels.

6. The major normative output of FAO, in the context of the International Plant Protection Convention, in the area of biological pest control activities over the past 15 years, has been the approval and review of an international standard, or Code of Conduct for the export, shipment, import and release of biological control agents and other beneficial organisms (ISPM No. 03). For more information on this standard, see CGRFA-12/09/Inf.15.

7. Other existing ISPMs such as ISPM No. 2 (Framework for pest risk analysis, 2007), ISPM No. 11 (Pest Risk Analysis for quarantine pests including analysis of environmental risks

---

<sup>1</sup> More information about the CBD initiative can be found at <http://www.cbd.int/agro/cross-cutting.shtml>.

and living modified organisms, 2004) and ISPM No. 5 (Glossary of Phytosanitary Terms: Supplement No. 2 Guidelines on The Understanding of Potential Economic Importance and Related Terms, Including Reference to Environmental Considerations) provide the methodology for carrying out pest risk assessments for biological control agents and other beneficial organisms, including provisions for environmental risks; this aspect covers environmental concerns related to the use of biological control agents.

8. A number of international institutions, include several CGIAR centers, involved in research in food and agriculture, manage substantial microbial collections and are actively involved in field projects and programmes in the area of micro-organisms. For example, the International Institute of Tropical Agriculture (IITA) manages microbial collections, including samples of pathogens, which are being used for diagnosis within national and regional integrated pest management or plant breeding programmes.

9. CAB International (CABI) has extensive expertise in mycology and manages the UK National Collection of Fungus Cultures since 1947, which houses over 28,000 living strains and 400,000 dried reference specimens. CABI develops and scales up bio-pesticides to control agricultural and environmental pests on a large scale, using naturally occurring organisms, such as fungi and bacteria in an environmentally benign manner.

### **III. INTERNATIONAL NETWORKS**

10. The World Federation for Culture Collections (WFCC), founded in 1963, pioneered in setting up a global information network to promote and support the long-term establishment of culture collections and related services, and to strengthen the relationship between the collections and their users. Today, the Federation's operational database - the World Data Center for Micro-organisms (WDCM) - has records of nearly 550 national and international culture collections containing the list of micro-organism species held in 68 countries (updated April 24, 2009). This database forms an important information resource for all microbiological activity and also acts as a focus for data activities among the WFCC members.

11. StrainInfo bioportal, bring together relevant and available information on biological material kept at multiple culture collections, including the historical traces and geographic distribution of the strains.

12. Mycobank is an on-line database for the mycological and scientific society, which documents mycological nomenclatural novelties and associated data.