

International Development Fund report

Culture collection management in Cuba

Franklin Sotolongo

Cuban Science Base

The Cuban National System for Science and Technology has sectoral entities such as health, agriculture, etc. much in the way that the UK has government departments responsible for these disciplines. These bodies are responsible for carrying out the R&D in their respective areas. National technical and scientific activities are developed as an integrated model relevant to the participating centres from each sector. In this way, they draw on each other's strengths and maximize the potential of each speciality; dealing with issues such as human resources and financial and structural capacities to reach some of the social and economic goals of the Cuban government. This integrated approach is aimed at quickly and efficiently reaching the objectives proposed through various committees within the Ministry of Science, Technology and the Environment.

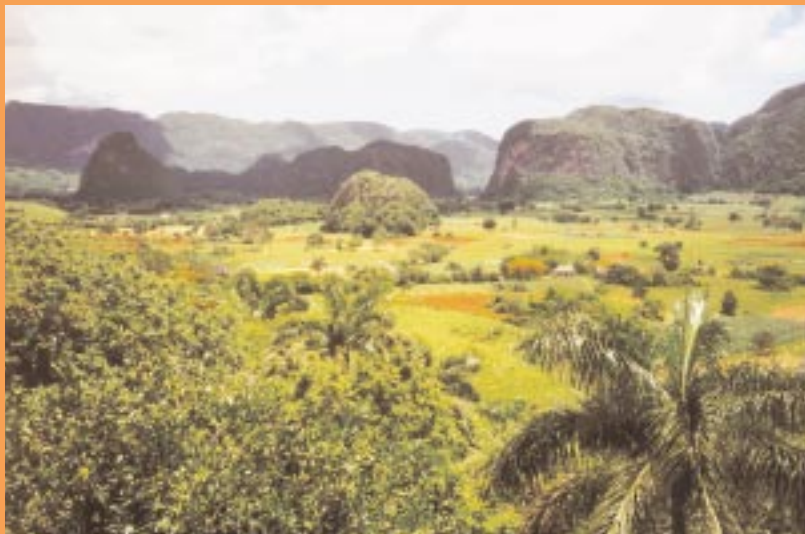
This strategy has given rise to the creation of many diverse scientific institutions in Cuba, rising from only 21 in 1951 to over 200 today and including production, biotechnological, biomedical and pharmaceutical centres.

The core activities of several of these scientific institutes involves basic microbiology and it has been necessary to study techniques concerned with the preservation of micro-organisms. Personnel have been trained to set up and manage culture collections.

At the beginning of the 1990s, a directive of the Academy of Sciences of Cuba encouraged the establishment of individual culture collections in each appropriate Institution. Some thought was given as to how these should function and develop and several laboratories and individual scientists wished to set up a Cuban Federation of Culture Collections. The current strategy is aimed at establishing the requirements of such a federation in terms of logistics, co-operation and training.

Culture collection management

Workshops and national courses have taken place to promote and organize the setting up of culture collections in research and production centres within Cuba which deal with different types of micro-organisms. The first international course on *Culture Collection Maintenance and Management* was held in the Finlay Institute, Center for the Research, Development and Production of Vaccines in Havana, Cuba, from 20 to 21 June 2000. The course was co-ordinated by Dr Peter Green from the National Collection of Industrial, Food and Marine Bacteria (NCIMB), UK, assisted by Dr David Smith of CABI Bioscience and Dr John Day from the Culture Collection of Algae and Protozoa (CCAP) and some members of the National Cuban Collection Culture Group. It was attended by 60 specialists from different scientific and production facilities in Cuba.



In addition to training and education, the course also provided a great opportunity for the participants to exchange experiences. The course included formal lectures, video presentations and workshops on the following topics:

- Culture collection function and quality management
- Culture collection services and activities
- Principles and theory of freeze-drying
- Principles of cryopreservation
- Preservation techniques for bacteria, fungi, algae and protozoa
- Databases, catalogues and websites
- Demonstration of the UKNCC website
- Postal and packaging regulations for the transportation of cultures
- Acceptance and maintenance of patent cultures
- Quality assurance in culture collections
- Impact on culture collections of the Convention on Biological Diversity

The focus afforded by the meeting and the useful information and exchange of ideas will, I hope, provide the impetus for the loosely affiliated Cuban Federation to proceed on a more formal basis and will allow us to move to the next stage of policy making, planning and fund raising.

Finally, we would like to thank the UK lecturers for organizing the course and the SGM for the award from its International Development Fund, without which this meeting could not have taken place.

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UPPER:
The Viniales Valley in north-west Cuba.
COURTESY P.M. GREEN

LOWER:
Some of the participants on the *Culture Collection Maintenance and Management* course, June 2000.
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