Country Report from Thailand:
Microbial resources and human resource development: BIOTEC's Experiences

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ABSTRACT

BIOTEC culture collection has been established in 1996. Initially, BIOTEC focuses on insect pathogenic fungi and, later, expands to diverse group of fungi, yeasts and bacteria as well as uncultured strains from the extreme environment in order to support the research program and taxonomists development. At present, almost 40,000 strains are collected and preserved, these include fungi (27,000), yeasts (2,600) and bacteria (8,300). The cultures are maintained in freezing and freeze drying stage as to ensure their genetic stability for long term storage. In addition, the temperature monitoring system of freezing unit has been set up to control and regulate the temperature for the survival of preserved cultures.

The data generating from research work were managed by a computer program named Microbial Information Management System (MIMS) which was developed by the Information Systems Laboratory. MIMS enables the users to input and retrieve data and information on number and diversity of preserved cultures as well as biotechnological products produced.

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Beside the continuation of financial support, human resources are also the important factor for the long term sustainability of the collection. BIOTEC has launched the Human Resource Development Program in Biotechnology for neighboring countries since 2001 and expanded to cover the Asia Pacific region in 2007. The course ranges from 3 to 12 months long which includes basic and advance training on biotechnological techniques such as molecular identification of bacteria fungi and yeasts, management of culture collection, screening techniques for biological products. Ninety nine scholarships have been granted from 2001 to 2009.

BIOTEC Culture Collection (BCC) has been certified with ISO 9001:2000 as a service provider since 2005. The deposition and distribution of cultures have been served with MAA and MTA which carefully produced by the Bio-law Department at BIOTEC.