

Topic (Times New Roman, 20)

Training Course of Microbial Resources
Information Management and Utilization
for Developing Countries

Personal introduction (less than 100word) (Times New Roman, 14)

I am Ursela G. Bigol, Supervising Science Research Specialist of the Environment and Biotechnology Division, Industrial Technology Development Institute, Department of Science and Technology. I am a Ph.D. student in Biochemistry at the Department of Biochemistry and Molecular Biology, University of the Philippines, College of Medicine, Manila. My dissertation is on Isolation of Bioactive substances from actinomycete isolated in compost/vermicompost where plants were allowed to decay.

My current researches are on cacao fermentation, laccase production from locally isolated mushroom species and bench scale food color production using *Monascus purpureus*. Under my supervision is rapid detection of adulteration of papaya in pepper using molecular methods.

I have availed of UNESCO training courses namely; Exploitation of Novel Microorganisms, Especially the Actinomycetes and the Postgraduate Diploma Course in Microbiology, Osaka University, 1994-1995. I have submitted a portion of my resume in my application forms.

Name of your culture collection (Times New Roman, 14)

ITDI Culture collection WFCC reg. ITDI 503

ABSTRACT

ITDI has been a small collection and its membership to GCM has never been updated. No data have been uploaded into GCM. The contact person and other data remain unchanged. To upload strains, data about the strains should be verified and/or annotated. Collaboration in terms of laboratory training for human capacity building will be necessary. If it is possible, to establish a center in our institute, being under the Department of Science and Technology through UNESCO will greatly upgrade our facilities and accelerate the research activities in our collection. Data management system will be established using standard techniques and protocol to obtain the data that will be uploaded into the WDCM. It will be necessary to discuss further with higher authorities.

Key words: (Times New Roman, 14)

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1. Brief introduction of your Culture Collection.

The Industrial Technology Development Institute Culture Collection is registered under the WFCC Reg. ITDI 503. It was formerly under the Biological Research Center, National Institute of Science and Technology. It has microbial holdings less than 500 and the database management system is not in place. The researchers who do isolation maintains and rejuvenates the microorganisms themselves. The collection does not require researchers to deposit their culture. The identification is not being done because of budget constraints. The isolates are from natural environment and screening is done for specific application, especially for bioremediation of polluted environment, for specific enzymatic properties or bioactivity against some pathogens. The money earned from technical services is being used to fund the culture collection. Some culture media may be obtained from current projects. The distribution of culture is only within the Philippines. It is difficult to send microbial cultures by courier services, even within the country sending cultures by courier require documentation, questions always arise during the sending of cultures by LBC. Trainings are coordinated by the Technological Services Division. The institute is ISO certified for management system. The status of ITDI culture collection has been discussed in the powerpoint presentation.

2. Benefit from the training courses.

I learned the database system of WDCM and how to navigate several

of the databases. The country report of each of the participants were very impressive, a sizeable budget allotment made a difference in the progress of each culture collection. There are culture collections with several strains of highly specialized cultures like yeasts producing alcohol as biofuel, a collection specialized for pathogenic clinical isolates. The human capacity building from several countries was given a priority. Several scientists work together in the collection and the laboratory facilities are available in a number. A few collection shares with the status of my collection in terms of manpower, laboratory facilities and human capacity. Possible collaboration within and among the participants is the best way to connect and interact with other culture collections. Identification and annotation of cultures would require a lot of work and funding. The lessons I learned during the Bioinformatics course enhanced my appreciation on the data practice. ITDI has not done molecular studies on the strains. Updating of publications where the cultures have been utilized may be done upon my return to the Philippines.

3. Suggestion on WDCM work.

It should continue to work on the database management as this gives ready reference as to where to obtain type and reference strains. The data about the culture is readily retrieved from WDCM. Collaboration with

small culture collection in terms of molecular identification will ensure proper identification of cultures whose data are uploaded into the WDCM.

4. Comments or suggestion on the training courses.

WDCM through CGMCC can offer training courses with laboratory work wherein the participants identify using morphological, biochemical characteristics and molecular techniques. With minimal data sets and data standards, participants upload into the WDCM and the sending institute and CGMCC share the authorsip in the publication. This disseminates not only the information but WDCM fosters growth and development of small culture collections. If this will be possible, funding from the sending institutions can be sourced out to share with CGMCC.

5. Suggestion on further cooperation between WDCM and your collections.

Collaboration in terms of laboratory training will be very much appreciated. We can send requests and we can try to source funds for sharing the expenses with WDCM through CGMCC.