



**IFAR 2006 Professional Development Program
Completion Report
[800 words]**

Instructions:

Please submit the completion report by email, using this form, through the sponsoring CGIAR Center to ifar@ifar4dev.org within three months after the completion of the fellowship.

Please check if Thalwitz Scholarship

Yes

Name of Applicant

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Sponsoring CGIAR Center

IITA

I. Work Program goals achieved (maximum length: 200 words)

A germplasm survey was carried out in which 143 cultivars were identified in three agroecological zones spread from 800-2000 m above sea level. Forty were cooking (AAA), 20 brewing (AAA, ABB), 9 plantains (AAB) and 14 dessert bananas. Twenty-nine varieties had persistent flowers and escaped insect transmitted BXW infection.

A germplasm collection was established at the Universite' Catholique du Gabon (UCG). The 2 ha farm was planted with 34 cooking varieties, 12 brewing, 27 plantains and 9 dessert varieties.

A BXW survey was carried out and the disease confirmed in four territories (Masisi, Rutshuru, Beni and Nyiragongo). Data on other key constraints (*Fusarium* wilt, nematodes, weevils, Black sigatoka) were recorded. Poor crop management practices, e.g., high densities and delayed removal of infected mats were noted to be the main factors for disease spread, while insects contributed to spread in the low and mid altitude areas.

Pathogen isolates were obtained and they will be included among the collection being used to develop more efficient diagnostic tools at IITA in collaboration with the Central Science lab (UK) and Ohio State University (US).

UCG lab was provided with various chemicals for diagnostics, precision pipetting equipment, and GIS support to increase mapping capacity.

II. Plans for follow-up (maximum length: 200 words)

The project was linked to another ongoing regional project (Crop Crisis Control project-C3P) on BXW management. Dr. Vigheri attended training workshops in Uganda in October 2006 and through UCG, he will receive additional funds in 2007 from the C3P for BXW management in Beni territory.

In August 2006 Dr. Vigheri participated in a workshop in Nairobi, Kenya in which he collaborated with NARS partners in Uganda and Kenya, IITA and INIBAP to develop a successful concept note for BXW management that will be funded by ASARECA. Dr. Vigheri will access over 70,000 USD over the next three years for BXW management in east DR Congo.

In October 2006 Dr. Vigheri and UCG, with IFAR grant support, participated in a workshop in Kampala Uganda, in a regional initiative by DFID (Research Into Use program) to develop the basis of a concept note that is expected to increase the funds available for BXW management in the region in the future, part of which is likely to benefit DR Congo.

The germplasm collection at UCG will be maintained by the University. Further financial assistance has been pledged from INIBAP (through ongoing Belgium funded project) towards expanding the collection.

III. Report budget utilization including whether budget was spent as planned (maximum length: 100 words)

The budget was fully spent with some reallocation to reduce expenses on aspects covered from other sources. The budget for lab supplies was reduced from 51% planned to 10 % actual while survey budget was increased from 10% planned to 46% actual due to an increase in area and transportation costs. Budget for training in GIS was reduced from 27% to 11% and supplemented from other IITA sources. The allocation to germplasm collection was increased from 10% planned to 25% actual to accommodate the higher number of varieties identified during the survey.

IV. Assessment of the fellowship experience and general comments. (maximum length: 300 words)

This project was a very enriching experience at the scientific, institutional and human level.

At scientific level, UCG now hosts one of the largest collections of banana and plantain in Eastern DR Congo and Central Africa, which is genetic property for international use. It will benefit farmers and researchers today and is safe for future generations. A lot of knowledge has been gained on understanding BXW, which is valuable to DR Congo and the entire East and Central African region.

At institutional and human level, very valuable and strong linkages have been established with colleagues and institutions involved in agricultural research. Linkages have been established and strengthened with government agencies in DR Congo (INERA and Ministry of Agriculture), NARO (Uganda), KARI (Kenya), with regional and national NGOs involved in BXW management (Catholic Relief Services, CARITAS, CEDERU), other sub-regional bodies e.g. ASARECA, FAO. Exposure has also been increased to the operations and values of the CGIAR system through interactions with IITA, INIBAP and CIAT.

We are grateful to IFAR for financial support and to IITA for scientific support through Dr. Maina Mwangi who served as intermediary for obtaining this IFAR fellowship.