The Royal Museum for Central Africa - Belgium

The Stellenbosch University – South Africa

with the support of the Belgian Development Cooperation

call for applications for

6 scholarships for the training course

Advanced tools for the monitoring and identification of African fruit fly pests (Diptera, Tephritidae)

12-22 December 2022

Stellenbosch, South Africa

Context

Frugivorous Tephritidae (also known as "true" fruit flies) are among the world's worst agricultural pests, being of major economic importance in nearly all tropical, subtropical and temperate countries and causing enormous devastation to both food production and international trade, in spite of often intensive insecticide use. As horticultural commodities are a main source of income for small scale farmers, these flies severely contribute to poverty, malnutrition and poor production and trade in large areas of tropical developing countries, including Africa, impeding the development of lucrative and labour-intensive agroindustries in rural areas. Changing agricultural practices and novel demands for particular crops and international trade aggravates the problem through the introduction of exotic invasive pests.

True fruit flies are one of the largest Diptera families, comprising about 4500 species worldwide, about half of which attack fruits and crops. In Africa, damage on commercial fruits and crops is caused mainly by polyphagous species belonging to the genera *Ceratitis*, *Dacus*, *Zeugodacus* and *Bactrocera*. Other African and closely related genera with fewer taxa are *Capparimyia*, *Carpophthoromyia*, *Neoceratitis*, *Perilampsis* and *Trirhithrum*, which also include some species of economic significance. Correct identification of intercepted / trapped fruit flies (on cargos, in airports, farms, orchards, etc.) is crucial to determine pest control strategies, to prevent the introduction of invasive species and to minimise crop losses. Yet, accurate identification of these pests requires specialised skills and there is an urgent need of training personnel for more effective and timely detection of these pests. The Royal Museum for Central Africa (RMCA, Tervuren, Belgium) and the Stellenbosch University (SU, Stellenbosch, South Africa) are organising an advanced training course on the monitoring and identification of tephritid fruit flies.

RMCA has an internationally renowned expertise related to the taxonomy and systematics of African Tephritidae and vast documentation and insect reference collections. The Department of Conservation Ecology and Entomology of SU has long standing and complementary expertise on the ecology and distributions of African fruit flies. RMCA and SU are research

partners in DISPEST ("Redefining dispersal potential for adequate fruit fly pest management") a project supported by the Belgian Directorate-General for Development Cooperation and Humanitarian Aid (DGD) in collaboration with Citrus Research International (South Africa) and the Eduardo Mondlane University (Mozambique).

Course objectives and contents

This advanced course complements the training courses periodically organised by RMCA on the taxonomy and systematics of African fruit flies. The course is addressed to professionals who can already deal with identification and monitoring of tephritid flies and aims at providing advanced and multidisciplinary tools for the identification of seven fruit fly genera of agricultural importance in Africa. The course will be held at Stellenbosch University over seven working days between 12 and 21 December 2022 by an international team of referenced instructors and will include extensive hands-on practice and field activities.

Profile of the participants

The training can receive 6 participants, among whom researchers and employees who are confronted with regular fruit fly identification and monitoring at a professional level and a national scale. They may be permanent staff members from agricultural institutes, professors of agricultural faculties, researchers from national institutions, etc. Participants must have pre-existing knowledge in taxonomy and ecology of Tephritidae (to be detailed in the motivation letter). Special attention is given to the participation of women. A good command of English is requested in case it would not be the mother tongue or the language of education of the applicant.

Admission requirements

Only applications from people with residence in Sub-Saharan Africa can be taken into consideration. Candidates must be citizens of one of the following countries: Benin, Burundi, Democratic Republic of Congo, Kenya, Mozambique, Rwanda, Senegal, South Africa, Tanzania, Uganda. If citizen from another African country, please contact us before submitting your application. Applications from consultants or individuals cannot be accepted, except for candidates from the private sector with a background that shows a clear link to Tephritidae in their professional work. The candidates should demonstrate a record of substantial work related to the monitoring and identification of tephritid flies. All applications will be subject to an evaluation by a panel of experts from RMCA and SU.

Instructions for application

A complete application file consists of :

1. the application form, which can be downloaded from the RMCA internet site at the following address: https://www.africamuseum.be/fr/research/training. This application form has to be completed, dated and signed by the applicant. A copy of the passport must be attached to the form.

2. a separate motivation letter outlining

• why you consider yourself a good candidate for this training,

• what is your experience and your knowledge in monitoring and ID of tephritid flies,

- which are the immediate perspectives offered by the training in the progress of your professional activities (direct or indirect benefits of the training for you in future research/work) and what would be the benefits of your training to your home institute.

- how you intend to share your new knowledge with your colleagues, students,… An important aspect of any application is the commitment to contribute to the sharing of knowledge and research results. This knowledge sharing can take many forms, (workshop, presentation, online video,...) but it is important that you can list them and estimate the number of people who will benefit from these activities.

3. A letter from your employer (research institution, ministry, university, …) authorizing your participation in the requested training, confirming your current position within the institution and reintegration after the training. It also should indicate a commitment to make good use of the newly acquired expertise and describe what would be the benefits of this training for the institution.

The complete application file must be send to callff@africamuseum.be

Deadline for application: 15/08/22