

# The Pollinator Information Network Newsletter

Editorial

July 12, 2019. Vol. 3, Issue 2

## Welcome to the second issue of volume 3 of the Pollinator Information Network Newsletter!

The *Pollinator Information Network Newsletter* is one of the projected outputs of an ongoing project of the JRS Biodiversity Foundation, *i.e.* “The Pollinator Information Network for Two-Winged Insects” or simply PINDIP. The PINDIP project has its own website: <https://www.pindip.org/>. An update on the project can be found on pages 2-4.

We also introduce a new project, DIPTATEACH, between Belgium and South Africa (page 5) and announce two training courses in general entomology and collection management, one later this year (Tanzania, pages 6-7) and one in 2021 (South Africa, page 8).

Read more on the 10<sup>th</sup> International Symposium on Syrphidae (ISS10) on pages 9-10 and on the 12<sup>th</sup> International Symposium on Pollination (ISPXII) on page 11.

As usual, the issue ends with a list of new, although incomplete, published research related to pollination biology in its broadest sense.

We invite everyone concerned to submit relevant information for the *Newsletter*, including summaries of their own research and projects on pollination biology – or publications that they want to see highlighted, relevant literature, upcoming conferences and symposia, possibilities for cooperation and grant applications related to plant-pollinator networks, *etc.*, before the 15<sup>th</sup> of November.

Enjoy reading!

Kurt Jordaens  
on behalf of the PINDIP team

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## Project update: The Pollinator Information Network for two-winged Insects (PINDIP)

The Pollinator Information Network for two-winged insects (or PINDIP) is a three-year project (2017-2019) funded by the JRS Biodiversity Foundation (<https://jrsbiodiversity.org/>). PINDIP has its own website: <https://www.pindip.org/>.

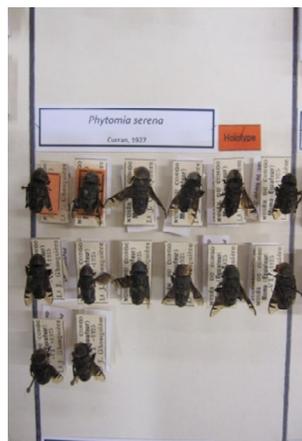
The PINDIP project is a partnership of two European (Royal Museum for Central Africa, RMCA Belgium and National Botanical Garden, Belgium) and six African partners (International Institute of Tropical Agriculture (IITA, Benin); International Centre of Insect Physiology and Ecology (*icipe*, Kenya); KwaZulu-Natal Museum (KZNM, South Africa); National Museum Bloemfontein (NMSA, South Africa); South African Biodiversity Institute (SANBI, South Africa), and National Museums of Kenya (NMK, Kenya).

The major goals of the project are to share biodiversity data of Diptera (two-winged insects) through digitization of collections, field work, and exchange of specimens, to train local entomologists, and to enhance capacity on plant-pollinator networks in the Afrotropical Region.

After two and a half years, we list below some of the major achievements of the project so far:

### Digitization of collections:

One of the major goals is to digitize 40,000 records of the Diptera collections of the partners. We target seven families, *viz.* Nemestrinidae, Bombyliidae, Mythicomyiidae, Rhiniidae, Syrphidae, Calliphoridae, and (pangonine) Tabanidae, which are assumed to play a significant role in the pollination of flowering plants. More than 10,000 records have been submitted to local hubs of the Global Biodiversity Facility (GBIF) and these, and other, data will be published soon. Below some pictures of the newly curated Syrphidae collection at the RMCA (left and middle) and at *icipe* (right).



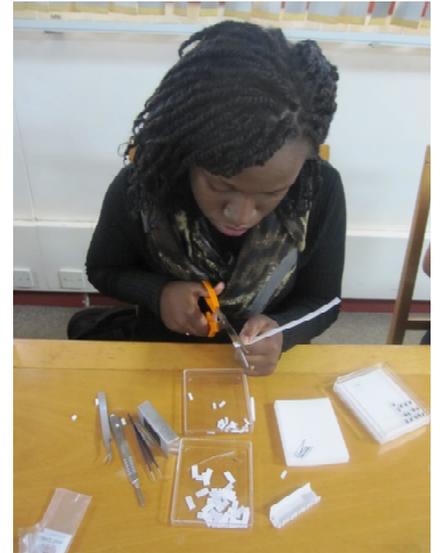
### Field work:

In the last two years and a half, the partners of the PINDIP project, together with various other colleagues, have collected Diptera during several field trips in Togo, Benin, Kenya, South Africa and Uganda. The collected specimens are added to the partner's collections and will be digitized. These data are also the basis for species checklists for the various countries, more specifically those of the hoverflies (Syrphidae). Below you see some pictures of the field work in Uganda (December 2018, top row, © Menno Reemer) and Togo/Ghana (June 2019, bottom row, © Georg Goergen).



### Training:

The project is training four technicians at the partner's institutes and museums (IITA, *icipe*, NMK, KZNM) in general entomology, digitization and collection management. Besides, we organize two-week trainings for 14 young, and emerging, African entomologists. A first course was held in December 2017 (Kenya). You will find an announcement of a second (2019, Tanzania) and third (2021, South Africa) training course further in this *Newsletter* issue. Trainings consist of ex-cathedra courses on morphology, classification, identification, identification methods, collection methods, and conservation methods of Diptera, with a focus on the target families listed above. Practical exercises will be used to comment on, and test, the topics presented in the courses. On the next page you see some pictures of the training course in Kenya (December, 2017).



### Capacity building and networking:

Besides the training courses, we stimulate capacity building and networking through the organisation of plant-pollinator symposia during congresses, and to share project results at various congresses. We organized a symposium entitled “The importance of Diptera in plant-pollinator networks” at the 9<sup>th</sup> International Congress of Dipterology (Namibia, 2018) with 15 talks and actively participated at the 9<sup>th</sup> (Brasil, 2017) and 10<sup>th</sup> (Greece, 2019) International Symposium on Syrphidae.

We publish 2-3 PINDIP *Newsletters* per year to highlight new projects, and to make announcements related to (Diptera in) plant-pollinator networks.

Progress and more information can be found on the PINDIP project website ([www.pindip.org](http://www.pindip.org)). On the website, you will find, amongst other items, sets of pictures of Syrphidae of the Afrotropical Region. Currently, one lateral view and of a wing can be found for each genus but we have now started to add pictures for each of the species. Have a look at the genus *Syrpitta*, for example! Below some pictures you might encounter on the website.



contact: kurt.jordaens[at]africamuseum.be

## New project: DIPTera Museum Collections as a source for TAXonomic research and TEACHing activities (DIPTATEACH)

The Royal Museum for Central Africa at Tervuren, Belgium (RMCA), the KwaZulu-Natal Museum at Pietermaritzburg, South Africa (KZNM) and the Albany Museum, South Africa (AM) have just started a new project financed by the Belgian Science Policy (Belspo, Belgium) and the National Research Foundation (NRF, South Africa). The project will support joint research activities between South Africa and Belgian young and emerging researchers in order to contribute to scientific advancement in both countries, to provide an opportunity for young and emerging researchers in the two countries to engage, and to contribute to research capacity enhancement.

The project will do so by:

- 1) developing an open-access data set on the Syrphidae of South Africa in the KZNM Diptera collection ;
- 2) publishing a data-paper on the Syrphidae collection of KZNM and a checklist of the South African Syrphidae ;
- 3) creating an open access online picture database of South African Syrphidae [this database will be free-online on the PINDIP website and will contain a large set of high-resolution stacked pictures of South African Syrphidae that will make it easier to identify South African hoverflies] ;
- 4) improving the PINDIP-website through the incorporation of flower visit records of South African Syrphidae;
- 5) training a group of young and emerging South African researchers (see further in this issue).

Budget: 45.000 €

Period: 2019-2021

### Partners:

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Dr. Terrence Bellingan, Albany Museum, Albany, South Africa, t.bellingan[at]am.org.za

### **Sponsors:**



# Training course in taxonomy and systematics of African pollinating flies

18 – 29 November 2019, Tanzania

## Organisation:

The training will be organized by several institutions: the Royal Museum for Central Africa (RMCA) in Belgium, the Sokoine University of Agriculture (SOI) in Tanzania, the KwaZulu-Natal Museum in South Africa and the Natural History Museum, London in the UK.



## Background:

The objective of this group training is to ensure, for the sake of the African scientists or the persons confronted with the problem, a basic training on the identification and ecology of African Diptera, with special emphasis on those families (*e.g.*, Bombyliidae, Calliphoridae, Nemestrinidae, Rhiniidae, Syrphidae, and pangonine Tabanidae) that have a significant role in plant-pollinator networks.

It shall consist of ex-cathedra courses on morphology, classification, identification, identification methods, collection methods, and conservation methods of Diptera, with a focus on the target families listed above. Practical exercises will be used to comment on, and test, the topics presented in the courses.

Participants shall be asked to bring material they collected so it can be identified during practical work sessions. Likewise, should they have large datasets at their disposal, these may also be analysed.

## When/where? :

The course will take place at the Sokoine University of Agriculture (Tanzania) from 18-29 November 2019 and be taught in English.

## Participant profile and admission requirement:

The training can receive 10-14 participants, among whom researchers and employees who are confronted with pollinating flies on a professional level. They may be employees from agricultural institutes, professors of agricultural faculties, researchers from national or international institutions, etc.

Participants must have a minimum level of knowledge in basic Diptera ecology.

The candidates' maximum age at the moment of their application is not to exceed 45 years.

Only applications from people with residence in Sub-Saharan Africa and working for an institution, ministry, research institute or university can be taken into consideration. Applications from consultants or individuals cannot be accepted.

Candidates must be citizens of one of the following countries: Benin, Burundi, Burkina Faso, Côte d'Ivoire, Cameroon, Democratic Republic of Congo, Ethiopia, Guinea, Kenya, Madagascar, Mali, Mozambique, Niger, Rwanda, Senegal, South Africa, Tanzania, Uganda, Zambia, and Zimbabwe. This list is not restricted and may be changed in 2019.

Scientists with a diploma other than MSc or PhD. should demonstrate a record of substantial work related to the subject that is presented (Diptera of the target families; plant-pollinator networks, etc.).

All applications will be subject to an evaluation by internal experts.

**More information :**

More information on the trainings organized by the RMCA can be found on:

<http://www.africamuseum.be/research/collaborations/training>

contact: Kurt Jordaens at [kurt.jordaens\[at\]africamuseum.be](mailto:kurt.jordaens@africamuseum.be)



**Sponsors:**



**Belgium**  
partner in development

**JRS** Biodiversity  
Foundation

# Training course in entomology and collection management for South African entomologists

## 2021, South Africa

### Organisation:

The training will be organized by the Royal Museum for Central Africa (RMCA, Belgium) and the KwaZulu-Natal Museum (KZNM, South Africa). The training will take place in South Africa, in the first half of 2021. Ten young and emerging South African researchers will be trained in taxonomy, entomology and collection management.

### Background:

The aim of this training is to stimulate entomological (taxonomic and ecological) research in South Africa, specifically in students and young researchers and to increase sustainability of taxonomic expertise in Dipterology in South Africa.

More information will be provided in forthcoming issues of the *PINDIP Newsletter* and will be posted on the PINDIP website.



### Sponsors:



# Symposium: 10<sup>th</sup> International Symposium on Syrphidae (ISS10), Greece

## 10<sup>th</sup> International Symposium on Syrphidae

8th - 12th September 2019

Lesvos, Greece



Dear fellow Syrphidologists and Entomologists,

It is a great pleasure to invite you all to attend the 10th International Symposium on Syrphidae (ISS10). The main objective of the Symposium is to bring together people interested in hoverflies, to promote the study of hoverflies, as well as develop professional or private collaborations based on this insect group. We are sure that this 10th jubilee Symposium will be a scientific highlight for colleagues from around the world, as well as all symposiums before.

During the 18 years since the first Symposium was held in Stuttgart, great progress has been made in the research, as well as in the international collaborations among syrphidologists. As a direct result, the 10th Symposium will cover all major aspects of syrphidology, such as systematics and (integrative) taxonomy, morphology, evolution, biodiversity and conservation, biogeography, ecology etc.

ISS10 is a co-organization of the University of the Aegean, Department of Geography, Mytilene, Greece and the University of Novi Sad, Department of Biology and Ecology, Novi Sad, Serbia.

Schedule:

- Arrival: 8 September 2019
- Symposium: 9 -11 September 2019
- Excursion: 12 September 2019, Kallonis, Eresos, Sigri, Petrified forest



Olive grove along the Bay of Year – Photo: T. Petanidou

**Contact:**

More information on the congress can be found at <https://cbbc.pmf.uns.ac.rs/en/iss10/>.

Feel free to contact the symposium organizers at [syrphidae10@gmail.com](mailto:syrphidae10@gmail.com)

The PINDIP partners will actively participate at the congress with two talks and two posters !

New species in the *Eumerus ornatus* group (Diptera: Syrphidae) from the Republic of South Africa. Snežana Radenković, Ante Vujić, Nevena Veličković, Gunilla Ståhls, Ana Grković, Mihajla Djan, Celeste Pérez-Bañón, Santos Rojo & Kurt Jordaens (poster)

A taxonomic revision of Afrotropical *Mesembrius* (Diptera, Syrphidae). Kurt Jordaens, Georg Goergen, Jeff Skevington, Scott Kelso & Marc De Meyer (talk)

Towards a checklist of the Syrphidae (Diptera) of Uganda. Kurt Jordaens, James Peter Egonyu, Ximo Mengual, Menno Reemer, Jeff Skevington & Gunilla Ståhls (talk)

The Pollinator Information Network for two-winged insects (Diptera) (PINDIP): update. Kurt Jordaens, Robert Copeland, Georg Goergen, Michelle Hamer, Steven Janssens, John Midgley, Burgert Muller & Laban Njoroge (poster)



# Congress: Twelfth International Symposium on Pollination (ISPXII)

**31 August – 4 September 2020, South Africa**

## UPCOMING !

The 12<sup>th</sup> International Symposium on Pollination will be organized from 31 August – 4 September 2020, at the Kirstenbosch National Botanical Garden.

Kirstenbosch National Botanical Garden is acclaimed as one of the great botanic gardens of the world. Few gardens can match the sheer grandeur of the setting of Kirstenbosch, against the eastern slopes of Cape Town's Table Mountain.



More information can be found on the website of the International Commission for Plant-Pollinator Relationships (ICPPR) ([www.icppr.com](http://www.icppr.com)). ICPPR was founded in 1950 as the International Commission for Bee Botany (ICBB). Its objectives are to promote & coordinate research on relationships between plants and pollinators of all types. That mandate includes studies of insect pollinated plants, pollinator foraging behaviour, effects of pollinator visits on plants, management and protection of insect pollinators, bee collected materials (e.g. nectar and pollen), and of products derived from plants and modified by bees. Further, the ICPPR organises meetings, colloquia or symposia related to the above topics and publishes and distribute the proceedings. The ICPPR collaborates closely with national and international institutions and is one of the 82 scientific commissions of the International Union for Biological Sciences.

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