

The Papua Insects Foundation (2006-2026), twenty years a commitment to the insects fauna of Papua

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Suara Serangga Papua (SUGAPA digital) 17(1): 16-36

urn: lsid:zoobank.org:pub: DA56CA8B-7D87-4DBB-B2C7-A019A6DBC129

Abstract: An overview is presented of 20 years activity of the Papua Insects Foundation. The history, surveys and achievements are discussed. Some interesting events are highlighted and illustrated with informative pictures.

Rangkuman: Disajikan suatu tinjauan mengenai 20 tahun kegiatan Papua Insects Foundation. Sejarah, berbagai survei, dan pencapaiannya dibahas. Beberapa peristiwa yang menarik disorot dan diilustrasikan dengan foto-foto informatif.

Keywords: collection, journal, jubilee, New Guinea, website

Introduction

The Papua Insects Foundation (PIF) celebrates this year its 20th Birthday. Originally founded to be an informative platform for students and scientists for entomology in Papua, Indonesia, the achievements and objectives now reach much further than initially planned. Br. Henk van Mastrigt, who died in 2015, left a huge collection of more than 90,000 specimens of butterflies, moths and other insects. In this Koleksi Serangga Papua (KSP) are many type specimens, rare and undescribed species, which makes this collection very important for science. PIF feels obliged to help the responsible Universitas Cenderawasih (UNCEN) to maintain the condition and existence of the collection for the future.

With the start of the Papua Insects Foundation simultaneously the website papua-insects.nl was released. The historical events in New Guinea and especially the taxonomic information of mainly butterflies and moths are regularly referred to. And new information still is being added, the website is growing continuously.

The entomological journal SUGAPA (Suara Serangga Papua) would in fact have ended with the death of Henk van Mastrigt. PIF decided, in cooperation with the members of Kelompok Entomologi Papua (KEP), to continue this journal online with the website sugapa.org.

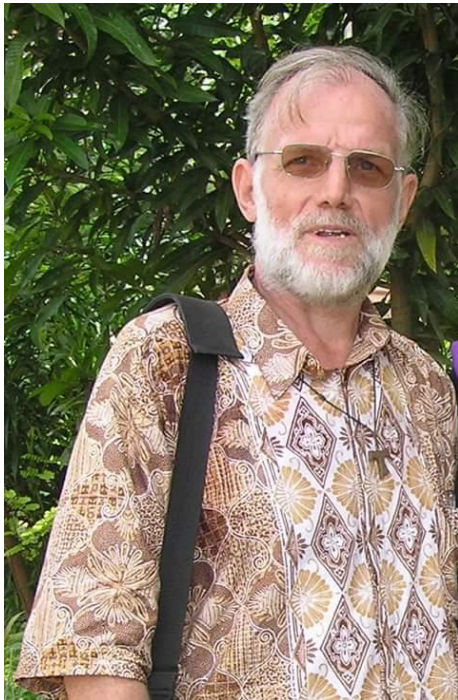
To be able to let the collection grow in the future, with an extended focus on other insect orders too, plans were made to build a new museum, with a research laboratory and education centre, in the area of UNCEN. This was in fact always the wish of Henk van Mastrigt, but which he couldn't fulfill. About 600 new drawers were built to improve the quality and manageability of the collection, especially when smaller species are concerned. The construction of the museum will start in 2027.

A summary is given of the amount of new species which are described through activities of PIF, in at least 14 entomological journals.

Finally, a future perspective is given on where and in which PIF can contribute.

Henk van Mastrigt

To have a good understanding of the history of the Papua Insects Foundation and its role and purpose of its activities in Papua Indonesia, it is necessary to first tell the story of the Catholic Brother Henk van Mastrigt for which fragments of his “in memoriam” are referred to (De Vos, 2016).



“Henricus Jacobus Gerardus van Mastrigt, better known to his friends as Bruder Henk, was born in Heerlen, The Netherlands, on 15th January 1946 and died at the age of 69 on the 5th of August 2015 in Jayapura, Papua, Indonesia. Inspired by the stories of missionaries, since childhood Henk dreamt of going to the tropics. At the end of 1974 he arrived in Irian Jaya (Indonesia) and with much perseverance he became the missionary economist for the Franciscan Catholic church.

Henk had a particular interest in the so-called River Whites (also known as Jezebels) (*Delias*, Pieridae), dominantly white on the upperside but colourful and decoratively patterned on the underside. These butterflies are sun lovers and are often rare, which makes them hard to collect. For Henk this was a

challenge and soon he possessed one of the most important collections of Papuan *Delias* in the world (now in KSP). He discovered new species and subspecies and tried to solve taxonomic puzzles in this genus. His publications in official entomological journals are numerous. Henk had contact with many international scientists and visited important museum collections. Gradually Henk made himself a specialist in this subject.”

But Henk also collected many moths for which he needed literature and specialists to identify them. Members of the Papua Insects Foundation helped him with this, and still many undescribed species are being discovered in his huge collection of about 90,000 specimens.

“Since 2000, his interest in teaching led him to involve biology students from the Universitas Cenderawasih (UNCEN) in Waena, near Jayapura, in his activities in the field. Henk visited many unexplored areas in Irian Jaya (later Papua) to collect Lepidoptera for his collection, but also for science. Some outstanding students became his regular assistants in the field. He taught the students the basics of entomology and helped them with projects and their thesis. Foreign scientists, who came to visit Henk and wanted to collect in the field, were asked to involve students in their survey and publications. This way, Henk helped the students and teachers of UNCEN to upgrade their work to a higher, more scientific level and they came in contact with foreign institutions and scientists.

With a group of inspired and ambitious students and teachers from UNCEN he founded in July 2006 “Kelompok Entomologi Papua” (KEP, Entomological Society of Papua) and published interesting entomological facts and fieldwork results from the students and himself in a newsletter: “Suara Serangga Papua” (SUGAPA), which means “the sound of the insects of Papua”. Two years later SUGAPA became an official entomological journal with a new and colourful layout that published articles in English by scientists from all over the

world. Many species new to science have been described in SUGAPA, as well as faunistic notes and other interesting entomological facts.”

An early start of interest in insects of Papua

Thirteen years before the Papua Insects Foundation was founded, two orientating visits were made to Irian Jaya, in 1993 and 1996.

1993: On invitation of Henk van Mastrigt the first author went to Jayapura, together with his colleague Arnold de Boer and friend Twan Rutten, for a stay of eight weeks. All three were interested in insects and were familiar with fieldwork in The Netherlands, but had no tropical experience. Henk was well acquainted with the area, local habits and language, so he helped a lot with the planning, translations and necessary documents. Near the village Depapre, in the West of the Cyclops Mountains, was the very first experience with attracting Papuan insects with a special UV-light on a white screen. Other visits were made to Wamena (Baliem Valley) and Pass Valley, both in the Jayawijaya Mountains, to Wandammen Peninsula, including the island Roon, and to Biak Island. The focus during this visit was mainly on moths, but we were also interested in singing cicadas (*Auchenorrhyncha*).



Collecting at light in Rasiei, Wandammen Peninsula



Sorting and packing the specimens by Arnold de Boer and Twan Rutten

1996: With a group of five people, Rob de Vos undertook a second visit of nine weeks to Irian Jaya. Again, Henk van Mastrigt welcomed us and helped us with the planning and documents. This time the Birdshhead Peninsula was visited, with Manokwari as our base. The northern and eastern edges of the Arfak Mountains were visited (Warkapi, Andai, Prafi), and the Raja Ampat island Batanta. At the end, four of us visited Wandammen Peninsula (Wasior, Mie, Tandia and Dotir River).



Collecting in Depapre, Cyclops (with Gerrit Withaar and Henk van Mastrigt)



Camp near Dotir River, Wandammen Peninsula

2005, an important year

Nine years later a group of six people visited Henk van Mastrigt in Papua (former Irian Jaya). But this time something had changed. Henk had contacts at the Universitas Cenderawasih (UNCEN) in Waena, near Jayapura. Students and teachers of the Biology department joined Henk on his field trips and research. In our activities we were supposed to involve the biology students and teachers as well, which turned out to be a fantastic combination of teaching and learning on both sides. The friendships which were made in 2005 still hold and new friends are being made in every following visit. At the “Laboratorium Biologi” of the “Fakultas Matematika dan ilmu Pengetahuan alam” we taught the students the basics of entomology and taxonomy. Since then, it is tradition in every visit to give a lecture and have some outstanding students and teachers accompanying us on field trips.

Because of our rather large group of six people, two groups of three people were formed to do field trips in the interior of Papua, and each group was accompanied by two UNCEN students or teachers. We alternately visited Pass Valley (district Abenaho) and Walmak (district Nipsan) in the Jayawijaya Mountains, and separately Abmisibil and Oksibil (Mabilabol) in the Star Mountains. The results of research were astonishing, up to now still new species from this trip are being discovered and described.

One very ambitious student, Wiwin, asked us why there is not one source on the internet to identify Papuan insects... This was the start for the idea to start the Papua Insects Foundation and to make a website focused on the insects of Papua Indonesia.

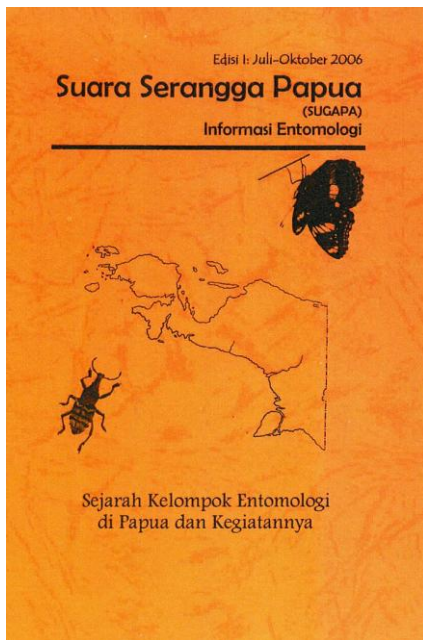


Demonstration of mounting and preparations



Piet Zumkehr shows leaf miners to UNCEN teachers

Founding and purpose



Henk van Mastrigt founded the Kelompok Entomologi Papua (KEP) on 1st July 2006 and initiated the entomological journal Suara Serangga Papua, better known with the abbreviation SUGAPA.

Almost simultaneously with KEP, the Papua Insects Foundation was founded, on 15th May 2006. One month later the website papua-insects.nl was released online.

The first members of the board were Piet Zumkehr (chairman), Rob de Vos (secretary) and Gerrit Withaar (treasurer).



Rob de Vos and Piet Zumkehr (right) at Supiori Island



Gerrit Withaar with his beating sheet for beetles

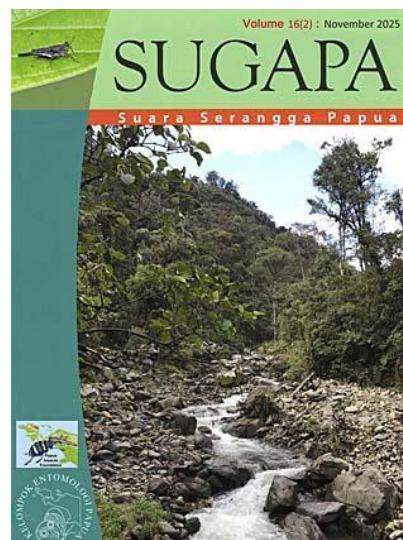
The Papua Insects Foundation has the ambition, in cooperation with biology students in Papua Indonesia and entomologists, to do research on the insect fauna of Papua Indonesia, and to recognize important and vulnerable areas of high biodiversity. These so-called biodiversity "hot spots" are in an urgent need of protection. This way we hope to contribute

to the protection of the rainforests. The Papua Insects Foundation wants to provide nature conservation organisations and authorities with information on these areas of endemism, biodiversity hot spots and faunistic and taxonomic information concerning the insects of Papua, to be stronger in the struggle for the protection of the rainforests in Papua. Furthermore, we encourage and support local universities and biology students to participate in inventory and other research projects on insects.

With the website and publications we want to draw attention to the need for research and protection of the rainforests in Papua in general, and the insect fauna in particular.

SUGAPA digital

With the death of Henk van Mastrigt the journal SUGAPA also came to a sudden end. Henk always published the volumes solitary without the help of others. The Papua Insects Foundation regarded the continuation of the journal SUGAPA as one of its obligations towards Henk and his students. It was decided to continue the publications online in 2016 with the modified name "SUGAPA digital" and to continue the numbering of the volumes, to start with volume 10(1). The aim was to produce two volumes each year but a shortage of manuscript copies forced us to now and then release only one volume in a year, sometimes with only three articles. This could be a call for authors to publish their manuscripts on New Guinea insects in SUGAPA digital. All issues and volumes of SUGAPA (paper and digital version) are digitized and put online in sugapa.org and have free access.



Surveys and events

Surveys or field trips, they all are necessary to gather information and specimens to do faunistic and taxonomic research. Without this knowledge we do not understand the complexity of the biodiversity in Papua. Searching for areas of endemism requires monitoring or at least some collecting and observation of the insects that live in certain areas, together with historic information from literature and museum collections. This takes years of study and a lot of experience. Identifying species is another thing, which also requires study, experience, patience and affinity with taxonomy. Making photographs and building an archive is essential for proof, teaching and learning. Having a reference collection is important for above mentioned purposes, which Henk van Mastrigt understood very well.

The result is having a treasure of information and a collection which is important for science and future studies.

Teaching and learning was one of the aims of Henk van Mastrigt, and the Papua Insects Foundation has taken over this important task. Our friends from UNCEN, teachers and students, are involved in collection maintenance, field trips and scientific publications, just as the Nagoya Protocol tells us to do. The following list presents the major events related to the Papua Insects Foundation that took place from 1993 till 2025:

- **1993:** first orientation survey to Baliem Valley, Pass Valley, Wandammen, Roon Island and Biak Island; participants: Rob de Vos, Arnold de Boer & Twan Rutten
- **1996:** second orientation survey to Warkapi-Andai-Prafi (Arfak), Batanta Island and Wandammen; participants: Rob de Vos, Arnold de Boer, Piet Zumkehr, Gerrit Withaar & Herman de Jong
- **2005:** survey to Pass Valley, Walmak, Abmisibil and Molbakon (Oksibil); participants: Rob de Vos, Gerrit Withaar, Piet Zumkehr, Jaap Zwier, Tomas Lackner & David Mannering. Accompanied and assisted by Evie Warikar, Herlina Menufandu, Daawia Suhartawan, Hanna Kawulur, Icka Ramandey, Windarty (Wiwin) Fauziah, Rinto Mambrasar
- **2006:** founding of Papua Insects Foundation and release of the papua-insects website. First members of the board: Piet Zumkehr (chairman), Rob de Vos (secretary) and Gerrit Withaar (treasurer)
- **2006:** founding of Kelompok Entomologi Papua and start of SUGAPA newsletter by Henk van Mastrigt
- **2008:** survey to Walmak, Lelambo and Supiori Island; participants: Rob de Vos, Hans de Vos, Vincent Kalkman, Piet Zumkehr & Joop Schaffers. Accompanied and assisted by Herlina Menufandu and Rinto Mambrasar
- **2008:** upgrade of SUGAPA to an entomological journal in full color and with English text
- **2010:** In December a minisymposium was held on entomological research in Papua, in the Van Steenis building in Leiden. Special guests were Henk van Mastrigt, Daawia Suhartawan and Evie Warikar. Several foreign scientists attended the event, from Germany, France and Finland
- **2011:** survey to the Birdshead Peninsula: Mokwam-Demaisi-Benyas (Arfak) and Senopi (Tambrau); participants: Rob de Vos, Gerrit Withaar, Piet Zumkehr, Siep Sinnema, Jannie Sinnema, Sandra Lamberts, Joop Schaffers & Harry Smit
- **2011:** survey to Walmak (district Nipsan); participants: Frans Groenen & Marion van Eyken. Accompanied and assisted by Rinto Mambrasar and Rosalina Giovani Mandowen
- **2014:** survey to Mokwam (Arfak), Senopi (Tambrau) and Fakfak-Werba-Huri Mber (Onin); participants: Siep Sinnema, Jannie Sinnema, Piet Zumkehr, Frans Groenen
- **2015:** passing away of Henk van Mastrigt
- **2015:** coincidentally visit to Kaimana and Fyria River (Kumawa Mts); participants: Rob de Vos, financed by Joop Schaffers. Accompanied by Daawia Suhartawan and Erlani Febrida. This visit led to the founding of the Kumawa Mountains National Park
- **2015:** in November 2015 the board of PIF was modified as follows: Rob de Vos (chairman), Siep Sinnema (secretary), Gerrit Withaar (treasurer), Piet Zumkehr (ordinary member), Frans Groenen (ordinary member), Eulalia Gasso-Miracle

(ordinary member), Daawia Suhartawan (foreign member) and Evie Warikar (foreign member)

- **2016:** continuation of SUGAPA journal as SUGAPA digital
- **2017:** signing of MoU with UNCEN by Dr. Onesimus Sahuleka (rector) with Rob de Vos and Eulalia Gasso-Miracle
- **2018:** field trip to Yuwong forest (Keerom) and survey to Lake Habbema. Visit to Nimbokrang; participants: Rob de Vos, Siep Sinnema, Jannie Sinnema, Piet Zumkehr & Renate Kramer. Accompanied by Daawia Suhartawan
- **2019:** Frans Groenen steps down from the board because of being too busy
- **2021:** Gerrit Withaar steps down as treasurer because of illness (he dies one year later). Mónica Guimarães Cruz replaces him. Eulalia Gasso-Miracle steps down as ordinary member of the board because of being too busy
- **2022:** digitization in KSP collection for Malesian Butterfly Project by Anne Overduin and Willemijn van Dijk. Assisted by Evie Warikar, Erlani Febrida, Daawia Suhartawan, Icka Ramandey and Herlina Menufandu
- **2022:** Icka Ramandey and Erlani Febrida enter the board as foreign members
- **2023:** survey to Yapen Island, and visit to Nimbokrang; participants: Rob de Vos, Piet Zumkehr, Siep Sinnema, Jannie Sinnema, Josef Tumbrinck, Luc Willemse, Pasquale Ciliberti, Mónica Guimarães Cruz, Peter Jan de Vries, Camiel Doorenweerd, Daniel Rubinoff, David Lohman, Royce Cumming, Inge van Noortwijk, Rinske van Noortwijk, Tomas Lackner, Olivier Pequín, Nicolas Grimaldi, Tony Robillard. Accompanied and assisted by Daawia Suhartawan, Erlani Febrida, Icka Ramandey, Heron Yando and Kajeff Wonda
- **2025:** maintenance of KSP collection by Rob de Vos. Preparing and studying the insects from the 2023 survey in KSP
- **2025:** start of crowdfunding for new drawers for the KSP collection.
- **2025:** On 5th July Rector Dr. Oscar Oswald O. Wambrau, SE., MSc.Agr. (UNCEN, Waena, Papua, Indonesia) visits Naturalis Biodiversity Center. Together with Luc Willemse and Rob de Vos he discussed the plans for a new natural history museum in Waena, Papua.
- **2026:** With the crowdfunding enough money was gathered for 600 new drawers with 60 cabinets. A local furniture maker built the drawers of local Lingua wood.
- **2026:** A group of 10 volunteers from The Netherlands go in October to the KSP collection for preparing the drawers for use and to do maintenance in the collection.

Two examples of surveys and visits

Survey in Mokwam (Arfak), Senopi (Tambrau) and Fakfak-Werba-Huri Mber (Onin) in 2014 (by Siep Sinnema):

In 2014, Frans Groenen, Jannie Sinnema, Siep Sinnema, and Piet Zumkehr (hereafter the PIF group) conducted a survey expedition to West Papua (Papua Barat). The objectives of the Papua Insects Foundation were to maintain collaboration with the staff of the local university (UNIPA), provide support to its teachers and researchers, and investigate the insect fauna of the surveyed areas. Three members of the group had already established contacts with Mrs. Rawati Panjaitan and other staff of the Faculty of Biology, Universitas

Papua (UNIPA), during a visit in 2011. Their continued support was again essential to the success of the expedition, which took place from 15 October to 15 November 2014.

Manokwari

The PIF group met with Yoris R. Wanggai, a Dutch-speaking guide who assisted with local logistics, and with Mrs. Rawati Panjaitan, lecturer at the Faculty of Biology, together with botanist Hengky Wambrau and other staff, to discuss the survey programme. Frans Groenen, Siep Sinnema, and Piet Zumkehr delivered guest lectures at UNIPA, attended by approximately 80 students. In the afternoon, they joined a biology field excursion to Gunung Meja and the adjacent Arboretum, where insect collecting was the main activity. Gunung Meja ("Table Mountain") is a nature reserve bordering the northern side of the UNIPA campus.



Students of UNIPA (Manokwari) attending the presentation of Siep Sinnema

The group also discussed future cooperation between UNIPA, the Papua Insects Foundation, and Naturalis Biodiversity Center (Leiden, The Netherlands), with particular emphasis on moth research. The itinerary included surveys in the Arfak Mountains (Mokwam and Demaisi), the Fakfak region on the Onin Peninsula, and several day trips to Warkapi, Maripi, and a nearby waterfall. UNIPA staff and students were invited to participate in the Fakfak expedition.

A day survey was carried out at Warkapi, about 40 km south of Manokwari on the east coast. Transport and a local guide were arranged by Yoris Wanggai. The lowland rainforest proved rich in butterflies and moths, including a species of *Nyctemera* (Erebidae, Arctiinae). Several Uraniidae were also recorded, including *Lyssa macleayi*, *Cyphura maxima*, *Urapteroides astheniata*, and *Acropteris inchoata*.

Mokwam

The PIF group surveyed Mokwam from 21–23 October. This small village, situated at 1,500 m on the northern slopes of the Arfak Mountains, is accessible only by four-wheel-drive vehicles and offers accommodation managed by Zeth Wonggor. Although best known among birdwatchers for its bowerbirds and birds-of-paradise, Mokwam also proved to be an

excellent site for insect surveys. The moss-rich montane forest harbours a diverse and distinctive insect fauna with many local endemics. An ML light trap, powered by a generator, was operated on three consecutive evenings to attract moths.



Moss forest in Mokwam, Arfak Mountains

Demaisi

From 24–26 October, the PIF group surveyed Demaisi, a small village about 30 km from Mokwam at an altitude of 1,740 m. Zeth Wonggor accompanied the group and provided meals throughout the stay. The villagers were exceptionally welcoming: the village chief offered an old schoolhouse for accommodation, while other residents helped erect the light-trapping setup by installing poles for the white collecting sheet.



Villagers curiosity for collecting at light in Demaisi, Arfak Mountains

An ML light trap, powered by a generator, was operated on two consecutive nights. Despite the cool, rainy evenings, which reduced moth activity later at night, a considerable number of species was collected. The trapping sessions also attracted many villagers, who gathered around the light each evening to observe the insects. It was noteworthy that some of the larger moths were occasionally collected as a nutritious snack.

Additional day surveys were conducted at Maripi and the Manokwari waterfall, where butterflies and moths were collected and photographed.

Onin peninsula

On 29 October the PIF group flew to Fakfak in Onin Peninsula. They met Frans Tamaela and Jack Gewab, who would be the guide during the trip. It was agreed that the next day the group would first go to the village of Werba. At that moment, it was unclear how accommodation would be arranged there.

Werba

The following morning, the group travelled by Jack's van to Werba, a village about 10 km west of Fakfak Airport. From there, a forest track led to the house of the village chief, Harti, where the group received a warm welcome from his family and many villagers. Fuel for the generator was obtained before continuing on foot into the lowland rainforest, with local villagers carrying the equipment.

After crossing a river, the group reached two simple forest shelters consisting of raised wooden platforms covered by plastic tarpaulins. The villagers assisted in setting up the light-trapping equipment for the evening. Along the river, several day-flying *Alcides* (Uraniidae) were collected. After dark, the generator-powered lamps were operated for about four hours, yielding numerous moths, including representatives of Saturniidae, Sphingidae, and Uraniidae.

On 1 November, the group returned on foot with local porters to Harti's house. They then travelled via Werba back to Fakfak with Jack to replenish supplies and refuel before continuing the expedition.

Huri Mber

After visiting the lowland tropical rainforest, the group moved to the central mountain ridge of the Onin Peninsula, which reaches about 1,000 m elevation. A suitable collecting site was found near Huri Mber (2°46'26"S, 132°18'47"E) at approximately 600 m. According to Jack, Henk van Mastrigt had also surveyed moths in this area several years earlier.

The group stayed with Jordan Komber and his wife, who generously provided accommodation and meals. After exploring the surrounding forest, a light-trapping site was selected on a nearby hill, where the collecting sheet was suspended between nutmeg trees. Local villagers again assisted by carrying the generator and other equipment uphill. Moth collecting was carried out on two consecutive evenings, while daytime surveys of the surrounding forest were conducted with Jordan.

Air Besar

On 3 November, the PIF group continued to Air Besar, a village at the mouth of a river near the coast. After considerable difficulty finding accommodation, Frans Tamaela arranged for the group to stay in an abandoned swimming pool building. Collecting conditions were poor, and only a small number of moths was recorded.

Return to Manokwari

On 5 November, the PIF group returned by air to Manokwari. Upon arrival, Yoris was contacted to arrange the planned expedition to Senopi, a village at the foot of the Tambrau Mountains. Initial reports suggested that the guesthouse used during an earlier

visit had been destroyed in a tribal conflict. However, Father Anton Tromp, head of a secondary school north of Manokwari, confirmed that although the conflict had caused fatalities, injuries, and extensive damage, the guesthouse was still intact.

Father Anton Tromp provided a letter of introduction addressed to the village head, the local pastor, and other key persons, which would facilitate passage through the villages en route to Senopi. In return, the PIF group offered to demonstrate moth collecting using a light trap and sheet at his school after the Senopi expedition, an offer that was gratefully accepted.

Senopi

On 7 November, the PIF group travelled to Senopi by four-wheel-drive vehicle. The route through the steep Tambrau Mountains was challenging, and progress was occasionally delayed at village checkpoints. Father Anton Tromp's letter of introduction, which effectively served as a *surat jalan* (travel permit), allowed the group to continue.

After arriving in Senopi, the group stayed at the village guesthouse, where local women prepared the meals. Villagers helped set up the light-trapping equipment, and despite rainy conditions, a good number of moths was collected.

The following morning, the group paid a courtesy visit to the village chief, Jan Teniwut, and presented Father Tromp's letter. They received a warm welcome from the chief and his family. The remainder of the day was devoted to collecting caterpillars and butterflies in the surrounding forest. During the following two evenings, moths were collected at a light trap set up beneath a small shelter beside the river bridge, attracting considerable interest from the local villagers. On 10 November, the group returned to Manokwari.



Piet Zumkehr and Frans Groenen packing insects



Jannie Sinnema-Bloemen doing the same

In Manokwari again

On 11 November, Jannie, Frans, and Siep visited Gunung Meja, where they photographed numerous butterflies and moths. Late in the afternoon, the group travelled to Father Anton Tromp's secondary school, Villa Nova, to demonstrate moth collecting. Assisted by the students, they erected a collecting sheet and operated an ML light trap. After dinner with Father Tromp and several students, the trap attracted many moths as well as an enthusiastic audience of students, who eagerly learned about the insects and the work of the Papua Insects Foundation.



The students group of Father Anton Tromp watching moths at light

On the final day in Manokwari, Rawati invited the group to a barbecue at her new home near Gunung Meja. Although a light trap was operated at her request, the main purpose of the visit was to discuss future cooperation between UNIPA and the Papua Insects Foundation.

On 13 November, the PIF group departed from Papua, bid farewell to Yoris, and, after a long journey, arrived in Amsterdam on 14 November.

New species that were discovered during this survey

Erebidae, Arctiinae

<i>Blaviodes arfakensis</i> De Vos, 2020	Mokwam (paratypes)
<i>Blavipelosia armata</i> De Vos, 2022	Mokwam (holotype)
<i>Cyana (Cryptanaema) ngata</i> Volynkin, Cerny & De Vos, 2022	Werba (paratypes)
<i>Darantasia arfakensis</i> De Vos, 2019	Mokwam (paratypes)
<i>Darantasia nigrifimbria</i> De Vos, 2019	Huri Mber (paratype)
<i>Darantasia tenebris</i> De Vos, 2019	Senopi (holotype and paratype)
<i>Eugopelosia transnovaguinea</i> De Vos, 2022	Demaisi (holotype and paratype)
<i>Lambula contrastata</i> De Vos & Zilli, 2023	Mokwam (paratypes)
<i>Lambula crispumcornuta</i> De Vos & Zilli, 2023	Mokwam (holotype and paratypes)
<i>Lambula flavibasis</i> De Vos, 2019	Mokwam (holotype and paratypes)
<i>Lambula keilyacornuta</i> De Vos & Zilli, 2023	Huri Mber (holotype and paratypes)
<i>Lambula nigrescens</i> De Vos, 2019	Hur Mber (paratype)
<i>Lambula palliflava</i> De Vos & Zilli, 2023	Demaisi (holotype) Mokwam (paratypes)
<i>Lambulosia gemmata</i> De Vos, 2019	Mokwam (paratype)
<i>Notata sinnemai</i> De Vos, 2020	Demaisi (paratypes)
<i>Sinapex nigrilineata</i> De Vos & Guimaraes Cruz, 2021	Mokwam (holotype); Mokwam , Demaisi (paratype)



Lambulosia gemmata De Vos, 2019



Lambula contrastata De Vos & Zilli, 2023



Darantasia arfakensis De Vos, 2019



Notata sinnemai De Vos, 2020

Visit to Lelambo in 2008 (by Piet Zumkehr):

In 2008, the small village of Lelambo was visited by three researchers: Rinto Mambrasar, representing UNCEN, Vincent Kalkman, a specialist in Odonata, and Piet Zumkehr, a specialist in Lepidoptera. The research was conducted over four days, from 24 to 28 October. The researchers were welcomed by the villagers and representatives of the local Protestant church. A small church-owned building served as the research base.

Lelambo is situated in Yahukimo District (Kabupaten Yahukimo), northeast of the Baliem Valley (139°47' E, 4°01' S), at an altitude of approximately 900 metres above sea level. Compared with the Baliem Valley, which lies at an average altitude of 1,500 metres, Lelambo has a warmer climate. The surrounding mountains are covered with dense forest, while only small areas around the village are used for agriculture. Unlike villages at higher elevations, there are no fields devoted to the cultivation of sweet potatoes.



Flight to Lelambo, Jayawijaya Mountains



Arrival in Lelambo



Lelambo village



Villagers of Lelambo

Forests below 1,000 metres are particularly interesting for insect research, as they have received relatively little scientific attention. Researchers have generally focused on higher mountainous areas, while the intermediate elevations have often been neglected. The few studies conducted around 1,000 metres have nevertheless indicated a high diversity of insects.

An important example is the work carried out during Richard Archbold's expedition in the late 1930s. During this expedition, several sites were visited at elevations ranging from 200 to 4,200 metres, the latter near Puncak Trikora (formerly Wilhelmina Top). Archbold also crossed the mid-montane zone and discovered numerous new insect species, many of which have not been rediscovered since. The possibility of rediscovering some of Archbold's species added particular interest to the visit to Lelambo. However, Archbold's expedition took place in the mountains west of the Baliem Valley, whereas Lelambo lies to the east and probably has a somewhat different ecosystem.

The 2008 research confirmed that Lelambo and its surroundings support a high diversity of insects. Despite its short duration, the visit contributed to a better understanding of insect diversity in these mid-montane forests.

Lelambo has a small airstrip, providing an open area surrounded by densely forested mountains. The small church building at the upper end of the airstrip was used to set up a light trap for attracting nocturnal moths. As the only bright light in the village, the trap attracted thousands of insects, many of which were collected for further study. It also attracted thousands of termites, making the work somewhat uncomfortable. Fortunately, the local chickens enthusiastically consumed them.

Not all of the collected material has yet been identified. The material studied so far has yielded a list of 227 species of Lepidoptera and one species of Hemiptera. Some species thought to be rare in Papua proved to be common in Lelambo. One example is *Scoliacma suzannae*, which had been described as a new species by Rob de Vos earlier that same year. To date, the research at Lelambo has resulted in the discovery of eight newly described species of Lepidoptera:

Erebidae, Arctiinae

Cyme laeta Looijenga, 2021

paratypes

Darantasia apicipuncta De Vos, 2019

paratypes

Darantasia nigrifimbria De Vos, 2019

holotype

Lambula flavistrigata De Vos & Zilli, 2023

holotype

Lambula longiductus De Vos, 2019

holotype & paratype

Lambula tristis De Vos, 2019

paratype

Nolidae, Nolinae

Manoba obscurialata László, Ronkay & Ronkay, 2022

paratype



Lambula flavistrigata De Vos & Zilli, 2023



Darantasia apicipuncta De Vos, 2019



Manoba obscurialata László, Ronkay & Ronkay, 2022

Achievements and results

- **Kumawa Mountains National Park:** In the South of the Bomberai Peninsula (Papua Barat) are the Kumawa Mountains, an isolated mountain range with no infrastructure and with only a few small villages at the coast. No nature exploration had been done in this area until 2015, when Rob de Vos, Daawia Suhartawan and Erlani Febrida coincidentally stranded there because their airplane couldn't land at Fakfak Airport, due to heavy smog because of extended forest fires in the South of Papua. The pilots put us safely on the small airstrip in Kaimana but were unable to take off again, because the airstrip was too short for such a large airplane. The only possibility to leave Kaimana was by boat, but the next Pelly passenger ship was expected to visit Kaimana not earlier than in two weeks! To make our time more useful we hired a longboat with a helmsman, a policeman as guard, a botanist and assistant, and we went to a place named Yadira at the Fyria River, in the South of the Kumawa Mountains. The river was full of floating tree trunks, a proof that nobody visited the place recently. The trees were hanging full with thousands of kalongs (fruit bats), and the river coast was inhabited by monitor lizards. Furthermore abundant orchids hang luxuriant down from the trees and there were many bird species, like several kingfishers. Unfortunately the area was very dry because for a long time it did not

rain. This caused relatively poor results when attracting moths with a special UV-light (we brought a generator with us). Nevertheless at least 120 moth species were recorded and at least one species was new for science: *Saetotenes yadirana* Groenen, 2022 (Tortricidae, Tortricinae). The fate of this beautiful piece of paradise was to be destruction, because of planned oil palm plantations! Daawia Suhartawan and Rob de Vos couldn't let that happen. A report was written for the Ministry of Forestry to explain the uniqueness of the area and the recommendation to conserve the forest for the future. This worked remarkably well, because about half a year later the concessions for deforestation for plantations of oil palms were withdrawn! It is now officially The Kumawa Nature Reserve, one of the best achievements the Papua Insects Foundation has made!



Fyria River, Kumawa Mountains National Park

- **MoU with UNCEN since 2017:** The Papua Insects Foundation (PIF) has signed a Memorandum of Understanding with Universitas Cenderawasih in September 2017. This document presents the cooperation between the two parties in research, publishing and other activities of mutual interest and importance. It is mainly based on the regulations and agreements of the Nagoya Protocol, to protect the interests of both parties, especially concerning status, benefits and commercial values. In the cooperation with UNCEN it means that PIF shares knowledge with students and teachers of UNCEN, go into the field and publish together. New collected insects are and remain property of the Republic of Indonesia and are stored in the Koleksi Serangga Papua (KSP) in Waena, the former collection of Henk van Mastrigt. Every five years this MoU needs to be updated and extended.



Signing the first MoU between UNCEN and PIF

- **Building of a new museum and new drawers:** When Bruder Henk van Mastrigt was still alive he already had the plan for a local museum for his collection. He had his eye on an empty building in Camp Walker, on the Campus of UNCEN in Waena. But because of his bad health which was rapidly getting worse, he was not able to fulfil his wish before he died. His death meant that the large collection had to be moved out of the Biara Santo Fransiskus, the Catholic Mission in Jayapura, to the building in Camp Walker. Students and teachers, the loyal assistants of Henk, immediately renovated and painted the old building to make it ready for the collection. In November 2015 the collection moved to Camp Walker. In 2025 Rob de Vos inspected the collection and made an inventory of the possible damage which was caused by the movement in 2015. Especially large specimens were dispositioned, turned around the pin or even with the pin fallen out of the quite hard pinbottoms. Fortunately no severe damage was found, not even from museum beetles or other harmful insects. But the original drawers, which were made or ordered by Henk, are too large, very heavy and unsafe to protect the moths and butterflies in it. The bottom of the drawers are too hard (so called "soft board") to put thin insect pins in and the lid of the drawers is not always closing tightly. For the smaller insects in the collection it would be better to make smaller and good quality drawers with soft pinbottoms. A crowdfunding action, which started in 2025, brought together enough money for 600 drawers, including the cabinets. The drawers are made of the locally available Lingua wood by a furniture maker in Sentani. In October 2026 a team of 10 volunteers from The Netherlands will help in the KSP collection to make the new drawers ready to use.



The current shelter for the KSP-collection in Waena



New drawers for KSP

The plan of Henk van Mastrigt to make a museum for his collection might come true in the near future. The drawings for the new museum, including research facilities, were recently approved by the National Accreditation Agency for Higher Education (BAN-PT) in Jakarta, and the construction of the museum will start early 2027. Details of the progress and purpose of the new museum will follow in future announcements.

- **127 new insect species during our surveys:** No less than 127 new species have been discovered during our surveys and are described by more than 15 scientists in several journals, like *Tijdschrift voor Entomologie*, *Zootaxa*, *Entomofauna*, *Nachrichten des Entomologischen Vereins Apollo*, *Biodiversity*, *Biogeography* and *Nature Conservation in Wallacea and New Guinea*, *Ephemera*, *Bulletin van het Koninklijk Belgisch Instituut voor Natuurwetenschappen*, *Spixiana*, *Aldrovandia*, *Entomological Science*, *Journal of Asia-Pacific Entomology*, *Florida Entomologist*, *Tropical Lepidoptera Research*, and of course our own journal *SUGAPA* in the paper and digital volumes. The new species are Coleoptera (13 species: Carabidae, Scarabaeidae, Staphylinidae), Trichoptera (18 species: Philopotamidae, Glossosomatidae, Hydropsychidae, Leptoceridae, Calamoceratidae) and Lepidoptera (103 species: Alucitidae, Erebiidae (Arctiinae, Erebinae, Hypenodinae), Lecithoceridae, Drepanidae (Thyatirinae), Noctuidae, Pterophoridae and Saturniidae). It is inevitable that more new species will follow soon, because many specimens still await description.

Future perspective

In the past, the Papua Insects Foundation has focused primarily on surveying potential areas of endemism and documenting existing information from the literature, collections, and field observations. This information was made available online through the website papua-insects.nl and was used in faunistic and taxonomic publications, often including descriptions of species new to science.



The current board of the Papua Insects Foundation

(left to right: Mónica Guimarães Cruz, Daawia Suhartawan, Rob de Vos, Erlani Rahareng, Siep Sinnema, Piet Zumkehr, Icka Ramandey)

This activity will continue in the future, but more attention will also be given to publishing practical guides to the insects of Papua. Students and lecturers at UNCEN will also become more closely involved in the study and publication of research on the insects of Papua.

An important resource is the KSP collection, which will be relocated to a new facility in the near future. A new museum building is being constructed, which will include not only collection storage facilities, but also a research laboratory and exhibition space. The collection will be provided with new and improved drawers and will probably be expanded to include more insect orders than just butterflies and dragonflies.

Cooperation will also be sought with another university, Universitas Papua (UNIPA) in Manokwari (Papua Barat). If this university wishes to establish a study collection as well, PIF could potentially play an important supporting and advisory role.

The organisation of symposia and exhibitions is also among the possibilities, as is the exchange of students between UNCEN and UNIPA on the one hand and Naturalis Biodiversity Center on the other. Courses could be offered on insect identification and determination, collection management, literature research, assistance with scientific publications, and related subjects.

More researchers from abroad will visit Papua to conduct research in the collection. In addition, it will become possible, provided that the appropriate documents and permits are obtained, to carry out fieldwork in cooperation with students and lecturers from UNCEN and UNIPA.

These may seem like far-reaching ambitions, but they are all achievable. Some of these plans are already scheduled to be implemented in the very near future, while other aspects still need to take shape. With the support of local and international partners, however, it should be possible to realise these ambitions.

Acknowledgements

First of all we want to thank posthumously Br. Henk van Mastrigt for his friendship, his help and expertise which made our activities in Papua possible. We will never forget his kindness and willingness to help us and other visitors to make the surveys a success.

Our friends and colleagues in Papua: Daawia Suhartawan, Evie Warikar, Icka Ramandey, Erlani Rahareng, Heron Yando and all others, who helped us in the past, we like to thank you very much for your assistance and accompany during our visits and field trips. It was a privilege to work with you.

We are thankful to Mr. Alex Waisimon (Nimbokrang, Papua, Indonesia) for his hospitality and guidance in the forest of Nimbokrang, and we thank Rector Dr. Oscar Oswald O. Wambrauw, SE., MSc.Agr. (UNCEN, Waena, Papua, Indonesia) for the hospitality at the Campus of UNCEN, where the KSP collection is stored.

And last but not least, we are grateful to The Uyttenboogaart-Eliassen Foundation (The Dutch Entomological Society) for the financial support that made to be able to visiting the UNCEN, KSP and most of the visits to remote areas possible, which often led to the discovery of new species.

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