The Lepidoptera collection of Friedrich Wilhelm Niepelt in the Museum of Natural History, University of Wrocław

Genus

PAWEŁ JAŁOSZYŃSKI, ANNA WANAT, MAREK WANAT Museum of Natural History, University of Wrocław, Sienkiewicza 21, 50-335 Wrocław, Poland. E-mail: scydmaenus@yahoo.com (PJ), anna.wanat@uni.wroc.pl (AW), wanatm@biol.uni.wroc.pl (MW)

ABSTRACT. Friedrich Wilhelm Niepellt's Lepidoptera collection preserved in the Museum of Natural History, University of Wrocław, Wrocław, Poland is summarised. The bulk of the collection, donated to the Museum about eighty years ago, comprises 3905 specimens of exotic butterflies and moths representing 2388 species and subspecies of 389 genera of Castnidae, Nymphalidae, Papilionidae and Pieridae. A small collection of type specimens representing thirteen species and subspecies is kept separately; this collection is characterised in detail, with photographic documentation of specimens and their labels.

Key words: Niepelt, Insecta, Lepidoptera, type collection, Wrocław University, Poland.

INTRODUCTION

Friedrich Wilhelm Niepelt (1862-1936) was a renowned dealer of natural history specimens and a devoted lepidopterist based in Lower Silesia. Born in Strzegom (= Strigau), Niepelt spent his youth in Świebodzice (= Freiburg) as a son of a tavern owner. There he received his basic school education and at the age of merely 14 became a bookbinder apprentice. Four years later Niepelt travelled across Germany to settle down in Kassel for a short period of time, and eventually enlisted in the army. The end of his military service and return to Świebodzice-Ciernie (= Zirlau) mark the beginning of the entomological chapter in Niepelt's life. He then managed to raise funds for a trip to the Caribbean Islands, and the money obtained by selling the collected insects enabled him to establish an apparently prosperous business as a dealer in entomological equipment and natural history specimens. Niepelt collected various animals during several further tropical expeditions and traded specimens with many contemporary dealers and naturalists. He became a dedicated collector of butterflies and moths, and published numerous descriptions of new species and subspecies. Moreover, specimens from his

collection were made available to other taxonomists, most notably to Embrik Strand and Hans Fruhstorfer, who also described many new taxa. Niepelt's achievements in lepidopterology were honoured by several authors who dedicated new taxa to him, for example *Morpho niepelti* Röber (Fig. 1), *Dismorphia niepelti* Weymer, *Dalaca niepelti* Fietzner, *Delias niepelti* Ribbe or *Deudorix niepelti* Joicey & Talbot. More detailed data on the life and publications of F. W. Niepelt can be found in Berner (1996), Calliess (1932), Heikertinger (1937), Röber (1932) or Strand (1932).

The Niepelt Collection, housed in the Museum of Natural History, University of Wrocław (MNHW), has been briefly characterised by González et al. (2013). It currently consists of a large non-type specimen collection kept in separate cabinets and type specimens incorporated into the general type specimen MNHW collection. The specimens were most probably donated to the Museum by Niepelt himself between 1932 and 1936, shortly before his death, although the circumstances and details remain unknown. The structure and contents of the collection strongly suggest that the specimens are all doublets from a larger Niepelt's private collection (discussed by González et al. 2013). Jan Kinel (1957), the first Polish post-war MNHW curator, found the Niepelt Collection provisionally ordered in the museum drawers and cabinets immediately after WWII. This seems to indicate more than one donation, as a single large donation of systematically or geographically organised material would have been most likely retained in original Niepelt's boxes or drawers and kept without transferring the specimens to the standard museum drawers. The last pre-war German MNHW director,



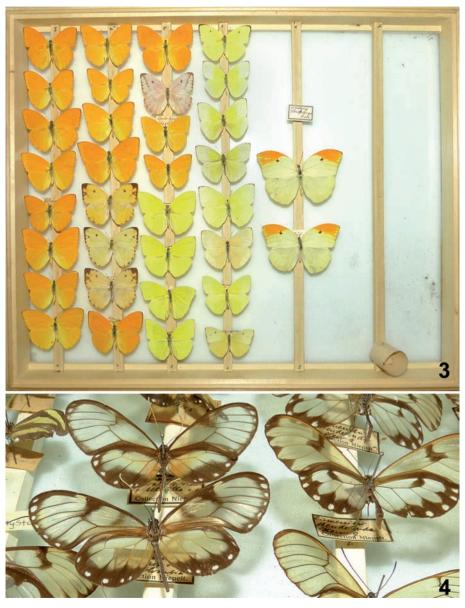
1. Morpho niepelti Röber, an example of a butterfly species dedicated to F.W. Niepelt (photo J. Maslowski)

Ferdinand Pax Jr. (1949) lists the Niepelt Collection among those found undamaged after WWII, when he visited the Museum at the end of 1945. However, only Kinel (1957) gives some basic details in his report prepared shortly before his death in 1950. Jan Kinel moved to Wrocław in May 1946 from the Dzieduszycki Museum in Lviv, to



2. One of cabinets containing the Niepelt Collection

curate the MNHW collections. He counted 240 drawers, most with a glass bottom, with exotic butterflies, and contained in four remarkably large cabinets. Additionally, about twenty drawers contained moths. In this form, the collection was kept until recently, virtually untouched but well-protected against pests under proper storage conditions.



3,4. Examples of Pieridae (3) and Danaidae (4) from the Niepelt Collection

After the MNHW entomology department moved to a new building in 2003, the Niepelt Collection was rearranged and catalogued. Presently the collection occupies 192 numbered drawers (10 standard cabinets) (Figs 2-5). The electronic MNHW database entries comprise data that allow locating every taxon in a respective drawer and valid combinations for each nominal species and subspecies.

The main MNHW NIEPELT Collection (Table 1) comprises 3905 specimens of Lepidoptera representing 2388 species and subspecies classified in 389 genera. Only Castnidae, Nymphalidae, Papilionidae and Pieridae are present in this collection. Nymphalidae are most numerous, both in terms of taxa and specimens, and make up nearly 70% of the collection. The smallest part, the Castnidae, with only 31 specimens, has been summarised in a recent publication (González et al. 2013). Most of the taxa



5. Examples of Nymphalidae from the Niepelt Collection

are Neotropical (over 40%), followed by Oriental (over 25%), Afrotropical (ca. 15%) and Australian (ca. 11%), the small remaining fraction comes from Nearctic and Palaearctic (mostly the Himalayas). The specimens are generally in good condition (Figs 3-5), mostly with appropriate collecting data, although frequently restricted to the locality only.

There are also several drawers kept separately, containing mixed butterflies and moths, some of them bearing identification labels identifiable as handwritten by Niepelt, but they consistently miss any locality labels. This problematic collection has not been catalogued and the specimens are not included in Table 1.

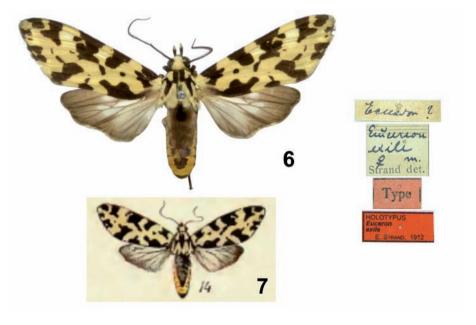
The type specimens from the NIEPELT Collection are kept separately, as a part of the Lepidoptera type specimen MNHW collection. Only fourteen type specimens of thirteen species and subspecies have been identified, and their details are presented below, in alphabetical order (f - female, m - male).

Checklist of the Lepidoptera type specimens in the Niepelt collection

Family Arctiidae

Euceron exile Strand, 1912: 146; holotype [f]; Ecuador; MNHW No 1038 Fig. 6).

Hyalurga cinctella Strand, 1911a: 42; holotype [f]; Ecuador, Sarayaku; MNHW No 1036 (Fig. 8).



6,7. Euceron exile Strand, holotype female (6) with its labels and illustration of the same specimen reproduced from Strand (1912) (7)

Family Lasiocampidae

Claphe macasibia Strand, 1912: 154; holotype [m]; Ecuador, Macas; MNHW No 1040 (Fig. 9).

Family Noctuidae

Sypna hieroglyphigera Strand, 1911b: 101; holotype [f]; Ecuador, Macas; MNHW No 1041; current status: *Lichnoptera hieroglyphigera* (Strand, 1912) (Fig. 10).

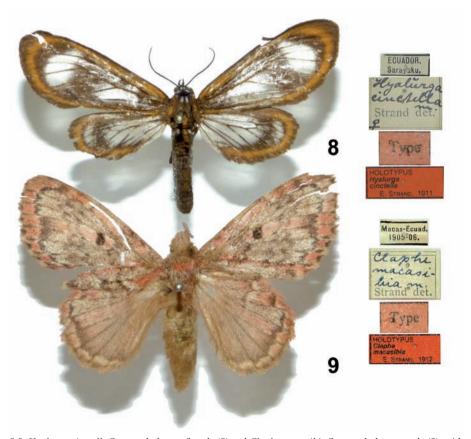
Family Notodontidae

Hemiceras dyari Strand, 1911a: 41; holotype [m]; Ecuador, Sarayaku; MNHW No 1035 (Fig. 11).

Family Nymphalidae

Euphaedra medon neustetteri Niepelt, 1915: 58; syntype [m]; Kongo, Kasai Riv.; MNHW No 1129 (Fig. 13).

Pyrameis dejeani sambaluna Fruhstorfer, 1898a: 150; syntype [m]; Indonesia, Lombok Is.; MNHW No 1127; current status: *Vanessa dejeani* Godart, 1824 (Fig. 14).

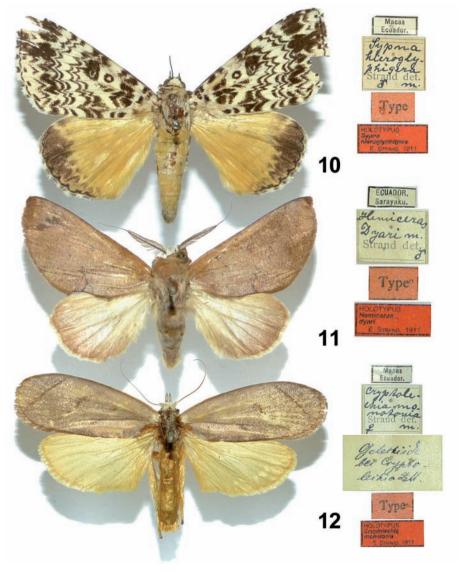


8,9. *Hyalurga cinctella* Strand, holotype female (8) and *Claphe macasibia* Strand, holotype male (9), with corresponding labels

Rhinopalpa megalonice eunice Fruhstorfer, 1898b: 331; syntype [f]; Indonesia, Sulawesi; MNHW No 1128; current status: *Rhinopalpa polynice megalonice* (Felder, 1867) (Fig. 15).

Family Oecophoridae

Cryptolechia monotonia Strand, 1911c: 151; holotype [f]; Ecuador, Macas; MNHW No 1037; current status: *Timocratica monotonia* (Strand, 1911) (Fig. 12).



10-12. Sypna hieroglyphigera Strand, holotype female (10), Hemiceras dyari Strand, holotype male (11), and Cryptolechia monotonia Strand, holotype female (12), with corresponding labels



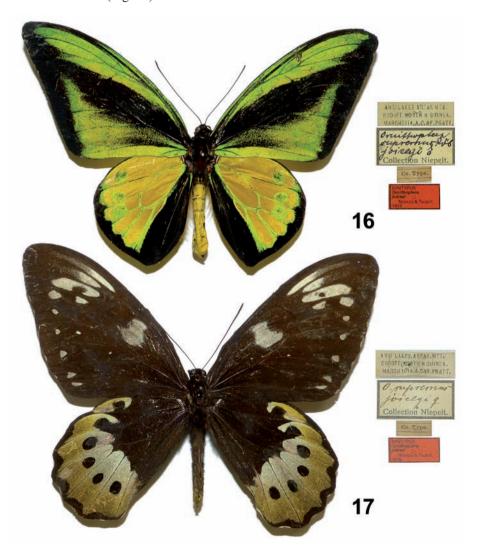
13-15. Euphaedra medon neustetteri Niepelt, syntype male (13), Pyrameis dejeani sambaluna Fruhstorfer, syntype male (14), and Rhinopalpa megalonice eunice Fruhstorfer, syntype female (15), with corresponding labels

Family Papilionidae

Ornithoptera joiceyi Noakes & Talbot, 1915: 59 (in Joicey & Talbot 1915); 2 syntypes [mf]; Papua New Guinea, Arfak Mts.; MNHW No 1049; current status: *Troides goliath samson* (Niepelt, 1913) (Figs 16-17).

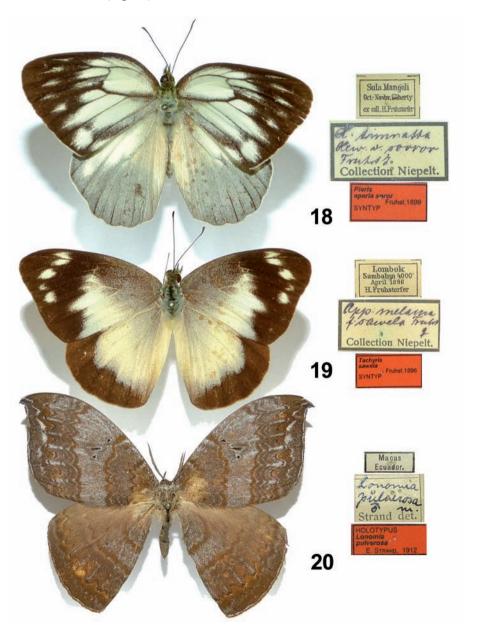
Family Pieridae

Pieris eperia soror Fruhstorfer, 1899: 10; syntype [m]; Indonesia, Mangoli; MNHW No 1122 (Fig. 18).



16,17. Ornithoptera joiceyi Noakes & Talbot, syntypes male (16) and female (17) with corresponding labels

Tachyris sawela Fruhstorfer, 1896: 115; syntype [f]; Indonesia, Lombok Is.; MNHW No 1121 (Fig. 19).



18-20. Pieris eperia soror Fruhstorfer, syntype male (18), Tachyris sawela Fruhstorfer, syntype female (19), and Lonomia pulverosa Strand, holotype male (20), with corresponding labels

Family Saturnidae

Lonomia pulverosa Strand, 1912: 150; holotype [m]; Ecuador, Macas; MNHW No 1039 (Fig. 20).

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 Table 1. Summary of non-type specimens in the main MNHW NIEPELT Collection.

			genera	species & subspecies	specimens
Lepidoptera			389	2388	3905
Castnidae			13	19	31
(Castninae		13	19	31
		Castniini	11	17	29
		Gazerini	2	2	2
Nymphalidae			293	1657	2600
	Apaturinae		11	25	34
	Biblidinae	Biblidini	35	173	260
(Charaxinae		14	96	142
		Anaeini	5	8	9
		Charaxini	2	64	93
		Euxanthini	1	3	5
		Pallini	1	2	2
		Preponini	4	13	19
		Prothoini	1	6	14
(Cyrestinae		7	61	93
	,	Cyrestini	3	49	78
		Pseudergolini	4	12	15
I	Danainae	S	40	287	453
		Danaini	8	128	218
		Ithomiini	32	159	235
I	Heliconiinae		32	246	401
		Acraeini	4	88	139
		Argynnini	9	26	50
		Heliconiini	10	86	140
		Vagrantini	9	46	72
1	Limenitidinae	S	39	267	407
		Adoliadini	18	117	189
		Limenitidini	12	72	108
		Neptini	7	66	91
		Parthenini	2	12	19
	Morphinae		26	129	206
	1	Amathusiini	11	40	77
		Brassolini	12	61	90
		Morphini	3	28	39
	Nymphalinae	1	34	196	369
	J F	Coeini	2	2	2
		Junoniini	5	80	169
		Kallimini	3	13	25
		Melitaeini	11	45	74
		Nymphalini	7	37	72
		Victorini	4	14	18
		incertae sedis	2	5	9

	Satyrinae		55	177	235
		Elymniini	16	85	121
		Eritini	2	3	3
		Haeterini	3	10	15
		Melanitini	3	13	19
		Satyrini	31	66	77
Papilionidae			19	354	625
	Papilioninae		15	346	615
		Baroniini	1	1	1
		Leptocircini	8	96	151
		Papilionini	1	147	269
		Troidini	6	103	195
	Parnassiinae		3	7	9
		Parnassini	1	5	7
		Zerynthini	2	2	2
Pieridae			64	358	649
	Coliadinae		16	87	216
	Dismorphiinae		6	35	60
	Pierinae		42	236	373
		Anthocharidini	5	17	30
		Colotini	5	28	39
		Pierini	32	191	304