Genus

Special Issue

Two Centuries of the Museum of Natural History, University of Wrocław, and Its Entomological Collections

VOL. XXV, FASC.4 2014

BIOLOGICA SILESIAE

WROCŁAW POLAND
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Subscription price: institutional - 75 U.S. Dollars or 65 € per 2013/2014, personal - 40 U.S. Dollars or 30 €; single fascicles - 20 U.S. Dollars or 15 € each. Subscription orders should be addressed to Polish Taxonomical Society, Sienkiewicza 21, 50-335 Wrocław, Poland.

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The fascicle is available in PDF format: www.biol.uni.wroc.pl/cassidae/genus.html.

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Title sponsored by the University of Wrocław
(Tytuł dofinansowany przez Uniwersytet Wrocławski)

PL ISSN 0867-1710
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Two Centuries of the Museum of Natural History, University of Wrocław, and Its Entomological Collections
Two centuries of insect collections in the Museum of Natural History in Wroclaw

In 1814 Johann Graevenhorst (1777-1857), a renowned entomologist and the first professor in zoology at the University of Wroclaw, was appointed as the first director of the newly established natural history museum. Two centuries later, the Museum of Natural History (MNHW) is still a part of the University of Wroclaw, and despite its turbulent history and severe war losses, its collections are counted among the largest and most valuable in Poland. The Museum occupies a special place in the history of the University - four out of its five pre-war directors were also rectors of the University of Wroclaw. Some of them were pioneers in academic didactic methods - Adolf Grube (1857-1880) for the first time introduced practical laboratory courses in animal anatomy, previously taught only in the form of lectures; Anton Schneider (1881-1890) equipped a Museum teaching room with microscopes that for the first time could be used by a group of students during practical classes; Willy Küenthal (1898-1917) added field trips to the natural history courses; and Ferdinand Pax jr. (1917-1945) organized short internships at the biological field station in Rovigno (now Croatia).

The Museum’s holdings during Graevenhorst’s times included nearly 45,000 insect specimens. Despite the fact that professor Graevenhorst was the only researcher entomologist working at the Museum until the onset of World War II, the insect collections were steadily growing due to donations and acquisitions, mainly from amateur naturalists. The current number of approximately 2-2.5 million specimens is a result of collecting activities, expeditions, passion and knowledge of several generations of naturalists, who entrusted their collections to the University. This special volume of The Genus is intended to provide an overview of selected insect collections deposited in the Museum, carefully curated and made available to scholars. An effort was made to present not only the most valuable historical collections (those of Johann Graevenhorst, Friedrich Wilhelm Niepelt, Wilhelm Kolbe, Richard Scholz, Georg Polentz) and younger, yet already post-war repositories (Coll. Jan Noskiewicz), but also most recent acquisitions (collections of Jadwiga Złotorzycka, Aleksander Wróblewski, Janusz Płuciński, Paweł Stachowiak), all being sources of invaluable taxonomic and faunistic data cited in hundreds of scientific publications, all still in focus of ongoing studies. It should be kept in mind, however, that this selection covers only a fraction of the MNHW insect collections, and scholars mentioned in this series of articles are not the only ones worth remembering. The historical pre-war collections include also, among others, Hemiptera and Diptera of Heinrich Scholz; Lepidoptera of Max Wiskott, Paul Nagel, Adolf Streckfuss, Alwin Gärtner, Alfred Bannier, Theodor Goetschmann; Hymenoptera of Rudolf Dittrich and Wilhelm Goetsch. An example of a recent acquisition is a large Andrzej Gruszka collection of Coleoptera entrusted to
the MNHW in 2012. The Museum’s holdings comprise also Eocene amber inclusions
(approximately 200 amber pieces, provisionally identified by the late Jan Koteja),
dee-frozen beetle collections suitable for genetic studies (thousands of specimens),
countless microscope slides and a rich entomological library.

The Museum (and the University), an important centre of biological studies, was
fortunate to employ or closely cooperate with a number of naturalists, who carried
out their studies, enlarged and curated the MNHW collections, taught students and
participated in multiple academic duties. In the post-war history of the Museum’s
Entomology Department, several persons contributed to successful development of
collections or gained a position of distinguished specialists. Jan Kinel, the first insect
curator after World War II, coordinated the rescue operation to retrieve the collections
evacuated to various localities, estimate war losses and protect the surviving specimens
from further damage. Mieczysław Kak (1928-2008) was a curator for 30 years, until
his retirement in 1993 and later for fifteen years as a volunteer; he initiated and almost
completed the process of integrating numerous Lepidoptera materials into one organized
collection. He was also a spiritus movens of the first permanent insect exhibition
opened in 1974 and maintained, after modernisation, till today. Wojciech Pulawski and
Jan Klimaszewski, former researchers at the Museum, became renowned specialists
on spherid Hymenoptera and staphylinid beetles, respectively, both working abroad
since early 1980s. Pulawski, a successor of Jan Noskiewicz, working in the Museum
in 1963-1983, had significant influence on systematic entomology in Poland, for years
being an editor-in-chief of the Polskie Pismo Entomologiczne (Polish Journal of Ento-
mology), a major Polish scientific periodical focused on insects. He is also author or
co-author of several volumes of the Keys for Identification of the Insects of Poland,
covering various families of Aculeata (Hymenoptera).

Current efforts of the present Entomology Department staff are focused on protec-
ting, organizing and data-basing of the existing collections, acquiring new specimens
and attracting specialists to explore the Museum’s resources. Together with scientists
and curators representing other disciplines - ornithologists, ichthyologists, malacolo-
gists, botanists and a mycologist - we join forces to fulfil the role museums play in
modern scientific studies and popularization of natural history - teaching by exhibitions,
workshops, courses and lectures, documenting biodiversity and its changes over cen-
turies (a task especially important in the times of rapid species extinction), conducting
cooperative and often interdisciplinary collection-based research, and protecting the
legacy of our predecessors.

Paweł Jałoszyński, Guest Editor
Museum of Natural History, University of Wrocław - 200 years of history in two countries

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ABSTRACT. The Władysław RYDZEWSKI Museum of Natural History, University of Wrocław (MNHW) is among the oldest museums of its kind in Poland and the largest such museum being part of university in our country. It was established in 1814 as the University’s Zoological Museum on the initiative of J. L. C. GRAVENHORST, the first zoology professor in Wrocław. 2014 is the Museum’s 200. anniversary. During almost half of its history it was located in the halls of the University’s Main Building. Since 1904, it occupied its present location at 21 Sienkiewicza street, and additionally, since 2004 it acquired a new Herbarium building where also the entomological collections were transferred. The Museum’s biological collections, which were among the richest in Europe, suffered greatly during World War II; in all, half of the zoological collections and nearly two thirds of the herbarium were lost. Despite the losses, the collection is the second largest in Poland. After the war, under the Polish government, the Museum remained part of the University and its significance increased. In 1974 it became the present-day Museum of Natural History, of a rank of research institute. Two years later, having fused with the Herbarium and the former Botanical Museum, and having taken over the old and valuable plant collections, the Museum acquired its present structure and status. The main spiritus movens of the organisation changes and post-war scientific development was the Museum’s director of 1963-1980, professor W. RYDZEWSKI. In recognition of his merits, since 1985 the Museum bears his name.

Key words: University of Wrocław, Museum of Natural History, MNHW, origin, history, structure.

Poland is one of the few European countries without a national natural history museum. The reasons for the situation are numerous, most probably mainly the lack of own statehood in the 19th c., when such museums were established in other countries and additionally, and maybe first of all, because of the lack of possibility to accumulate important natural history collections from the then researched and explored tropics. For the same reasons, the Polish systematic zoology at that time could not be ranked among...
the world’s leaders within the discipline. Consequently, after regaining independence by Poland, there was no great incentive to establish such a national museum. Even if there was any, the period between the wars was too short and too tempestuous for such an enterprise to come into being. Thus, after World War II Poland entered the communist epoch with three leading institutions which kept natural history collections: in Warsaw, Wrocław and Kraków. The situation remained unchanged during the next half century, despite the early post-war attempts at centralising zoological data in Warsaw. These attempts finally resulted, and from the present-day perspective we think in a way which was beneficial to the scientific community, in establishing one of the best zoological libraries in Europe, in the present-day Museum and Institute of Zoology, Polish Academy of Sciences. The centralisation of zoological collections never came true and also at present it is not a likely prospect, not only because of the high cost of the enterprise, but also because of the lack of favourable atmosphere and support at various decisive levels – both among the scientists and among the politicians. Now, after so many years of independent functioning of such institutions, it would be difficult to see possible advantages to such a solution. Each such museum has more than 150-200 years of its own, specific history resulting from its regional appurtenance, different organisation character and the nature of collections. Each is an efficient research centre and doing well in the present-day reality of financing scientific studies. It appears that in the 21st c. we should accept the state of affairs and learn to take advantage of the large number of natural history museums of international significance in our country.

The Museum of Natural History, University of Wrocław (international acronym: MNHW), at present bearing the name of its post-war director of long standing, professor Władysław Rydzewski, had certainly the most complex though not the longest history among the Polish natural history museums (the Kraków Zoological Museum, Jagiellonian University, originating from the Natural History Cabinet appointed by the Commission of National Education at the end of the 18th c. has somewhat deeper roots). This resulted, among other things, from the administrative appurtenance to a sequence of countries and political systems, and from the relatively recent merging of zoological and botanical collections and institutions, each with a different history. Another, no less important difference, resided in the organisation status of the Wrocław Museum, which had been part of the University “for ever”, practically from the beginnings of the University’s existence. The 200. anniversary of founding of the Museum, in 2014, is a good opportunity to recall its complex fates and the names of the people who played important parts in its history. It would not be possible without the long-term, Benedictine project of the late Jadwiga Wiktor who collected all the fragmentary archival data on the fates of our institutions and published a historic monograph (Wiktor 1997, 2002) (Fig.1). It is also an opportunity to reflect on the situation and significance of this and other natural history museums in the world of science of the 21st c.

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The founder of the Zoological Museum in Wrocław was Johann Ludwig Christian Gravenhorst (1777-1857), the first zoology professor at the University (Fig. 2).
Quite rightly regarding collections as indispensable when educating students, three years after taking over the chair in Wrocław he established the Zoological Museum located in the University’s huge main building, in today’s Uniwersytecki Square. Its holdings initially included the collection of the Leopoldine Natural History Cabinet (Naturwissenschaftlicher Kabinett der Leopoldiner), University in Frankfurt an der Oder (Viadrina), and most of all professor Gravenhorst’s own zoological collection which he had accumulated since his student times and then increased considerably due to purchase of specimens and whole collections from collectors. The collection was then purchased by the University for a lifetime annual pension. Besides the zoological specimens, professor Gravenhorst transferred to the Museum and University his huge natural history library with numerous, now priceless volumes dealing with early development of systematic zoology. He also bequeathed a considerable sum to the University in his will, for further development of the zoological collections and the library. The first preserved information on the holdings of the then Museum dates from 1832 when it had more than 55 000 exhibits.

After the death of professor Gravenhorst who had been the Museum’s director for more than 40 years, his successors till World War II were professors Adolf Grube (1857-1880), Anton Schneider (1881-1890), Carl Chun (1891-1898), Willy Kükenthal (1898-1917) and Ferdinand Pax Jr. (1917-1945). Except for A. Schneider, who hampered the Museum’s development and neglected the collection, allocating most of the Museum’s funds to teaching and equipping teaching rooms, all the directors contributed greatly to the enlargement of the collections and the organisation development of the Museum. Already at the time of A. Grube, the Museum’s collections were among the richest in Central Europe, and became enriched, among others, due to the numerous expeditions to the Mediterranean region. Also during that period Benedykt Dybowsk participated with the Museum; one of the most outstanding Polish zoologist, professor Grube’s student, he participated in one of Grube’s expeditions in search of marine fauna in Croatia, and after his death sentence for his participation in the January Uprising he owned his salvation indirectly to Grube’s pleading. An even greater development of the Museum’s collections fell on the end of the 19th c. when the Museum’s director was C. Chun who had come from Königsberg. Being a specialist in marine fauna, he organised Museum expeditions in order to acquire specimens from the Mediterranean Sea and the Atlantic (region of the Canary Islands), and – most of all - in 1898-1899 took part in the famous German expedition “Deutsche Tiefsee-Expedition” on the ship Valdivia, in order to explore and acquire countless specimens of deep sea and pelagic fauna of the Atlantic and Indian Oceans. During his directorship the Museum started regular cooperation with the Wrocław Zoological Garden from where it bought dead animals; skeletons and histological slides were also acquired. It was then that, among other exhibits, a complete skeleton of the fossil giant deer Megaloceros giganteus (Blumenbach) was purchased. In 1898 professor Chun transferred to Leipzig, to be replaced by an outstanding scientist from Jena - W. Kükenthal, phylogeny specialist and Ernst Haeckel’s student. Soon he turned out to be a very able organiser who succeeded in erecting the new, spectacular building for the Museum, at the present 21 Sienkiewicza street (Fig. 8). The building started to be used in 1904; besides two exhibition halls, it
housed numerous laboratories, library, lecture halls and four large storage rooms for scientific collections which occupied most of the building’s right wing. The Museum collections were divided into three parts, besides the exhibits in the permanent exhibitions and the largest scientific collection; the collection for teaching purposes was also kept separately. The division into exhibition and scientific materials was also practiced in the invertebrate, and especially insect, collection. This had a negative effect on the scientific value of the “exhibition” specimens which, as a rule, lacked precise information on their origin. At that time the Museum was practically self-sufficient with respect to preservation of specimens (including large vertebrates) and preparing exhibitions; it had its own metal worker’s shop, tannery, maceration shop and carpentry shop. It also had a marine aquarium with the necessary equipment, housed in a separate extension. With respect to technical equipment, the whole building was very modern, with electric lighting, central heating, lifts, and even automatically blinded windows in the exhibition halls. From the very start the Museum shared the new building with the Zoological Institute which was established at roughly the same time, also on the initiative of professor Kükenthal, who was director of both these institutions till 1917, when he transferred to Berlin to become director of the Humboldt Museum. His successor was F. Pax jr. (Fig. 3) who had worked at the Museum since 1908, and had been curator since 1912; he held the position till the end of World War II. During his directorship the Museum enriched its holdings, among other things, with the valuable collection of exotic butterflies of W. Niepelt; it also employed more researchers.

The end of World War II was a very dramatic event in the Museum’s history, and was fraught with consequences. Especially the defence of Festung Breslau in 1945 was a great catastrophe: the building itself, hit by a bomb (Fig. 9), and the zoological collections and exhibitions contained in it, became destroyed. The damage was contributed to by the German soldiers who threw a part of the specimens out of the windows when organising their defence positions, and later by the Soviet soldiers who looted the collection in search of alcohol-preserved specimens. Great losses were caused by explosions of aerial bombs and the ammunition stores located in the nearby Botanic Garden; they caused breaking of windows and glass panes in the cabinets, specimen jars and even blown bird eggs. Many collections suffered also later, under the effect of atmospheric conditions before they could be protected; a part may have been lost as a result of looting. Before the expected arrival of the Red Army, a part of valuable collections, mainly entomological, was evacuated to nearby villages and hidden in attics and cellars of offices and schools on the order of the German civil defence administrators. In the war conditions the process was not well planned and chaotic and, as indicated by later accounts of professor Pax (1949), executed without consulting the Museum’s authorities. Not all of those valuable insect collections could be retrieved later; among others, a part of Gravenhorst’s collection became irretrievably lost, including all of his beetle collection and a quarter of the collection of parasitic hymenopterans with hundreds of types, a part of Polenz’s beetle collection and possibly a part of Niepelt’s butterfly collection. Those fortunately re-found, for example in Katy Wrocławskie, such as the major part of Gravenhorst’s ichneumonid collection, Dittrich’s hymenopteran collection or most of Polenz’s collection of Silesian beetles, had been kept in inadequate
conditions and partly damaged by pests. Some were found after the War by pure accident, for example nearly 300 valuable bird skins of Otto Nathorp, found by professor K. Szarski in one of Wrocław pet shops and retrieved with the aid of militia. It is very difficult to assess the scale of global losses to the Museum collections as a result of military operations of 1945, most of all because of the lack of reference points. As a result of these operations neither the Museum nor the University’s central archives held up-to-date inventories from before the war, or any other significant documentation of the Museum’s history between the wars. In this respect we can only base our conclusions on the necessarily superficial estimates of professor Pax, who had the opportunity to have a short and cursory glimpse of the destroyed Museum after his return to Wrocław from the field station Hofeberg in the Sudetes, after the city had been occupied by the Red Army (Pax 1949), and on the report of the first Polish collection curator, doc. dr. Jan Kinel (Kinel 1957) who arrived in 1946 from the Dzieduszycki Museum in Lviv. Their accounts differ slightly in the details and fates of individual collections, but both indicate that the losses in the zoological scientific collections were at least 50%, and the losses in the exhibitions were much larger, even up to 90% (Wiktor 1997).

The post-war years were difficult for the Museum, as they were for the whole country which was busy trying to deal with the war damage. Despite the staff’s care and devotion, ensuring adequate housing for the collections took a few years which resulted in further damage to some collections. Reconstruction of the building’s left wing, completely destroyed as a result of bombing (Fig. 10), took even longer, and

6-7. Participants of the history of the Wrocław Museum of Natural History: 6 – professor Ludolph Christian Trevisanus (1779-1864), the first director of the Wrocław Botanic Garden and the Herbarium’s founder; 7 – professor Krzysztof Rośtański (1930-2012), the Herbarium’s post-war curator and restorer. All photos from J. Wiktor’s monograph (1997, 2002)
was ultimately completed in 1957. Also from organisation point of view, in the postwar conditions the Museum had to start almost from scratch, being incorporated in the Chair of General Zoology, Zoological Institute and thus becoming in a sense provider of teaching materials. After doc. J. Kinel’s, entomologist and experienced curator who had been head of the Museum since 1946, premature death, the care of the collections was entrusted for a few months to an ichthyologist, doc. dr. hab. Zofia Kozikowska, and then in 1951-1962 – to a parasitologist professor Janina Janiszewska. In that period the initially very small staff was increased with 7 persons. After professor Janiszewska left in 1962 for the Department of Parasitology established by her, and the few months period during which the Museum’s head was the arachnologist doc. S. Pilawski, in 1963 professor Władysław Rydzewski took over; he had been head of the Department of Ornithology for three years, after his return from England. Due to his efforts and organisation skills, the status of the Zoological Museum within the structure of the Faculty and University changed radically. Already in 1963 the Museum became an independent structure within the Zoological Institute, with its own budget and staff. On the strength of a decree of the Minister of Science, Technique and Higher Education of September 9th 1974, the Museum of Natural History was appointed as a separate unit of institute rank within the then Faculty of Natural Sciences.

The history of the Herbarium and Botanical Museum, University of Wrocław is even more complex and nearly as long; after the war it was described for the first time by professor Krzysztof Rostanski (1963). Their founder was professor Ludolph Christian Treviranus, in 1815-1830 director of the University Botanic Garden (Fig. 6). The Herbarium Horti Botanici Universitatis Wratislaviensis was initially to document vascular plants imported and cultivated in the Garden; it developed gradually thanks to donations and purchases, to achieve the number of 26 different collections of higher and lower plants and fungi in 1884. Also subsequent directors of the Botanic Garden were at the same time Herbarium directors. L. C. Treviranus’ successors were professors Christian Gottfried Daniel Ness von Essenbeck (1830-1850) and Heinrich Robert Göppert (1850-1884). The latter extended the range of accumulated specimens to include, among other things, fruits, seeds, trunk sections, roots, resins and other materials of plant origin. Based mainly on those, he established two museums: in 1853 the Botanical Museum located in the Auditorium Chemicum of the University, and in 1878 the Museum of the Botanic Garden, enriched among others with a collection of amber and palaeobotanical exhibits, such as fossil trunks of sigillariae and calamites. After his death the two museums started to live “their own lives” and even compete in acquiring new collections; they were headed by professors Heinrich Engler (Museum of Botanic Garden and Herbarium) and Ferdinand Cohn (Botanical Museum). They joined forces and in 1888 succeeded in erecting the building which till recently was the Institute of Plant Biology (Kanonia str. 6/8), where all the botanical collections were moved, but preserving the division into two museums. The collections were merged into one Botanical Museum by professor Ferdinand Pax sr., who became its head in 1893. He held the post during 33 years, and achieved a considerable development of the collection due to the rich materials from German expeditions to Africa and south-eastern Asia, exchange, donations and purchases. During his directorship
the Botanical Museum’s holdings became doubled, to reach 540,000 herbarium sheets in 1914. Just before the war, in 1938, the Museum was bequeathed the most valuable botanical collection of Karl Lauterbach of 50,000 sheets, from south-eastern Asia, with numerous types.

Till the end of World War II the so-called Silesian Herbarium (Herbarium Sile-siacum) functioned independently. It was established in the first half of the 19th c. by the Silesian Society of Native Culture (Schlesische Gesellschaft für vaterländische Kultur), associated with the University, on the initiative of the Society’s secretaries: dr. Friedrich Wimmer and dr. Henryk Grabowski. During all the period of the activity of the Society and Silesian Herbarium its seat was one of the university buildings on the Tamka, an island on the Odra near the University’s main building. Among successive curators of the Silesian Herbarium were, among others, university professors such as F. Cohn (1858-1864) or F. Pax sr. (1886-1890). The collections of the Silesian flora came mainly from donations of members and sympathizers of the Society and were often older and more valuable than the collection of the Botanic Garden Herbarium. Besides the herbaria of H. G. Mattuschka and A. J. Krocker from the 18th c., professor A. Henschel’s donation was especially noteworthy. The Herbarium Henschelianum, donated to the Society in 1858, included more than 90,000 sheets with both European and tropical plants (according to the owner’s index more than 46,000 plant taxa!). Henschel’s herbarium, valuable but containing a small number of plants from Silesia, was later, on the initiative of professor F. Pax, exchanged with the University Botanical Museum for the typically Silesian herbarium of R. von Uechtritz. Another unique acquisition of the Society was Silvio Boccone’s bound herbarium, dated 1674. Special merits for the development and curating of the Silesian Herbarium, and the knowledge of Silesian flora in general, were due to the many-years curator and teacher in one of the Wroclaw gymnasia, Theodor Schube. Due to his work and the extensive network of provincial collaborators who sent in materials, the holdings became almost doubled during his term (1890-1929). His work was successfully continued by Emil Schalow, curator of the Silesian Herbarium till World War II.

As in the case of the Zoological Museum, there is almost no record of the holdings and acquisitions of the Botanical Museum between the wars, and it is difficult to estimate the size of the collections before World War II. Rostański (1963) estimated it as 600,000 herbarium sheets, excluding other botanical exhibits of which there were certainly thousands. Unlike the zoological collections which were mostly left in the Zoological Museum building, the Germans removed all the botanical collections from Wroclaw in the autumn of 1944. As a result, the partial destruction of the Botanical Institute building at Kanonia 6/8 during bombing (both buildings are located within the Botanic Garden, less than 100 m apart) caused no damage to the collections. On the other hand, the Silesian Herbarium which then included more than 80,000 sheets, was moved and placed without any safety precautions in the attic of one of the schools in the southern part of Wroclaw. Regrettfully, as it turned out later, the evacuation failed to prevent losses in the botanical collections. On the contrary, the losses were proportionally greater than in the case of the zoological collections. Despite the efforts and the search supervised by professor Stanisław Tolpa, the collections were found only
after 1-2 years and only in a small part. A large part was burnt with the garrison church in Oleśnica where they were kept. The retrieved parts included a considerable fraction of the main university herbarium (castle in Piotrowice near Kąty Wrocławskie), Lauterbach’s herbarium (Siedlęcin near Jelenia Góra), and also, after 3 years, the Silesian Herbarium which then became the University’s property and was merged with the remaining surviving botanical collections. Following reconstruction of the building at Kanonia 6/8, in 1950, the botanical collections returned to their original location and could be properly curated. The work was started by mgr Józef Panek, acting curator of the Herbarium in 1950-1956. His work was continued by the late professor K. Rostański (Fig. 7), since 1971 staff member and then head of the Chair.
of Systematic Botany, Silesian University. He was the first to assess more precisely the size of war losses to the Wrocław herbarium collections (Rostański 1963). The total of about 200 000 sheets retrieved after the war constitutes only one third of the original University collection; one small bit of luck was only the saving of the whole of the most valuable Lauterbach’s herbarium. Likewise, 60% of the Silesian Herbarium were destroyed and only 30 000 sheets remained. Regrettfully, these did not include the oldest Silesian collections of Mattuschka and Krocker, but Boccone’s valuable herbarium was saved.

Establishing of the University Natural History Museum in 1974, and the indifference of the then authorities of the Botanical Institute to the collection and disastrous housing situation of the Herbarium which was crammed into one tall room, filled to the ceiling with shelves of collection boxes, quickly brought about natural fusion of the two institutions. The Botanical Department of the Museum of Natural History was established in 1976, next to the departments of Invertebrates, Insects, Lower Vertebrates, Higher Vertebrates and Exhibitions established one year earlier based on the former Zoological Museum. The Herbarium’s collections and staff as a whole became part of the Botanical Department whose head, after K. Rostański’s transfer to Katowice, became a slime-mould specialist dr. Wanda Stołanowska. After establishing the Museum Library in 1975, and inclusion of the Herbarium, the staff of the Museum headed by professor Rydzeński included 22 persons, 9 of them being research workers. Five years after professor Rydzeński’s death, in recognition of his merit in organising the Museum and restoring its rank, in 1985 the Museum was officially named in his honour. He was succeeded by professor Andrzej Wiktor, who was the Museum’s director during subsequent 22 years. His most important task was to solve the problem of lack of adequate housing for the scientific collections, especially the herbarium specimens, which after the organisation changes were still kept at the Institute of Botany, at Kanonia 6/8. The insect collection was then kept in a room partitioned off one of the exhibition halls, with no possibility of further development. Due to the efforts of professor Wiktor and the then head of the Botanical Department, professor Jerzy Hryniewicz-Sudnik, greatly supported by the University authorities, funds for a new Herbarium building were obtained from the Ministry of Science and Higher Education. The new building was to be built on a University plot at Sienkiewicza str. 5, less than 150 m from the Museum’s main building (Fig. 11). The building was constructed not without difficulties (argument with the city architect about the rather ultramodern design, unstable soil and, finally, the famous bankruptcy of the building company) in 2003, already during the directorship of professor Tadeusz Stawarczyk. Next year all the botanical and entomological collections were gradually moved to it. This made it possible to reorganise and enlarge those collections and free potential area for further development of exhibitions. Gradually even the slow general renovation of the Museum’s main building, more than 100 years old, housing the exhibitions and laboratories, and of some other buildings of the Faculty of Biological Sciences, was completed (Fig. 12).
9. Museum building in 1945 – left wing destroyed by aerial bomb (photo E. Zubik)
Apart from organising exhibitions which is their obvious and well known function, and thereby contributing to public education within natural history, natural history museums play another very important role. They keep and maintain collections of zoological and botanical specimens which are not destined for public display, but which provide the basis for studying biodiversity. This is especially important at present, when a part of this biodiversity has already gone extinct while another part is endangered. They are repositories of data, in the form of preserved biological specimens, and thus the source of information about life’s diversity and evolution. A very good example is the use of museum specimens for extracting DNA for phylogenetic studies done with recently invented techniques. The collections kept at the museums are essential to studying the diversity and history of life on earth, and to planning its conservation.

The present staff of the MNHW includes 22 people, and the number, despite some fluctuations in the intervening period, is the same as it was in 1975, when the Museum gained its present organisational form. The Museum has its own library, at present comprising 6500 books and over 11700 volumes of journals, including a permanent deposit of ornithological literature of the Polish Zoological Society. Half of the staff are research workers who are subject to the same legal regulations and obligations as all academic teachers, only with didactic duties largely replaced with work in the collections and exhibitions. For a long time the research staff has included ornitho-

10. Museum building in 1948 – left wing with top floor exhibition halls devoid of walls (photo S. Bednarz)
logists, ichthyologists, malacologists, entomologists, botanists and a mycologist, all conducting their own research and participating in scientific projects of their respective specialities. In all, the topical scope of studies conducted at the MNHW is very wide and comprises, among others, systematics, biology and biogeography of beetles (Staphylinoidea, Curculionoidea) and terrestrial gastropods, ecology and ethology of birds, fish ecology and systematics, faunistics of various groups of animals and floristics of Poland, phytosociology, taxonomic and ecological studies on Macromycetes, and nature conservation problems. The staff members participate in the University’s teaching; the Museum offers courses, among others, in entomology, malacology, ornithology and fish biology. However, the primary duty implied in employment at any natural history museum is collection curating: our staff is responsible for the second largest biological collection in Poland which now contains ca. 2.5 mln of zoological specimens and 0.5 mln herbarium sheets, and for organising exhibitions. The collections are being gradually catalogued and digitised, and the data are made available in the internet. Animal (especially invertebrate) and plant specimens are regularly loaned for examination to specialists worldwide. For a long time the MNHW has been a member of the KSIB (Krajowa Sieć Informacji o Bioróżnorodności – Polish Biodiversity Information Network) and made the information about its collections available through the GBIF (Global Biodiversity Information Facility) portal. In the
21st c. the Museum resumed the tradition of organising field expeditions to the parts of the world with little known invertebrate fauna. The expeditions are aimed at collecting specimens for research, describing new taxa and enriching the collections. Since 2004 eight such expeditions have been organised, among other places to New Caledonia, Australia and RSA, and the resulting material is in total ca. 100 000 specimens of insects, mostly beetles, representing hundreds of species new to science. Each year taxonomic publications based on this material appear all over the world. Likewise, as a result of malacological expeditions to the Caucasus, Crimea, Australia, Atlantic Islands and Eastern Carpathians, about 70 thousand snail and slug specimens have been added to the collections, and several papers published. Following contemporary trends in taxonomy and biodiversity studies, the MNHW develops also the collection of frozen specimens preserved suitably for DNA sequencing.

Since 1820 the Museum had permanent zoological exhibitions open to the public. Before World War II they were housed in two exhibition halls: a smaller one to show Silesian fauna and a large three-level hall where world animals and many biological problems were displayed and explained. Regretfully it was the large hall that was completely ruined in 1945 as a result of bomb explosion. After a long break and war damage the Museum resumed organising exhibitions already in the 1960s. The first to open, in 1965, was a small exhibition presenting animals in various habitats; it was kept till 1986. Further permanent exhibitions were opened in 1974 (Insects and Man), 1979 (Vertebrate Skeletal System) and 1985 (Animal World). The latter is the largest, located...
in a two-level hall, with a complete skeleton of the blue whale *Balaenoptera musculus* (Linnaeus) in the centre. It is one of only few such exhibits in European museums and the only such an exemplar in Poland, brought to Wroclaw by W. KüKENTHAL from one of his marine expeditions on whaling ships. In 1992 the traditionally zoological exhibitions were extended to include plants and fungi – the exhibition Plant World. These four exhibitions are open in the Museum until today, with the total area of ca. 1000 m², and the total number of exhibits of 3740 (3140 zoological, 600 botanical), which makes it the largest natural history exhibition in Poland. All the exhibitions were modernised in the meantime (the insect exhibition, the last to be modernised, in 2014). More details about our exhibitions can be found at the MNHW home page (http://www.muzeum-przyrodnicze.uni.wroc.pl/en/index.php?go=exhibitions). As a kind of extension of the exhibitions we offer practical workshops and lectures to school parties who visit the Museum. They can not only see our exhibitions but also learn to identify insect, gastropod and fish species, or get to know the problems of international nature conservation activities.

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Museums with long and rich traditions should be provided with adequate means to play the part of repositories of all biological collections, including those of amateurs, from all over the country. Especially in the case of invertebrates, amateurs’ collections are often the source of very valuable scientific data. In many natural history museums of the world, also those which are the oldest and the largest, such as the Natural History Museums in London, Paris or Washington, some of the amateurs’ collections are among the most valuable. Even some of the articles in this celebratory issue of the Genus, dedicated to the MNHW, convey the message that during the nearly 250 years of history of natural sciences since the times of Linnaeus, the passion and observation abilities of the researcher were much more important than his profession. Natural history collections are part of the national heritage of Poland, equal to the testimony of our national history, development of civilisation or works of art, and as such deserve exactly the same care and attention.

REFERENCES


Johann Ludwig Christian Graevenhorst, the first director of the Museum of Natural History, University of Wroclaw, and his collection of Ichneumonidae

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ABSTRACT. Johann Graevenhorst (1777-1857) was the first director of the Museum of Natural History, rector of the University of Wroclaw and an outstanding zoologist with a broad scope of scientific interests, from protists to vertebrates. His publications on insects, and among them on the hymenopteran family Ichneumonidae, are especially valued. Graevenhorst’s private collection was once the core of the Museum’s educational and scientific collections; now it represents only a fraction of ca. 2.5 million specimens preserved in this institution. The original Graevenhorst Collection of Ichneumonidae is among the most valuable entomological treasures of the Polish museums. At present, it comprises 4743 dry-mounted specimens. Of this number, 674 specimens of 229 nominal species, among them 645 type specimens and two possible type specimens, have been so far catalogued and their details are available from the electronic MNHW databases.

Key words: Graevenhorst, Insecta, Hymenoptera, Ichneumonidae, type collection, Wroclaw University, Poland.

INTRODUCTION

Many distinguished naturalists, most notably zoologists, have worked at the Museum of Natural History over the past two hundred years, but Johann Ludwig Christian Graevenhorst, the first director of the Museum, rector of the University of Wroclaw, and an outstanding entomologist, deserves a special place in the scientific hall of fame. Although seriously depleted during WWII, Graevenhorst’s specimens can still be found in the Museum, and even if this is only a fraction of what was once one of the most remarkable natural history collections in Germany, the several thousand of ichneumon wasps are subject to our special care.
The Royal Privy Councillor, professor of natural history, Johann Ludwig Gravenhorst was born on the 14th of November 1777 in Brunswick. His father, a wealthy brewer, died when Johann Ludwig was 10 years old, and his mother re-married two years later. Gravenhorst received his basic school education in the Katharinen-Gymnasium. Already then, in the first grade, his passion to the entomology was inspired by

1. The title page of Gravenhorst’s doctoral dissertation
teachings of Johann Christian Ludwig Hellwig, who helped to identify insects collected by his student and introduced him to the classification system of Fabricius. In 1795 Gravenhorst entered the Collegium Carolinum (presently University of Brunswick – Institute of Technology), where one of his teachers was professor August Wilhelm

2. The title page of Gravenhorst’s opus magnum, *Ichneumonologia Europaea*
Knoch, a renowned entomologist and author of the three-volume *Beiträge zur Insek tengeschichte*. Thus Gravenhorst’s education was under a continuous influence of the most famous specialists in insect systematics. However, although interested in natural history, young Gravenhorst was rather inclined to become a lawyer and in 1797 with such an intention he entered the University of Helmstedt (Academia Julia). Spending his spare time exploring the surrounding nature and attending additional lectures in physics and natural history, his zoological interests soon came to the fore. Numerous field trips helped improving his previously unsteady health, and the inherited fortune ensured him a high position in the society, without a necessity of taking a job. Therefore, in 1799 Gravenhorst decided to move to Göttingen, then a renowned centre of natural history. His teachers were such brilliant scientists as Johann Friedrich Blumenbach (physician, naturalist, physiologist and anthropologist) or Heinrich Adolf Schrader (botanist and mycologist), and he soon came to be on close terms with Johann Karl Wilhelm Illiger.

In Göttingen Gravenhorst studied not only zoology, but also botany and mineralogy, and soon became a member of the Göttingen Physical Society, at that time headed by the famous naturalist Johann Friedrich Gmelin. In 1801 Gravenhorst returned to Helmstedt, where he submitted his dissertation *Conspectus historiae entomologiae, imprimis systematum entomologicorum* (Fig. 1), passed the doctoral exam and was awarded a degree of doctor philosophiae et artium liberalium magister. Settled down

3. *Xorides gravenhorstii* (Curtis), an ichneumon wasp species dedicated to Gravenhorst (fot. J. Hilszczański)
in Brunswick again, Gravenhorst focused on the large family of rove beetles (Staphylinidae). He studied collections of Hellwig, Knoch, von Hoffmannsegg, Illiger and Zinnen and in 1802 published the first of his remarkable contributions to entomology, *Coleoptera microptera Brunsvicensia* (Gravenhorst 1802). In the same year Gravenhorst visited Paris, where he had an opportunity to study museum collections and met
Georges Cuvier, Guillaume-Antoine Olivier, Pierre André Latreille, Louis Augustin Guillaume Bosc, Alexandre Brongniart and Anselme Gaëtan Desmarest. After returning to Brunswick, Gravenhorst published System der Natur, a textbook for students attending his lectures (Gravenhorst 1804). Being rather well-off, Gravenhorst could afford to enlarge his collection by buying numerous specimens. His acquisitions included the insect and bird collection of Mauерhoff (some of his specimens were previously described by Fabricius) and Lampe’s large collection of reptiles, fishes and shells.

6-7. Specimens of Ichneumonidae from the Gravenhorst Collection
In 1805, Graevenhorst received habilitation degree at the Göttingen University, where he moved from Brunswick. Here he published another large study, the famous Monographia coleopterorum micropterorum (Graevenhorst 1806), where he treated nearly 400 species of Staphylinidae. This monograph, dedicated to Knoch, confirmed his entomological talents. He continued working on a new, enlarged edition of this book for many years, until 1839-40, when Erichson’s opus magnum Genera et species Staphylinorum appeared and with its broader and overlapping scope forced Graeven-
Horst to abandon his long-term project. In 1809 Gravenhorst was nominated associate professor of the Göttingen University, but instead decided to accept full professorship in natural history in Frankfurt (Oder), where he also became director of the botanical garden and lecturer in botany and mineralogy. In 1811 he married Charlotte Elsner, a daughter of a theology professor. In the same year the Frankfurt University, Alma Mater Viadrina, was closed. Its assets were divided between two newly founded universities: the Frederick William University of Berlin (presently Humboldt University) and the Silesian Frederick William University in Breslau (presently University of Wrocław). Gravenhorst moved to Wrocław.

17-18. Box with remains of various Ichneumonidae from the Graevenhorst Collection (17) and the annotation on its lid (18) reading “Köpfe, Hinterleiber, Flügel etc. zu Tryphon u. Mesoleptes in diesem Zustande von Dr. Förster in Aachen zurückerhalten” (“Heads, abdomina, wings etc. of Tryphon and Mesoleptes in this condition received back from Dr. Förster in Aachen”)
19. The front page of GRAVENHORST’s book Vergleichende Übersicht des Linnéischen und einiger neuern zoologischen Systeme..., coming from the library GRAVENHORST donated to the MNHW
In Wrocław professor Gravenhorst was a teacher of a three-year zoology course which covered all animals except lower invertebrates and fishes, which he found unattractive to study. In 1814 he donated a major part of his collection to the university, for a lifelong pension of 150 thalers. This is the date of establishing the institution
that has survived 200 years of various turns of history and is presently known as the Museum of Natural History of the University of Wroclaw. GRAVENHORST became its first director. His efforts to organise a remarkable museum were so successful that Karl LETZNER, one of the most eminent Silesian naturalists of 19th c. wrote in 1857 that “es jetzt zu den bedeutendsten Sammlungen Deutschlands gehört” (it now belongs to the most important collections in Germany).

The new environment suited GRAVENHORST well and in Wroclaw his scientific activity reached its peak. There he published many valuable volumes, including a textbook (GRAVENHORST 1817) and a series of fundamental studies on the hymenopteran family Ichneumonidae, among others Monographia Ichneumonum pedestrium (GRAVENHORST 1815), Conspectus generum et familiarum Ichneumonidae (GRAVENHORST 1819), Monographia Ichneumonum Pedemontanae regionis (GRAVENHORST 1820) and Ichneumonologia europaea (GRAVENHORST 1829) (Fig. 2). However, his research interests comprised a number of various topics and during his work as museum director GRAVENHORST published articles on amphibians, reptiles, several groups of marine invertebrates, spiders, staphylardin and tortoise beetles, chalcidoid wasps and protists.

In 1823 the previously retained doublet specimens from his private collection were also donated to the Museum of Natural History, and for this GRAVENHORST received a salary supplement of 100 thalers. GRAVENHORST suffered from a severe facial neuralgia and in 1825-26 was forced to make two visits to the seaside resort Bad Doberan. The therapy apparently gave expected results, as for the next few years GRAVENHORST with his usual enthusiasm worked on various entomological projects and in 1828-1829 was even appointed rector (German and Polish equivalent of chancellor) of the University of Wroclaw. Unfortunately, the pain returned during his 1830 trip to Prague, Vienna and Trieste. Bathing in the sea relieved the symptoms, and GRAVENHORST took the opportunity to do observations of marine invertebrates. The study Tergestina, oder Beobachtungen und Untersuchungen über einige bei Triest in Meere lebende Arten der Gattung Octopus, Doris, Pinna, Ascidia, Serpula, Echinus, Asterias, Ophiura, Holothuria, Actinia, Caryophyllia, Actinotus (GRAVENHORST 1831) was in fact a result of his health-restoring sea baths.

GRAVENHORST’s health deteriorated further and in the winters 1840/41 and 1841/42 he spent a long time bedridden. This illness affected also his mental powers and he never fully recovered. Fortunately, shortly before that GRAVENHORST managed to complete several important studies and even ill, he was able to edit seven more papers. Still able to give lectures in the forties and early fifties, in 1853 GRAVENHORST was already too weak to continue his teaching duties. The bath therapy in Salzbrunn in 1854 and 1855 did not improve his health and in April 1856, on his own request, professor GRAVENHORST retired. However, during short periods of health improvement, he still occasionally gave lectures in zoology in the summer that year. Johann GRAVENHORST died on the 14th of January 1857 of a pulmonary failure.

In acknowledgement of GRAVENHORST’s scientific achievements and his role as the organiser and the first director of the Museum of Natural History, in 1830 he was awarded a title of the Prussian Royal Privy Councillor and in 1846 the 4th class Order of the Red Eagle. The 50th anniversary of receiving his PhD (1851) was honoured
by a presentation of the honorary doctorate of the Faculty of Medicine, University of Wrocław and the 3rd class Order of the Red Eagle with bow. Gravenhorst was a member of 21 scientific societies, including eight honorary memberships. In his testament, he donated his large library and 12000 thalers to the Museum of Natural History, and a part of this sum was to be used to fund a stipend for a zoology student. Many taxon names were dedicated to Gravenhorst by various authors, including insects and reptiles, e.g. ichneumonid wasps Gravenhorstia Boie, Xorides gravenhorstii (Curtis) (Fig. 3), Stibeutes gravenhorstii Förster; braconid wasp Microchelonus gravenhorstii Nees; iguanian lizard Liolaemus gravenhorstii (Gray), scincid lizard Trachylepis gravenhorstii (Dumeril & Bibron) and others.

This biography, largely based on Letzner (1857), presents Gravenhorst as a brilliant scientist, skilled organiser and dutiful lecturer. It should be added, however, that Karl Letzner, a vice-secretary of the entomology section of the Silesian Society for National Culture (Schlesische Gesellschaft für Vaterländische Kultur), also recalled Gravenhorst as a modest, quiet and friendly man with a soft spot for poetry and singing.

Gravenhorst’s collection, or what remained from his large and diverse original collection, is preserved in the Museum of Natural History, University of Wrocław (MNHW). Nearly two centuries of turbulent history, among others the cataclysm of WWII, reduced this once remarkable collection to merely 19 drawers containing less than 5 thousand ichneumon wasps (Figs 4-16). If any other specimens from the Gravenhorst Collection survived, their origin would now be impossible to identify because of the missing documentation. Half of the scientific collections and nearly the entire museum archives have been destroyed or lost during the war. Even a story of a parcel containing type specimens from the Gravenhorst Collection and burned during transport is kept in the museum’s records. The remaining material is all the more valuable today.

Among the lost Gravenhorsts’ collections are the staphylinids, a reference material for two early monographs (Gravenhorst 1802, 1806), all other insects and remaining animals, including types of numerous species described in Vergleichende Übersicht des Linnéischen und einiger neuern zoologischen Systeme, nebst dem eingeschalteten Verzeichnisse der zoologischen Sammlung des Verfassers und den Beschreibungen neuer Thierarten, die in derselben vorhanden sind (Gravenhorst 1807), published during his stay in Göttingen. MNHW is in possession of a unique exemplar of this book with extensive handwritten notes made by Gravenhorst himself (Figs 19-20), a volume invaluable as a source of data to clarify status of many taxa presently treated as nomina dubia because of missing type specimens.

Even the ichneumonid collection is incomplete. During WWII some of the MNHW treasures were transported to safe locations outside Wrocław, but not all of them were retrieved after the war. Six Gravenhorsts’ drawers of ichneumon wasps were missing when the collection was luckily discovered in Kąty Wrocławskie in 1948. All drawers were numbered and the specimens organized as they appear in Ichneumonomologia Europaea, and therefore it was possible to identify exactly which part of the collection was lost (Townes 1959).
The Gravenhorst ichneumonid collection is a major challenge for scholars who attempt to identify true type specimens. Most specimen labels were removed already in the 19th c., the collection was rearranged, new specimens (e.g., from Arnold Förster) were added and some were sent in exchange to museums in Leiden and Copenhagen around 1840.

Townes (1965) made efforts to clarify these problems during his two visits to MNHW in 1958 and 1964, when he examined the entire collection. He managed to partly reconstruct the pre-war state of the collection by gathering information directly from the last German MNHW curator Karl Hedwig and from John Frederick Perkins, a renowned British specialist on parasitic wasps, who studied the Gravenhorst Collection in 1936. Townes (1965) concluded that the labels were removed already in 19th c., possibly before Gravenhorst’s death, because even early authors who studied the collection, as Wesmael (1859) and Taschenberg (1865), did not cite any label data. Townes (1965) analysed labels from the Gravenhorst Collection and was able to identify those originally associated with type specimens collected before 1829. He also found and described several reliable indicators related to pin brands or methods of mounting that can be used to identify type specimens coming from other sources, as those from Italian collectors, from coll. Manger (Silesian “Warmbrunn”) or from coll. Hope (England). This careful and detailed investigation also enabled Townes to identify recent re-mountings of several type specimens.

The Gravenhorst Collection of Ichneumonidae comprises currently 4743 dry-mounted specimens. Although this material has been partly revised by numerous specialists, the exact number of species remains unknown. Jacques Aubert (1958, 1960, 1968; Aubert & Jourdheuil 1958), Franco Frilli (1965, 1974, 1978), Klaus Horstmann (1968, 1974, 1976, 1992, 2001, 2005), Geoffrey Kerrich (1942), Joachim Oehlke (1966), Gerard van Rossem (1969a, b, 1974), Janusz Sawoniewicz (1984, 1986, 1988, 1989, 1990, 2003; Sawoniewicz & Wanat 2003), Martin Schwarz (2005, 2007) and Henry Townes (1958, 1963; Townes & Gupta 1962; Townes & Townes 1962; Townes, Momoi & Townes 1965) and others, used Gravenhorst’s specimens for taxonomic revisions and designated lectotypes or neotypes, but their studies covered only selected taxa and still numerous specimens require examination to verify their status (type specimen? holotype? syntype? identity?). Also traces of much earlier entomologists working on the specimens can be found in the collection, e.g., a small cardboard box containing damaged remains of specimens is pinned inside one of the drawers, with a note “Köpfe, Hinterleiber, Flügel etc. zu Tryphon u. Mesoleptes in diesem Zustande von Dr. Förster in Aachen zurückerhalten” (“Heads, abdomens, wings etc. of Tryphon and Mesoleptes in this condition received back from Dr. Förster in Aachen”) (Figs 17-18). Apparently, already the author of Synopsis der Familien und Gattungen der Ichneumonen (Förster 1869) used Gravenhorst’s material for his work (and already then the process of specimen damage had begun).

Most of the specimens in the Gravenhorst Collection are pinned, only some are glued on plastic or cardboard mounting cards. The collection is in a relatively good condition, with the majority of specimens well-preserved and identifiable, although some of them are incomplete to various extent. Specimens studied by Gravenhorst...
and later never dissected (Figs 11-16) are usually in a good condition, while too many revisions took their toll on those studied and re-mounted several times by various entomologists. The specimens and taxa that have been used in the published taxonomic works of the above-mentioned specialists are all catalogued and their details can be found in the MNHW electronic databases. The catalogue presently comprises 674 specimens of 229 nominal species, among them 645 type specimens and two possible type specimens. Ninety of them are holotypes, 131 lectotypes, two either syntypes or holotypes, 6 neotypes, and 57 paralectotypes. A large part of the MNHW catalogue was published (Sawoniewicz & Wanat 2003) with database entry numbers, specimen details and even the condition of each primary type specimen, and therefore such a list is not presented here. The remaining, not catalogued and largely unrevised part of the collection, awaits specialists willing to explore this nearly two-century old legacy of their predecessor, professor Johann Ludwig Christian Gravenhorst.

Acknowledgements

Our thanks go to Żaneta Zaborowska who translated Letzner’s biographic note on Gravenhorst, Michael Schülke who read and translated an 19th c. German handwritten note, and Jolanta Jurkowska for her help in locating rare literature. Jacek Hilszczański kindly sent us a photo of Xorides gravenhorstii and Beata M. Pokryszko proofread the manuscript.

References


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

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ABSTRACT. Friedrich Wilhelm Niepelt’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 Castniidae, 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 Joyce & 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 Wroclaw (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,
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
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 Palaeartic (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

*Synna 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 dejani sambaluna* FRUHSTORFER, 1898a: 150; syntype [m]; Indonesia, Lombok Is.; MNHW No 1127; current status: *Vanessa dejani* 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).
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

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

Acknowledgements

Our thanks go to Janusz Masłowski for kindly providing a photograph of *Morpho niepelti* from his collection. Beata M. Pokryszko kindly proofread our manuscript.

References


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

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Coleoptera collections of Wilhelm Kolbe, Richard Scholz and Georg Polentz in the Museum of Natural History, University of Wrocław

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Abstract. Among historical beetle collections preserved at the Museum of Natural History, University of Wrocław, three deserve special attention. They belonged to famous pioneers of Silesian coleopterology, school teachers and amateur naturalists: Wilhelm Kolbe (1852-1929), Richard Scholz (1866-1935) and Georg Polentz (1879-1965). Voucher specimens from these collections have been used in numerous faunistic papers, which are still frequently cited by modern entomologists, and they represent invaluable documentation of beetle diversity of pre-war Silesia, Sudety Mts and adjacent areas. Contributions of these early authors to the knowledge of beetles and their collections are summarised, with a brief biographical note on each of them.

Key words: Insecta, Coleoptera, collection, Wrocław University, Poland, Silesia, types.

Introduction

Within the present territory of Poland, the south-western region of Silesia has a particularly long and rich tradition of coleopterological studies. Natural sciences, among them entomology, attracted special attention in the second half of 19th c., when several prominent coleopterists initiated systematic faunistic studies focused on Silesian beetles. The first and most important pioneer was Karl Letzner (1812-1889, see Jałoszyński & Ruta 2012), whose work was continued by Julius Gerhardt (1827-1912). Their contributions were supplemented by numerous findings and publications of their followers: Wilhelm Kolbe (1852-1929), Richard Scholz (1866-1935) and Georg Polentz (1879-1965). Each of them published, on a regular basis, faunistic summaries focused on new distributional data of beetles occurring in Silesia. These three scholars
have been exchanging specimens and possibly cooperating in their mutual studies; yet their collections, preserved in the Museum of Natural History, University of Wroclaw (MNHW), show different characteristics, reflecting different research focus, methods and favourite collecting sites of each of their original owners. The collections comprise well over 10,000 species, subspecies and varieties represented by approximately 233,000 specimens (Tables 1, 2), thus being probably the largest existing collections of Silesian Coleoptera.

Wilhelm Kolbe (Fig. 1) was born on the 9th of October 1852 in a village Rosochata (= Seiffersdorf) near Legnica (= Liegnitz). In 1870 Kolbe participated in the Franco-Prussian War, after which he settled down in Legnica. In this town he became a school teacher (in 1875), then a director of the Hedwigschule (1883-1918, Hinke 1919), and there he died in 1929.

Since 1888 Kolbe was a member of the Silesian Society for Insect Science (Schlesische Verein für Insektenkunde). He closely cooperated with Gerhardt, who was a teacher at the same school. When Gerhardt retired, it was Kolbe who urged the authorities of Legnica to buy Gerhardt’s beetle collection (which, unfortunately, has not survived the World War II). Kolbe’s collecting activities were restricted mainly to areas adjacent to Legnica. In a short obituary published after his death (Anonym 1929), Kolbe was recalled as a representative of the good old school of faunistics, a continuator of studies initiated by Letzner and Gerhardt.

Kolbe’s contribution to the knowledge of insect fauna comprises 35 articles focused on beetles. Eighteen of them form a cycle „Beiträge zur schlesischen Käferfauna“ (Contributions to the Beetle Fauna of Silesia) published from 1899 to 1932 in the journal Zeitschrift für Entomologie (in 1908-1924 as Jahresheft des Vereins für schlesische Insektenkunde zu Breslau). One of his first papers was devoted to beetles inhabiting mosses (Kolbe 1892). Kolbe’s research on beetle larvae, life cycles and biology deserves a special mention (Kolbe 1893, 1894, 1895, 1896, 1899, 1900, 1902);
he belonged to very few contemporary Silesian entomologists interested in this field of study. One of his faunistic studies was focused on beetles of a small swamp forest near Pańnow Legnicki (= Panthen) (Kolbe 1897), which later became a nature reserve, until 1945 known as Verlorene Wasser, and in 2001 again recognized as a valuable area worth protecting and appointed as a Nature Reserve Ponikwa. Kolbe’s contributions to entomology were broadly recognized and honoured by several authors by dedicating him species names, e.g., *Stenus kolbei* Gerhardt, 1893, *Lamprosoma kolbei* R. Scholz, 1926 (junior synonym of *Oomorphus concolor* (Sturm, 1807)), and *Enicmus kolbei* Wanka, 1929 (junior synonym of *Latridius gemellatus* (Mannerheim, 1844)).
The Coleoptera collection of Kolbe (Figs 4-7) is the largest of historical beetle collections deposited at MNHW. It consists of over 131,000 specimens representing 6,513 species, subspecies and varieties (Table 1) kept in 217 drawers. Most of the beetles come from Silesia, collected mainly in Legnica and neighbouring areas (towns and villages Dunino, Malecyce, Pątnów Legnicki, Zimna Woda, etc.), in Żagań and Polkowice; a small fraction is from Karkonosze Mts and Izerskie Mts. This is also the most difficult of all MNHW historical beetle collections to deal with. Kolbe has mounted small specimens on points of minute triangular cards, and often a single pin bears more than ten such specimens coming from 2-3 different collecting sites, interspaced with locality labels (Fig. 6). The labels bear rudimentary data, usually a printed abbreviation of a locality, less frequently also a handwritten date added on the reverse side. It is possible to assign specimens to certain collecting sites, and the Kolbe Collection is still very useful in modern faunistic studies (e.g., Kubisz et al. 2010, Ruta et al. 2010, Wanat & Borowski 2013).

Richard Scholz (Fig. 2) was born on the 25th of October 1866 in Legnica (= Liegnitz), where he studied didactics to become a school teacher. He worked at a school in Marciszów (= Nieder-Wernersdorf), but after passing exams required to become
a secondary school teacher and a rector he returned to Legnica. There Scholz was a rector of a Lutheran school, retired in 1932, and died three years later.

Scholz was a student of Julius Gerhardt, and met W. Kolbe for the first time in 1881 (Scholz 1931). His entomological interests were focused on Coleoptera and Hemiptera (according to Horn at al. (1990) his collection of bugs was transferred to the Phyletisches Museum in Jena before WWII, soon after Scholz’s death). He was especially fond of water beetles belonging to the suborder Adephaga. Scholz cooperated with other contemporary specialists; for instance many of his determinations were verified by Edmund Reitter (Scholz 1916a). Since 1893 he belonged to the Schlesische Verein für Insektenkunde. One of the prominent German natural history societies, Verein für naturwissenschaftliche Heimatforschung in Hamburg, awarded Scholz in 1930 a title of a corresponding member.

In 1900-1935 Scholz published over 150 papers focused mainly on beetles. Most of them are short faunistic records of interesting beetle species discovered in Silesia,
initially (1900-1905) published in the journal Insekten-Börse (Leipzig), and later (since 1911) in Entomologische Blätter (Berlin). Among his larger papers is a synoptic work on beetles of Legnica and surrounding areas, where he gives distributional data on 87 species (Scholz 1927a), and a cooperative study on nidicolous species, in which the authors present an ecological classification of beetles living in nests of birds and mammals and original observations from Lower Silesia (Scholz & Hinke 1919). In his early papers Scholz dealt also with morphological problems, e.g., teratology (Scholz 1900) and stridulating organs in Cerambycidae and Scolytinae (Scholz 1904, 1905b).

Occasionally, he also studied preimaginal stages (Scholz 1926) and biology of beetles (Scholz 1905a, 1927b). His most valued studies are those focused on distributions of Palaearctic Dytiscidae and Haliplidae (e.g., Scholz 1916b, 1923, 1927c, 1929a, 1932) and his identification key to the Haliplidae of Europe (Scholz 1929b).

The beetle collection belonging to Scholz (Table 1) originally comprised 12,000 species (Anonym 1935). At present, the main Scholz Collection preserved at MNHW contains nearly 57,000 specimens representing slightly less than 10,000 species and subspecies (Figs 8-11), kept in 92 drawers. This is the most species-rich of the three historical Coleoptera collections characterised in this paper. Scholz’s water beetle specimens have been originally kept as a separate collection (in 15 boxes) and they have retained this special status till present. This part of the Scholz Collection (Table 2) comprises nearly 6,000 specimens representing 592 species and infraspecific taxa. The Scholz’s water beetles are of special value, as they come not only from Silesia and surrounding areas, but from a large part of Europe and Asia, with several syntypes of species described by Scholz himself (Figs 10-11), which are currently kept in the main type specimen MNHW collection and were used in recent taxonomic studies on

10-11. Type specimens of Dytiscidae from the Scholz Collection. Syntype of Agabus zimmermanni Scholz (10); syntype of Rhantus incognitus Scholz (11)
Hydradephaga (*e.g.* Ferly 1992). Scholz extensively collected in the same area as Kolbe and many of his specimens come from Legnica and surrounding townships (Dunino, Malczyce, Zimna Woda).

**Georg Polentz** (Fig. 3) was born on the 28th of December 1879 in Wrocław. Young Georg inherited his vivid interest in natural history from his father, a merchant who collected butterflies and reared caterpillars. His son started collecting beetles already as a schoolboy. After graduating from a gymnasium, Polentz served as a public officer at the municipal council of Wrocław, and later became a merchant. After WWII Polentz settled down in Gernrode in Harz, where he was a teacher of biology, chemistry and physics, and where he died in 1965.

Polentz was a member of the Schlesische Verein für Insektenkunde since 1901, and since 1928 he cooperated with the Zoological Museum of the University of Wrocław (present-day MNHW). This cooperation gave him an access to a large library and collections of Ansgorge, Dietl, Fusting, Matuschka, Kolbe and Scholz (*Pax* 1960). In 1940s Polentz was inspired by A. Lanzke to start working also on Hemiptera, and this topic of his research was continued, in addition to beetles, also after WWII. Identifications made by Polentz were respected by contemporary entomologists as most reliable and his knowledge of Silesian beetle fauna was so outstanding that in some volumes of Adolf Horion’s „Faunistik der Mitteleuropäischen Käfer“ Polentz was listed as a contributor (*e.g.*, Horion 1953).

Polentz has published more than 60 papers on beetles. Most of them are short faunistic records published in the journal Zeitschrift für Entomologie (Breslau). In 1932-1949 he published a series of papers entitled Beiträge zur schlesischen Käferfauna, composed of 13 parts in various journals, one part prepared together with Hans Nowotny (*Nowotny & Polentz* 1933). Polentz also published articles on beetle conservation problems (*Polentz* 1928), interesting beetle species occurring in Wrocław (*Polentz* 1929), and beetles collected from nests of the European mole around Kłodzko and Wrocław (*Polentz* 1936). The latter study was based on an impressive number of 1500 nests. Polentz also described a new ground beetle species of the genus *Dromius*, dedicated to an Upper Silesian entomologist K. Kuntze (*Polentz* 1939).

In summer 1944, when the Soviet army was approaching Wrocław, Polentz’s collections of Coleoptera and Hemiptera were transported together with several other valuable insect collections to a safe location in Katy Wrocławskie, where they remained hidden until 1948 (*Pax* 1949, Kinel 1957). The major part of the Polentz’s beetle collection that has survived and has been successfully retrieved, is currently preserved at MNHW (Figs 12-13). It comprises nearly 39 000 specimens representing nearly 7 000 species (Table 1) and kept in 56 drawers. Specimens collected by Polentz himself come from Wrocław and surrounding areas, from the Trzebnickie Hills (Oborniki Śląskie, Trzebnica), but also from Legnica, Mt. Śnieżnik Kłodzki (Sudety Mts) and localities outside Silesia, as Walcz in Western Pomerania. Some specimens have been acquired from other coleopterists, as K. Kuntze, H. Lgocki, H. Nowotny, J. Roubal, Sz. Tenenbaum, and species belonging to difficult groups have been identified by E. Reitter, Th. Wanka or V. Machulka. The Polentz Collection is an invaluable documentation of the
beetle fauna of Wrocław and neighbouring areas, but when used in modern faunistic revisions a special care must be taken to distinguish between specimens truly coming from this region and those only bearing a label “Polentz / Breslau”. This often means not a collecting site but simply the locality or ownership of the collection, and only patient and careful comparisons with data originally published by Polentz allow to made such a distinction.
The beetles of Kolbe, Scholz and Polentz after WWII have been permanently incorporated into vast MNHW Coleoptera collections. For their historical value, they are kept separately and in original drawers (Figs 4, 5, 8, 12), in standard museum cabinets. The collections are not complete, judging from gaps in continuous numbering of drawers. During WWII or after the war drawers containing some Carabidae, Hydrophilidae, Chrysomelidae and Cerambycidae have been lost (4 drawers of the Kolbe Collection, 8 drawers of the Scholz Collection and 12 drawers of the Polentz Collection). It is only known that the Chrysomelidae part of each collection has been seriously depleted after the war but before the early eighties of 20th c., in unclear circumstances. The remaining specimens are in good condition, but they are not catalogued.

Initially private collections used mainly in the publications of their owners, in MNHW they were made available for specialists from Poland and abroad, and were used in a great number of faunistic and taxonomic studies. These three collections have been extensively studied by many authors, whose focus was primarily on faunistic revisions and identification keys to the insects of Poland. Most monographic reviews of beetles of Poland contain data based on these collections, and the specimens together with bibliographic references to original papers of Kolbe, Scholz and Polentz were cited hundreds of times in the fundamental publication series on the beetle fauna of Poland, the Katalog Fauny Polski (Catalogue of the Fauna of Poland) by Burakowski et al. (1971-2000), comprising over 6 500 pages in 22 volumes. Verification of old determinations yielded discoveries of rare and previously overlooked species in Western Poland (e.g., Wanat & Borowski 2013), and large monographs focused on Polish representatives of selected beetle groups were partly based on these specimens (e.g., Pawłowski 1975, Kuśka 1995, Kubisz 2006). Most recently, this material was used in the faunistic revisions of the families Corylophidae (Ruta et al. 2010), Melandryidae and Tetratomidae (Kubisz et al. 2010) and Aderidae (Jaloszyński et al. 2013) of Poland. Many taxonomic studies were also based on the collections of Kolbe, Scholz or Polentz, most notably on weevils (e.g., Caldara 1979, Caldara & O’Brien 1998, Koštál & Holecová 2001, Wanat & Colonelli 2004, OSELLA & BELLO 2010).

Acknowledgements

Our thanks go to Dr. Eckhard Groll (Senckenberg Deutsches Entomologisches Institut, Müncheberg, Germany) and to Mr. Arne Köhler (Deutsche Gesellschaft für allgemeine und angewandte Entomologie e.V., Müncheberg, Germany) for allowing us to publish photographs of Wilhelm Kolbe (Fig. 1) and Georg Polentz (Fig. 3), respectively.

REFERENCES

PAWEL JALOSZYNSKI, RAFAŁ RUTA, MAREK WANAT, NATALIA KOŁODZIEJCZYK


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<td>Tetratomidae</td>
<td>6</td>
<td>124</td>
<td>7</td>
</tr>
<tr>
<td>Throscidae</td>
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<td>153</td>
<td>9</td>
</tr>
<tr>
<td>Trogidae</td>
<td>6</td>
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<td>10</td>
</tr>
<tr>
<td>Trogossitidae</td>
<td>8</td>
<td>47</td>
<td>12</td>
</tr>
<tr>
<td>Zopheridae</td>
<td>23</td>
<td>139</td>
<td>43</td>
</tr>
<tr>
<td><strong>total</strong></td>
<td>6513</td>
<td>131258</td>
<td>9952</td>
</tr>
</tbody>
</table>
Table 2. Summary of Coleoptera aquatica (Hydradephaga), a separate Scholz Collection (arranged alphabetically; taxa include varieties).

<table>
<thead>
<tr>
<th>family</th>
<th>species &amp; subspecies</th>
<th>specimens</th>
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</thead>
<tbody>
<tr>
<td>Dytiscidae</td>
<td>483</td>
<td>4839</td>
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<tr>
<td>Gyrinidae</td>
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<td>359</td>
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<td>Haliplidae</td>
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<td>649</td>
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<tr>
<td>Hygrobiidae</td>
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<td>10</td>
</tr>
<tr>
<td>Noteridae</td>
<td>15</td>
<td>121</td>
</tr>
<tr>
<td><strong>total</strong></td>
<td><strong>592</strong></td>
<td><strong>5978</strong></td>
</tr>
</tbody>
</table>
The Hymenoptera: Apidae collection of Jan Noskiewicz in the
Museum of Natural History, University of Wroclaw

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Abstract. The Apidae collection of Jan Noskiewicz preserved at the Museum of Natural History, University of Wroclaw, Wroclaw, Poland is summarised. The entire Hymenoptera collection consists of many families of Aculeata, but the bees represent the most valuable part, with nearly 1000 identified species and subspecies, and over 11500 specimens of predominantly Old World geographical range. A brief biographical note on Jan Noskiewicz, the late professor of the University of Wroclaw and a renowned specialist on Apidae, is given. The type specimens of 75 bee species and subspecies from the Noskiewicz Collection are listed with respective details and bibliographic data.

Key words: Noskiewicz, Insecta, Hymenoptera, Apidae, type collection, Wroclaw University, Poland.

Introduction

Jan Noskiewicz (1890-1963) was a distinguished Polish zoologist and zoogeographer. Born in Sanok, he attended a school in Jaroslaw where his teacher, Kazimierz Piątkowski, inspired him to focus his interests on the world of insects. For one year a student of the Jagiellonian University, Noskiewicz later moved to the Lviv University to complete his zoological studies. In 1913-1920 he worked as a secondary school teacher in Lviv and then for two years as a senior assistant of professor Jan Hirschler, a zoologist and comparative anatomist. In 1922-39 Noskiewicz was a researcher and librarian of the famous Dzieduszycki Museum of Natural History. In 1927 he got his PhD; his dissertation was “A polyembryony in the reproduction of Halictoxenos simplicis Nosk.”. Ten years later he obtained habilitation degree for a pioneer study of the faunistic regions of Poland.
During WWII Noskiewicz was a lecturer at the Lviv University and a researcher of the Dzieduszycki Museum. Together with Jan Kinel, he managed to protect the invaluable museum collections from war damage. Harsh conditions during the city’s occupation forced Noskiewicz to hire as a lice feeder for the epidemic typhus vaccine project at the Rudolf Weigl Institute. This allowed him to earn his living and avoid repressions from the Germans. Near the end of WWII, in 1944, Noskiewicz was appointed Chair of Invertebrate Zoology of the Lviv University, and at the same time continued his work for the Dzieduszycki Museum. In 1946, when Lviv was excluded from the territory of Poland, Noskiewicz was repatriated to Wrocław and took position of the Chair of Animal Systematics and Zoogeography, University of Wrocław. There he received full professorship (1954) and retired in 1961. In 1955/56 he was dean of the Natural History Faculty. During his scientific career he was also a founding member of the Polish Entomological Society, an editor-in-chief of the Polish Entomological Journal, and head of the Polish Zoological Society and the Polish Naturalist’s Society.

Additional biographical data can be found in Brzęk (1994, 2007), Feliksiak (1987), and primarily in a detailed obituary by Smreczyński (1964) containing also a complete Noskiewicz’s bibliography compiled by Żak-Ogaza (1964).

Noskiewicz was a renowned specialist on Hymenoptera, especially Aculeata. He published his first faunistic notes on hymenopterans yet before his employment at the Dzieduszycki Muzeum (e.g., Noskiewicz 1918). In his further work Noskiewicz focused on the taxonomy of bees and described numerous new taxa, most notably those of the ground-nesting bees of the diverse genus Colletes Latreille. His comprehensive studies of this genus conducted in Lviv resulted in a taxonomic revision of 125 Palaearctic species, including 61 new to science (Noskiewicz 1936a). This outstanding monograph was later supplemented with several further contributions after WWII (e.g., Noskiewicz 1958ab, 1959ab, 1962a). Like many other contemporary entomologists, he was also interested in faunistic studies, with special focus on xerothermophilous insects of Podolia and Lower Silesia. Noskiewicz’s studies significantly contributed to the knowledge of zoogeography and entomofaunistics of Podolia (especially his 18-year cooperative study with another famous Polish zoologist, Roman Kuntze), Silesia, Western Pomerania and the Karkonosze Mountains. Together with Gustaw Poluszyński, Noskiewicz discovered and characterised the phenomenon of polyembryony in Strepsiptera, rare and poorly studied parasites of Hymenoptera. Their collaborative work resulted in a large monograph on the embryonic development of Strepsiptera (Noskiewicz & Poluszyński 1928, 1935), an important contribution to the knowledge of this enigmatic order. They also described several new species of Strepsiptera (Noskiewicz & Poluszyński 1924). After moving to Wrocław, Noskiewicz extended his study to other groups of Hymenoptera and selected families of Diptera, particularly Asilidae (e.g., Noskiewicz 1953). His remarkable contribution to zoology was honoured by several taxonomists who dedicated new species to him, for example Otiorhynchus noskiewiczi Smreczyński, Nomada noskiewiczi Schwarz or Colletes noskiewiczi Cockerell (Fig. 1).

The Hymenoptera collection of Jan Noskiewicz is preserved at the Museum of Natural History, University of Wrocław (MNHW). It includes 88 original drawers contained in three cabinets. One of the drawers contains Diptera, while in 87 there are
The bees form the bulk of this collection, with 995 identified species and subspecies represented by over 7500 specimens, including many primary types. Together with a material of approximately 4000 unidentified specimens from Podolia and various regions of Poland, this is one of the most important repositories of Apidae in Polish museums. The Noskiewicz Collection contains also Sphecidae, Pompilidae, Ichneumonidae, Braconidae, Gasteruptiidae, Chrysidae, Vespidae, Ibalidae, Aulacidae, Tiphiidae, and a small number of Chalcidoidea; two drawers are occupied by Symphyta. All these groups are only partially or not identified to species.

Since Apidae was the main research focus of Noskiewicz, this part of his collection is best studied and various taxonomic groups have been later revised by other specialists (e.g., Wärncke 1978, Kuhlmann 2000). However, there are still numerous specimens awaiting identification. The collection has been properly curated and the specimens are generally in good condition, pinned, labelled and the identified material is arranged systematically (Figs. 2-6). The geographical scope of the collection is mainly within xerothermic areas of the Old World, with a strong representation of the Mediterranean basin and southern Europe, and especially eastern Europe (Ukraine), northern Africa (Tunisia, Algeria, Morocco) and Asia (Turkey, Iran, Kazakhstan, Turkmenistan, Azerbaijan, Uzbekistan, Mongolia, east China, Japan).

All the type specimens of taxa described by Noskiewicz (Figs 7-12) are kept in two separate drawers. Type specimens of 77 species and subspecies are present in this
material. The identity of each specimen has been confirmed by comparing the label data with the original description. All the type specimens have been catalogued, and identification numbers have been assigned: all syntypes of one species; holotype + all paratypes; and lectotype + all paralectotypes bear one MNHW catalogue / electronic database number. The checklist below comprises all these taxa and specimen details in alphabetical order (f - female, m - male, nd - not determined).

CHECKLIST OF THE APIDAE TYPE SPECIMENS IN THE MNHW NOSKIEWICZ COLLECTION

*Andrena nanaeformis* Noskiewicz, 1925: 138; holotype [f]; MNHW No 947; Ukraine, Lesienice, leg. Noskiewicz.


*Andrena simontornyella* Noskiewicz, 1939: 246; 4 syntypes [mf]; MNHW No 950; Hungary, Simontorna, leg. Pillich.


*Camptopoeum verhoeffi* Noskiewicz, 1962b: 1; 7 paratypes [mf]; MNHW No 952; Tunisia, Djerba, leg. Verhoeff.

*Colletes acutiformis* Noskiewicz, 1936a: 382; 2 syntypes [mf]; MNHW No 891; Algeria, Laghouat, leg. Meyer (m), Algeria, Ain Sefra, leg. Chobaut (f).

*Colletes albescens* Noskiewicz, 1936a: 330; 3 syntypes [mf]; MNHW No 892; Spain, Los Molinos, leg. Mercet (m), Spain, Canizares, leg. Selgas (f), Spain, Sierra de Guadarrama, leg. Dusmet (f). Current status: *Colletes noskiewiczi* Cockerell, 1942.

*Colletes alfkeni* Noskiewicz, 1958b: 512; holotype [m]; MNHW No 893; Israel, Nahalal, leg. Palmoni.

*Colletes alicularis* Noskiewicz, 1936a: 260; 7 paralectotypes [mf]; MNHW No 894; Aral Sea, Syr-Darin ob., leg. Popov (2 m), Kazakhstan, Baygakum ad Dzhulek, leg. Wollman (4 exx.), Turkmenistan, Repetek, leg. Paramonow (1 m).

*Colletes anchusae* Noskiewicz, 1924a: 118; 5 syntypes [mf]; MNHW No 895; Ukraine, Lysa Góra ad Złoczów (= Lysa Hora ad Zolochiv), leg. Noskiewicz (2 exx.), Ukraine, Góra Żulica (= Zhulici), leg. Noskiewicz (3 exx.).

*Colletes bidentulus* Noskiewicz, 1936a: 129; 2 paratypes [mf]; MNHW No 896; Azerbaijan, Helenendorf (currently Khanlar), (m), Turkmenistan, Ashkhabad, (f).

*Colletes bytinskii* Noskiewicz, 1955: 81; 5 syntypes [mf]; MNHW No 897; Israel, Bat-Jam, leg. Bytinski-Salz.

*Colletes cariniger graecus* Noskiewicz, 1959b: 515; holotype [f], allotype [m], paratype [m]; MNHW No 898; Greece, Mt. Penteli. Current status: *Colletes cariniger* Pérez, 1903.

*Colletes conradti* Noskiewicz, 1936a: 459; 6 syntypes [mf]; MNHW No 899; Kazakhstan, Ber Tschogur, Mugodjar Mts., leg. Wollmann (1 m), China (Xinjiang),
King-Ssai, Jarkand, leg. CONRADT (1 m), China (Xinjiang), Tschakar ad Polu, leg. CONRADT (1 f), Aral Sea, Syr-Darin, leg. POPOV (1 m), Mongolia, Chott, Gobi, leg. KOZŁOW (1 m), “Din-junan- in s. Atanan”, leg. KOZŁOW (1 f).

**Colletes coriandri judaicus** NOSKIEWICZ, 1955: 89; 2 syntypes [mf]; MNHW No 919; Israel, Ein Gev, leg. BYTINSKI-SALZ. Current status: *Colletes judaicus* NOSKIEWICZ, 1955.

**Colletes creticus** NOSKIEWICZ, 1936a: 123; allotype [f], 1 paratype [m]; MNHW No 900; Greece, Crete, Amari, leg. BIRÓ (allotype), Greece, Crete, Piskokephalon, leg. SCHULZ (paratype).

**Colletes cypricus** NOSKIEWICZ, 1936a: 118; 2 syntypes [nd]; MNHW No 901; Cyprus, Limassol.

**Colletes dubitatus** NOSKIEWICZ, 1936a: 241; 2 syntypes [m]; MNHW No 902; Turkmenistan, Merw (1 m), Kazakhstan, Tartugay, leg. SZESTAKOW (1 m).

**Colletes elegans** NOSKIEWICZ, 1936a: 217; holotype [m]; MNHW No 903; Algeria, Ghardaia.

**Colletes emaceatus** NOSKIEWICZ, 1936a: 264; lectotype [m], paralectotype [f]; MNHW No 904; design. KUHLMANN, 2000; Kazakhstan, Muyun-Kum, Karaken, leg. LEBDEW (lectotype), Turkmenistan, Başıramały (paralectotype).

**Colletes escalerai** NOSKIEWICZ, 1936a: 361; 8 syntypes [mf]; MNHW No 905; Morocco, Mogador, leg. ESCALERA.

**Colletes flavescens** NOSKIEWICZ, 1936a: 106; 2 syntypes [mf]; MNHW No 906; Morocco, Mogador, leg. ESCALERA. Current status: *Colletes nigricans* GISTEL, 1857.

**Colletes fodiens hispanicus** NOSKIEWICZ, 1936a: 303; 16 syntypes [mf]; MNHW No 907; Spain, Sierra de Guadarrama, leg. DUSMET (10 exx.), Spain, Bajona, leg. DUSMET (2 exx.), Spain, El Pardo, leg. DUSMET (2 exx.), Spain, Escorial, leg. DUSMET (1 ex.), Spain, Los Molinos, leg. MERCET (1 ex.). Current status: *Colletes fodiens* (FOURCROY, 1785).

**Colletes fraterculus** NOSKIEWICZ, 1936a: 526; holotype [f]; MNHW No 908; “Koj-pjas-tau bl. Kabadiana”, leg. GUSSAKOWSKI.

**Colletes fulvicornis** NOSKIEWICZ, 1936a: 416; 2 paratypes [m]; MNHW No 909; Mongolia, Gobi, Cholt, leg. KOZŁOW.

**Colletes fusicicornis** NOSKIEWICZ, 1936a: 284; 2 paratypes [m]; MNHW No 910; Egypt, Gabal Elba.

**Colletes grisescens** NOSKIEWICZ, 1936a: 442; 1 paratype [m]; MNHW No 911; Erdschias, leg. PENTHER. Current status: *Colletes asiaticus* KUHLMANN, 1999.

**Colletes gussakowski** NOSKIEWICZ, 1936a: 528; holotype [f]; MNHW No 912; “Koi-pjas-tau bl. Kabadiana”.

**Colletes ibericus** NOSKIEWICZ, 1936a: 471; 11 syntypes [mf]; MNHW No 913; Spain, El Pardo, leg. DUSMET (9 exx.), Spain, Valencia, leg. MORODER (2 exx.). Current status: *Colletes pulchellus* PÉREZ, 1903.

**Colletes illyricus** NOSKIEWICZ, 1936a: 120; 10 syntypes [mf]; MNHW No. 914; Croatia, Dalmatia (1 m), Croatia, Ragusa, (6 exx.), Montenegro, Herceg Novi, (2 m), Italy?, Lesina, leg. KELLER (1 m). Current status: *Colletes eous* MORICE, 1904.
Colletes inexpectatus Noskiewicz, 1936a: 325; 15 syntypes [mf]; MNHW No 915; Ukraine, Łyczaków (6 exx.), Ukraine, Wężowa Dolina, (2 m), Ukraine, Kręciłów (= Krutiliv), (1 m), Ukraine, Sinków (= Syn’kiv), (3 exx), Ukraine, Krzemieniec (= Kremenec), (3 f).

2. One of drawers with the Noskiewicz Collection
Colletes integer Noskiewicz, 1936a: 427; holotype [f]; MNHW No 916; ?Uzbekistan, Alatau, Syrdarinskaya ob.

Colletes iranicus Noskiewicz, 1962a: 51; 2 paratypes [f]; MNHW No 917; Iran, Rayne, (Teheran), leg. SCHMID.

Colletes jejunos Noskiewicz, 1936a: 231; lectotype [m]; MNHW No 918; design. KUHLMANN (2000); Egypt, Gabal Elba, leg. ALDEH.

Colletes maidli Noskiewicz, 1936a: 166; syntype [f]; MNHW No 920; Italy, Venezia-Lignano, leg. ZERNY.

Colletes merceti Noskiewicz, 1936a: 223; 5 paratypes [mf]; MNHW No 921; Spain, Alicante, leg. MERCET.

Colletes meyeri Noskiewicz, 1936a: 401; 2 syntypes [mf]; MNHW No 922; Croatia, Split, leg. MANN (m), Croatia, Dubrovnik, leg. MEYER (f).

Colletes nanaeformis Noskiewicz, 1959a: 35; holotype [m], 2 paratypes [m]; MNHW No 923; Egypt, Tell-el-Amarna, leg. PUŁAWSKI.

3-4. Examples of Thyreus PANZER (3) and Colletes LATREILLE (4) from the non-type part of the Noskiewicz Collection
*Colletes ottomanus* Noskiewicz, 1958a: 5; 3 paratypes [mf]; MNHW No 924; Turkey, Konia, leg. Bytinski-Salz.

*Colletes pallescens* Noskiewicz, 1936a: 468; 31 syntypes [mf]; MNHW No 925; Kazakhstan, Ber Tschogur, Mugodjar Mts., leg. Bubyr (2 m), Kazakhstan, Ber Tschogur, Mugodjar Mts., leg. Androssow (1 m), Kazakhstan, Uralsk, leg. Bartel (18 m),

5-6. Examples of type specimens of *Colletes Latreille* (5) and non-type *Nomada Scopoli* (6) from the Noskiewicz Collection
Mongolia, Taga-Ursa, leg. Kozlow (2 exx.), Ukraine, Crimea (1 f), Balchash Mts., “balchashsk exped” (1 m), Sarepta, Russia, leg. Becker (2 m), Sarepta, Russia, (4 m).

Current status: Colletes chengtehensis Yasumatsu, 1935.

Colletes pallipes Noskiewicz, 1936a: 274; paratype [f]; MNHW No 926; Syr-Daria, leg. Bodemeyer.
Colletes plumulosus Noskiewicz, 1936a: 267; 3 paralectotypes [mf]; MNHW No 927; Kazakhstan, Baygakum bei Dzhulek, leg. WOLLMANN; males labeled as Colletes plumulosus Nosk.

Colletes pollinarius Noskiewicz, 1936a: 224; lectotype [m], 1 paralectotype [f]; MNHW No 928; design. KUHLMANN (2000); Transcaspia, Uzun-Ada, leg. VARENCOV (lectotype), Transcaspia, Uzun-Ada, (paralectotype).

Colletes popovi Noskiewicz, 1936a: 271; 3 paralectotypes [m]; MNHW No 929; Kazakhstan, Ber Tschogur, Mugodjar Mts., leg. BUBYR (1 ex.), Kazakhstan, Karatau Mts., ad Dzhulek, leg. WOLLMANN (2 exx.).

Colletes pseudocinerascens Noskiewicz, 1936a: 424; 2 paralectotypes [mf]; MNHW No 930; Russian, Jakutsik, leg. MOSKWIN.

Colletes pseudojejunus Noskiewicz, 1959a: 47; holotype [m], allotype [f]; MNHW No 931; Israel, Dead Sea, South End, leg. BYTINSKI-SALZ.

Colletes radoszkowskii Noskiewicz, 1936a: 452; 2 paralectotypes [mf]; MNHW No 932; ?Iran, Kheyrabad, Kopet-dag, leg. GOLBEK (f), ?Iran, Chorasan, leg. ZARUBNYJ (m).

Colletes reinigi Noskiewicz, 1936a: 372; paratypes [mf] 2; MNHW No 933; West Pamir, leg. REINIG (f), Kuku-nor-Geb, (Kuku-nor Lake, China, Qinghai?), leg. TANCRE (m).

Colletes rubripes Noskiewicz, 1936a: 205; 2 paralectotypes [mf]; MNHW No 934; Turkmenistan, Repetek, leg. HUSSAKOWSKIJ (f), Turkmenistan, Farab, leg. KULESZOW (m).

Colletes schmidtii Noskiewicz, 1962a: 49; 5 paratypes [f]; MNHW No 935; Spain, Sierra Nevada, Laguna de Yeguas, leg. SCHMID.

Colletes siciliensis Noskiewicz, 1959a: 50; allotype [f], 4 paratypes [m]; MNHW No 936; Italy, Sicily, Catania Plaja, leg. BYTINSKI-SALZ. Current status: Colletes nigricans GISTEL, 1857.

Colletes skorikovi Noskiewicz, 1936a: 209; 4 paralectotypes [mf]; MNHW No 937; Transcaspia, Uzun-Ada, (3 exx.), Turkmenistan, Molla-Kara Lake (1 ex.).

Colletes squamulosus Noskiewicz, 1936a: 191; paralectotype [m]; MNHW No 938; “Araxesthal, Caucaus” (= Armenia, Araxes Valley), leg. REITTER.

Colletes stachi Noskiewicz, 1958b: 509; holotype [m], allotype [f]; MNHW No 939; Tajikistan, Djili-Kul, leg. FURSOV.

Colletes tarsalis Noskiewicz, 1936a: 140; paratype [m]; MNHW No 940; Spain, Pater Muedra ad Orihuela. Current status: Colletes canescens SMITH, 1853.

Colletes tuberculatus anatolicus Noskiewicz, 1959b: 513; allotype [m], 2 paratypes [f]; MNHW No 941; Turkey, Ankara, leg. BYTINSKI-SALZ (allotype), Turkey, Nigda, leg. BYTINSKI-SALZ (1 paratype), Turkey, Ugurup, leg. BYTINSKI-SALZ (1 paratype). Current status: Colletes tuberculatus MORAUFITZ, 1894.

Colletes tuberculatus siculus Noskiewicz, 1959b: 511; 8 paratypes [mf]; MNHW No 942; Italy, Sicily, Etna, leg. BYTINSKI-SALZ. Current status: Colletes tuberculatus MORAUFITZ, 1894.

Colletes tuberculiger Noskiewicz, 1936a: 333; 2 paratypes [mf]; MNHW No 943; Spain, Poveda, leg. DUSMET (f), Spain, Arajunez, leg. DUSMET (m).
**Colletes wahrmani** Noskiewicz, 1959a: 43; 3 paratypes [m]; MNHW No 944; Turkey, Beysehir, leg. Wahrman.

**Colletes wollmanni** Noskiewicz, 1936a: 188; 6 syntypes [mf]; MNHW No 945; Turkmenistan, Farab, leg. Szestakow (2 m), Kazakhstan, Tartugay, leg. Szestakow (2 exx.), Kazakhstan, Baygakum ad Dzhulek, leg. Wollmann (2 m).

**Colletes yemensis** Noskiewicz, 1929: 211; lectotype [m], paralectotype [f]; MNHW No 946; design. Kuhlmann (2000); Yemen, Sanaa.

**Dasypoda niveocincta** Noskiewicz, 1959c: 431; 1 paratype [m]; MNHW No 967; France, St. Cyr. Current status: *Dasypoda dusmeti* Quilis, 1928.

**Dioxys kunzei** Noskiewicz, 1948: 99; 2 syntypes [mf]; MNHW No 953; Ukraine, Zaleszczyki (= Zaliszcziki), leg. Noskiewicz (f), Ukraine, Trójca n/Zbruczem (*i.e.*, Okopy Św. Trójcy; = Forteca Sviatoj Trijcy), leg. Noskiewicz (m). Current status: *Aglaoapis tridentata* (Nylander, 1848).

**Eucera vittulata** Noskiewicz, 1936b: 175; 3 syntypes [mf]; MNHW No 954; Ukraine, Krzywcze (= Krivcze), leg. Noskiewicz (f), Ukraine, Ostrowiec (= Ostrivec), leg. Noskiewicz (2 m).


**Nomada dzieduszyckii** Noskiewicz, 1924b: 34; 4 syntypes [mf]; MNHW No 959; Ukraine; Hołosko Wielkie (= Holosko). Current status: *Nomada striata* (Fabricius, 1793).

**Nomada minuscula** Noskiewicz, 1930: 260; syntype [f]; MNHW No 960; Ukraine, Zaleszczyki (= Zaliszcziki), leg. Noskiewicz. Current status: *Nomada sheppardana* (Kirby, 1802).


**Osmia illyrica** Noskiewicz, 1926: 234; 3 paralectotypes [mf]; MNHW No 962; Montenegro, Herceg Novi. Current status: *Hoplitis illyrica* (Noskiewicz 1926). Lectotype designated and described by Tkalců (1974), but not returned to MNHW.
**Stelis odontopyga** Noskiewicz, 1926: 230; syntype [d]; MNHW No 965; Ukraine, Niżniów (= Nyzhniv).

**Stelis ornatula** var. **immaculata** Noskiewicz, 1926: 231; holotype [f]; MNHW No 966; Montenegro, Herceg Novi.

**Acknowledgements**

We are greatly indebted to Michael Kuhlmann (Natural History Museum, London) for verifying the current status of several species described by Noskiewicz and Beata M. Pokryszko (MNHW) for linguistic corrections.

**References**


Type specimens of Phthiraptera in the collection of Jadwiga Złotorzycka preserved in the Museum of Natural History, University of Wrocław

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ABSTRACT. The Phthiraptera type specimen collection of Jadwiga Złotorzycka preserved in the Museum of Natural History, University of Wrocław, consists of 88 holotypes, one neotype and 628 paratypes (total 717 specimens) of 124 species and subspecies of Amblycera and Ischnocera. Details of each taxon and type specimen are listed, including the original combination and current status, museum catalogue number and collecting localities. The contribution of Złotorzycka to the knowledge of Phthiraptera is discussed.

Key words: Złotorzycka, Insecta, Phthiraptera, Mallophaga, type collection, Wrocław University, Poland.

INTRODUCTION

Jadwiga Złotorzycka (1926–2002) was born in Warsaw, but her family soon moved to Lviv, and in 1945 Złotorzycka returned to Poland to study biology in the University of Wrocław. Already during her student years she assisted Jan Kinel in the restoration of what remained of the collections of the Zoological Museum (currently Museum of Natural History, University of Wrocław (MNHW)), damaged or scattered during WWII. Her MSc thesis was focused on cuckoo wasps (Hymenoptera: Chrysididae) and was supervised by Jan Noskiewicz. In 1950 Złotorzycka was employed in the Museum, at that time headed by prof. Janina Janiszewska, a renowned parasitologist. It was apparently Janiszewska’s influence that decided about the future scientific career of Złotorzycka. She changed her research focus from Hymenoptera to chewing lice (at that time a separate order Mallophaga) and this group became the subject of
her PhD thesis. Złotorzycka soon became a specialist in taxonomy, morphology and ecology of mallophagan lice. She has been working in MNHW for 10 years, and in 1960, together with prof. Janiszewska, moved to a newly established Department of General Parasitology, which she headed from 1972.


The contributions of Jadwiga Złotorzycka to phthirapteran study are substantial, but of varying quality. A considerable portion of her work was devoted to two closely related aspects: large-scale revisions of complicated groups of lice (particularly those on songbirds (Złotorzycka 1964a–c, 1965) and shorebirds (Złotorzycka 1967)), and research into the relationships between hosts as revealed by the distribution and relationships of lice. While some of her early papers (e.g., Złotorzycka 1968bc) show an earnest desire to untangle some of the more complicated matters in louse research, her study was hampered by lack of material, particularly from outside of Central Europe. This naturally limited the scope of her conclusions. In addition, her cooperation with Wolfdietrich Eichler in East Germany meant that his sometimes rigid adherence to Fahrenholz’ rule (see Klassen (1982) for an introduction to this rule) influenced her taxonomic contributions. Following Eichler, Złotorzycka’s species are typically described mainly on the basis of host relationships, and references to morphological characters are usually vague or hard to assess. Most of her descriptions are short and uninformative, often based on only a few individuals. This may become problematic as in small samples individual variation sometimes becomes dominant, while having little taxonomic value. As a result, the characters she used to differentiate her taxa are often vague and inadequate, her illustrations are typically schematic, and can seldom be used to identify species without reference to the type slides. Today, many of the species names she established are considered junior synonyms or, at least, the species are treated as impossible to differentiate based solely on original descriptions (Price et al. 2003, and see below). The well-preserved collection of Złotorzycka is all the more valuable today and especially the numerous type specimens, recently organized, catalogued and made available for specialists, await proper examination.

The Phthiraptera collection of Złotorzycka is preserved in MNHW. It comprises a large and still only preliminarily surveyed non-type specimen collection and a separate type specimen collection. The microscope slides of the type collection (Fig. 1), originally kept on cardboard trays (Fig. 2), have been transferred to plastic slide boxes and all specimens with respective label and bibliographic data are now included in the MNHW electronic databases. The type collection consists of 88 holotypes, one neotype and 628 paratypes (total 717 specimens) of 124 species and subspecies of Mallophaga (54 species of Amblycera and 70 Ischnocera). Most of the species were described by
1. Examples of microscope slides in the Złotorzycka Collection of type specimens
Złotorzycka or Eichler & Złotorzycka (Figs 3-12), but some specimens come from collections of Lucińska, Mey, Carriker Jr., Eichler, Price and Emerson.

The type specimens listed in this catalogue were identified on the basis of the microscope slide label data and confirmed by comparing with slide numbers and additional data published in original descriptions. The species are listed in an alphabetical order (in each family), and the following data, when available, are given: the species name as it appears on the microscope slide, author of the name and the page on which it has been described; the status of type specimens (holotype, neotype, allotype, paratype) and their sex or developmental stage (male - [m], female - [f], larva - [l]); the microscope slide (MS) number as it appears on the slide; collecting locality/circumstances, including the host; the MNHW database number (MNHW No); the valid combination currently accepted for this species (if different from the name used in the slide label, following Price et al. (2003)); optionally additional remarks.

CHECKLIST OF THE TYPE SPECIMENS OF MALLOPHAGA IN THE ZŁOTORZYCKA COLLECTION

Suborder Amblycera
Family Gyropidae
Abrocomophaga chilensis Emerson & Price, 1976: 426; 2 paratypes [mf]; Santiago, Chile; ex Abrocoma benetti Waterhouse; MNHW No 708.
Gliricola venezuelanus Emerson & Price 1975: 18; 2 paratypes [mf]; Capibara, Venezuela; ex Proechimys semispinosus Tomes; MNHW No 755.

Family Laemobothriidae
Laemobothrion vulturis danecki Złotorzycka, 1969: 125; holotype MS No 28/xx/152 [m], 67 paratypes [mf]; Wrocław, Poland, leg. Danecki; ex Gypaetus barbatus (L.); MNHW No 767; current status: Laemobothrion vulturis (Fabricius, 1775).

Family Menoponidae
Aegypiphilus contrastus Eichler & Złotorzycka, 1963a: 216; holotype MS No 29/F/26 [f], 1 paratype [f]; 20 km N Meiktila, Burma; ex Pseudogyps bengalensis (Gm.) (museum skin specimen); MNHW No 709; current status: Cuculiphilus (Aegypiphilus) gypsis (Eichler, 1944).
Aegypiphilus secundus Eichler & Złotorzycka, 1963a: 217; holotype MS No 29/H/10 [m]; Ndjiri, Africa, leg. Schillings; ex Gyps rueppelli (Brehm) (museum skin specimen); MNHW No 710; current status: Cuculiphilus (Aegypiphilus) gypsis (Eichler, 1944).
Allocolpocephalum lanüidorum Złotorzycka, 1964a: 188; holotype MS No 15/d/4-4 [f], 2 paratypes [f]; Wrocław, Poland, leg. Złotorzycka; ex Lanius excubior L.; MNHW No 712; current status: Colpocephalum fregili Denny, 1842.
Amyrsidea obstinata Złotorzycka, 1972a: 583; holotype MS No 32/e/23-1 [m], 42 paratypes [mf]; Wizna, Łomża, Poland, leg. Noskiewicz (holotype, 15 paratypes), Bychawa, Poland, leg. Deryło (6 paratypes), Kraśnik, Poland, leg. Deryło (7 paratypes), Janów Lubelski, Poland, leg. Deryło (2 paratypes), Lubelskie Voivodship, Poland, leg. Deryło (12 paratypes); ex Lyrurus tetrix (L.); MNHW No 713; current status: Amyrsidea lagopi (Grube, 1851).
**Austromenopon caspiae** Złotorzycka, 1968a: 311; holotype MS No 43/e/73 [m], 12 paratypes [mf]; Hodonin, Czech Republic, leg. BALÁT (holotype and 7 paratypes), Mikoszewo, Poland, leg. ZAJAC (5 paratypes); ex *Hydropogon caspia* (PALL.); MNHW No 720; current status: *Austromenopon atrofulvum* (PIAGET, 1880).

2. An original tray with microscope slides in the Złotorzycka Collection (all slides have been recently transferred to plastic boxes)
Austromenopon decorosum decorosum Złotorzycka, 1968a: 323; holotype MS No 42/p/5 [m], 9 paratypes [mf]; Mikoszewo, Poland, leg. ZAJAC; ex Tringa totanus (L); MNHW No 721.

Austromenopon decorosum finitimum Złotorzycka, 1968a: 325; holotype MS No 42/t/7-2 [f], 1 paratype [f]; Sominy, Poland, leg. ZŁOTORZYCKA; ex Tringa erythropus (PALL.); MNHW No 722; current status: Austromenopon decorosum Złotorzycka, 1968.

Austromenopon erilis Złotorzycka, 1968a: 325; holotype MS No 42/ab/61 [m], 2 paratypes [f]; Górki Wschodnie, Poland, leg. ZAJAC; ex Calidris maritima (BRÜNN.); MNHW No 723; current status: Austromenopon erilis Złotorzycka, 1968.

Austromenopon icterum (Burmeister, 1838: 440); neotype MS No 42/j/1-1 [m]; designated by Złotorzycka, 1968a: 331; Kotowice, Poland, leg. ZŁOTORZYCKA; ex Scolopax rusticola (L.); MNHW No 725.

Austromenopon nigropleurum volucer Złotorzycka, 1968a: 318; holotype MS No 50/F/1 [m]; Bear Island (Bjørnøya), Norway, leg. ZŁOTORZYCKA (museum skin specimen); ex Uria troille (L.); MNHW No 726; current status: Austromenopon nigropleurum (Denny, 1842).

Austromenopon putum Złotorzycka, 1968a: 312; holotype MS No 43/a/15 [f]; Sominy, Poland, leg. ZŁOTORZYCKA; ex Chlidonias nigra (L.); MNHW No 727; current status: Austromenopon atrorufum (PIAGET, 1880).

Austromenopon sternophilum paucum Złotorzycka, 1968a: 314; holotype MS No 43/g/12-1 [m], 28 paratypes [mf]; Sominy, Poland, leg. ZŁOTORZYCKA (holotype and 27 paratypes), Mikoszewo, Poland, leg. ZŁOTORZYCKA (1 paratype); ex Sterna albifrons (PALL.); MNHW No 728; current status: Austromenopon atrorufum (PIAGET, 1880).

Austromenopon sternophilum piageti Złotorzycka, 1968a: 315; holotype MS No 43/f/8 [m], 7 paratypes [f]; Mikoszewo, Poland, leg. ZAJAC (1 paratype), Mikoszewo, Poland, leg. ZŁOTORZYCKA (5 paratypes), Mikolajki, Poland, leg. DĄBROWSKI (holotype and 3 paratypes); ex Sterna hirundo L.; MNHW No 729; current status: Austromenopon atrorufum (PIAGET, 1880).

Austromenopon transversum circulor Złotorzycka, 1968a: 306; holotype MS No 43/l/22 [f], 2 paratypes [f]; Górki Wschodnie, Poland, leg. ZAJAC (holotype), Wrocław, Poland, leg. ZŁOTORZYCKA (1 paratype), Dąbie ad Szczecin, Poland, leg. NOSKIEWICZ (1 paratype); ex Larus canus L. MNHW No 730; current status: Austromenopon transversum (Denny, 1842).

Austromenopon transversum comitor Złotorzycka, 1968a: 306; holotype MS No 43/O/78 [f]; Pohorelice, Czech Republic, leg. BALÁT; ex Larus marinus L.; MNHW No 731; current status: Austromenopon transversum (Denny, 1842).

Austromenopon vanelli Złotorzycka, 1968a: 320; holotype MS No 42/a/30 [m], 1 paratype [f]; Czech Republic, leg. BALÁT (holotype), Górkì Wschodnie, Poland, leg. ZŁOTORZYCKA (paratype); ex Vanellus vanellus L.; MNHW No 732; current status: Austromenopon aegialitidis (Durrant, 1906).
Cavifera abdita Clay & Price, 1970: 337; paratype; Indonesia (New Guinea), Archbold Lake; ex Otidiphaps nobilis Gould; MNHW No 1173.

Ctenigogus erinaceimorphus Eichler & Złotorzycka, 1963b: 40; holotype MS No 29/F/1 [m], allotype [f], 2 paratypes [fl]; Manila, Philippines; ex Pseudogyps bengalensis (Gm.) (museum skin specimen); MNHW No 738.

Ctenigogus secundarius Eichler & Złotorzycka, 1963a: 203; holotype MS No 29/G/5 [f]; Dönje Erok, Tanzania, leg. Schillings; ex Torgos tracheliotus tracheliotus (Foster) (museum skin specimen); MNHW No 739.

Eichlerinopon celeripes Złotorzycka, 1964a: 181; holotype MS No 1/c/40-33 [m], 3 paratypes [mf]; Wroclaw, Poland, leg. Złotorzycka; ex Corvus frugilegus frugilegus L.; MNHW No 747; current status: unidentifiable (see Clay 1966).

3-12. Examples of type specimens in the Złotorzycka Collection. Aegypophilus secundus Eichler & Złotorzycka, holotype (= Cuculiphilus (Aegypophilus) gypsis (Eichler)) (3), Falcolipeurus jaczewskii Złotorzycka, holotype (= Falcolipeurus quadripustulatus (Burmeister)) (4), Craspedorrhynchus fraterculus Eichler & Złotorzycka, holotype (5), Ctenigogus erinaceimorphus Eichler & Złotorzycka, holotype (6), Falcolipeurus laboriosus Złotorzycka, holotype (= Falcolipeurus lineatus Bedford) (7), Austromenopon putum Złotorzycka, holotype (= Austromenopon atrofulvum (Piaget)) (8), Laemobothrion vulturis danecki Złotorzycka, holotype (= Laemobothrion vulturis (Fabricius)) (9), Larithophilus negroidalis Złotorzycka, holotype (= Actornithophilus piceus piceus (Denny)) (10), Pseudomenopon zlotorzyckae Lucinśka, paratypes (= Pseudomenopon pilosum (Scopoli)) (11), Vulturigogus femellus Eichler & Złotorzycka, holotype (= Colpocephalum turbinatum Denny)) (12)
**Gypsigogus novoannus** EICHLER & ZŁOTORZYCKA, 1963a: 213; holotype MS No 29/D/19 [f], allotype [m]; “Rüttwasteppe”, East Africa; ex *Trigonoceps occipitalis* (Burch.) (museum skin specimen); MNHW No 756; current status: *Colpocephalum subzebra* BEDFORD, 1939.

**Hirundoecus clayae** BALÁT, 1966: 20; allotype [m], 1 paratype [f]; Lednice, Czech Republic; ex *Riparia riparia* (L.); MNHW No 772; current status: *Machaerilaemus clayae* (BALÁT, 1966).

**Lanicanthus aequalis** ZŁOTORZYCKA, 1965: 57; holotype MS No 15/a/20, 15 paratypes [mfl]; Górki Wschodnie, Poland, leg. ZŁOTORZYCKA (holotype, 2 paratypes), Pasłęka, Poland, leg. BUSSE (13 paratypes); ex *Lanius collurio* L.; MNHW No 1165; current status: *Menacanthus camelinus* (NITZSCH in GIEBEL (1874)).

**Lanimenopon abhorrens** ZŁOTORZYCKA, 1964a: 177; holotype MS No 15/d/12-1 [m], 3 paratypes [fl]; Wrocław, Poland, leg. ZŁOTORZYCKA; ex *Lanius excubitor excubitor* L.; MNHW No 768; current status: *Myrsidea abhorrens* (ZŁOTORZYCKA, 1964). Remarks: in the original description the holotype is mentioned under the specimen number MS No 15/d/2-1.

**Larithophilus negroidalis** ZŁOTORZYCKA, 1963a: 226; holotype MS No 43/f/47 [f], 1 paratype [l]; Mikoszewo, Poland, leg. ZŁOTORZYCKA; ex *Sterna hirundo hirundo* L.; MNHW No 769; current status: *Actornithophilus piceus piceus* (DENNY, 1842).

**Larithophilus sperabilis** ZŁOTORZYCKA, 1963a: 227; holotype MS No 43/g/14 [m]; Sominy, Poland; ex *Sterna albifrons* PALL.; MNHW No 770; current status: *Actornithophilus piceus piceus* (DENNY, 1842).

**Liquidea proterva** ZŁOTORZYCKA, 1964a: 174; holotype MS No 16/a/6 [f]; Żeliźniewo, Poland, leg. GROMADZKI; ex *Muscicapa striata striata* (PALL.); MNHW No 771; current status: *Myrsidea proterva* (ZŁOTORZYCKA, 1964).

**Menacanthus pius** EICHLER & ZŁOTORZYCKA, 1963c: 369; holotype MS No 14/11-3 [f], 33 paratypes [fl]; Wrocław, Poland, leg. ZŁOTORZYCKA; ex *Turdus merula* L.; MNHW No 773; current status: *Menacanthus eurysternus* (BURMEISTER, 1838). Remarks: in the original description the holotype is mentioned under the specimen number MS No 14/e/11-1.

**Menacanthus polonicus** EICHLER & ZŁOTORZYCKA, 1963c: 371; 1 paratype [l]; Wrocław-Opatowice, Poland, leg. ZŁOTORZYCKA; ex *Turdus pilaris* L.; MNHW No 774; current status: *Menacanthus eurysternus* (BURMEISTER, 1838).

**Menacanthus trivialis** ZŁOTORZYCKA, 1973: 455; holotype [m] MS No 6/a/2, 2 paratypes [f]; Kufim, Czech Republic, leg. BALÁT; ex *Anthus trivialis* (L.); MNHW No 775; current status: *Menacanthus pusillus* (NITZSCH, 1866).

**Menacanthus verecundus** ZŁOTORZYCKA, 1965: 54; holotype [f]; Hel, Poland, leg. BUSSE; ex *Sylvia atricapilla* (L.); MNHW No 1135; current status: *Menacanthus curucceae* (SCHRANK, 1776).

**Menacanthus vistulanus** EICHLER & ZŁOTORZYCKA, 1963c: 372; holotype MS No 8/a/2 [f]; Skowronki, Poland, leg. ZŁOTORZYCKA; ex *Sylvia borin* (BODD.); MNHW No 776; current status: *Menacanthus curucceae* (SCHRANK, 1776).

**Menacanthus wipszyckii** EICHLER & ZŁOTORZYCKA, 1963c: 373; holotype MS No 4/h/4 [f]; Wrocław, Poland, leg. ZŁOTORZYCKA; ex *Chloris chloris* L.; MNHW No 777; current status: *Menacanthus eurysternus* (BURMEISTER, 1838).
Menopon deryloi Złotorzycka, 1972a: 580; holotype MS No 103-3 [m], 5 paratypes [mf]; Makoszka ad Parczew, Poland, leg. DERYLO; ex Lyrurus tetrix (L.); MNHW No 778.

Myrsidea clayae birmensis Klockenhoff, 1969: 397; paratypes [f] 3; Songkha Muang, Thailand; ex Corvus macrorhynchos levaillantii Lesson; MNHW No 780; current status: Myrsidea birmensis Klockenhoff, 1969.

Neocolpocephalum gypsi Eichler & Złotorzycka, 1971: 26; 1 paratype [f]; Czechoslovakia, leg. BALAT; ex Gyps fulvus (HABL.); MNHW No 781; current status: Colpocephalum gypsi (Eichler & Złotorzycka, 1971).

Neocolpocephalum polonum Eichler & Złotorzycka, 1971: 26; holotype MS No 782 [f]; Ruda Sulowska, Poland, leg. Złotorzycka; ex Accipiter gentilis (L.); MNHW No 781; current status: Colpocephalum polonum (Eichler & Złotorzycka, 1971).

Neomyrsidella usitata Złotorzycka, 1964a: 184; 12 paratypes [mf]; Wrocław, Poland, leg. Złotorzycka; ex Corvus monedula (L.); MNHW No 785; current status: Myrsidea anathorax (NitZsch, 1866).

Pseudomenopon janiszewskae Lucińska, 1969: 365; holotype MS No 48/d/4 [f], 1 paratype [f]; Potasznia, Milicz, Poland, leg. JURCZYK; ex Podiceps auritus (L.); MNHW No 795; current status: Pseudomenopon doliom (RUDOW, 1869).

Pseudomenopon stuchlyi Lucińska, 1969: 364; holotype MS No 48/b/7 [m], 1 paratype [m]; Radziądz, Poland, leg. Złotorzycka; ex Podiceps griseigena (BODD.); MNHW No 796; current status: Pseudomenopon dolium (RUDOW, 1869).

Pseudomenopon zlotorzyckae Lucińska, 1969: 359; 5 paratypes [mf]; Wrocław-Opatowice, Poland, leg. Złotorzycka (2 paratypes), Radziądz, Poland, leg. Złotorzycka (2 paratypes), Lednice, Czech Republic, leg. BALAT (1 paratype); ex Gallinula chloropus (L.); MNHW No 797; current status: Pseudomenopon pilosum (SCOPOLI, 1763).


Vulturigogus eugenii Eichler & Złotorzycka, 1963a: 207; holotype MS No 29/F/10 [m], allotype [f], Manila, Philippines (holotype), 20 km N Meiktila, Myanmar (allotype); ex Pseudogyps bengalensis (Gm.) (museum skin specimens); MNHW No 807; current status: Colpocephalum turbinatum Denny, 1842.

Vulturigogus femellus Eichler & Złotorzycka, 1963a: 209; holotype MS No 29/H/18 [f]; Ethiopia; ex Gyps rueppelli rueppelli (BREHM) (museum skin specimen); MNHW No 808; current status: Colpocephalum turbinatum Denny, 1842.

Family Ricinidae

Ricinus fringillae aureolae Mey, 1982: 163; 1 paratype [f]; Terelsh, Mongolia, leg. E. MEY; ex Emberiza aureola (PALL.); MNHW No 1147; current status: Ricinus fringillae De Geer, 1778.

Ricinus fringillae flavirostris Mey, 1982: 164; 2 paratypes [mf]; 10 km W. Mjangad, Aimak Chovd, Mongolia, leg. STUBBE (1 paratype), Jolyn am Gobi-Altai Mongolia, leg. E. MEY (1 paratype); ex Carduelis flavirostris altaica (SUSH.); MNHW No 1148; current status: Ricinus fringillae De Geer, 1778.
Ricinus japonicus rheinwaldi Mey, 1982: 166; 1 paratype [f]; Jolyn, Gobi-Altai, Mongolia, leg. E. MEY; ex Anthus spinolaetia couteili AUD.; MNHW No 1149; current status: Ricinus fringillae De Geer, 1778.

Ricinus piechockii Mey, 1984: 243; 1 paratype [f]; La Mayagna-Guanahacabibes, Cuba; ex Melopyrrha nigra (L.); MNHW No 1150.

Ricinus uragi Mey, 1982: 165; 1 paratype [f]; Tereldsh, Mongolia, leg. E. MEY; ex Uragus sibiricus (PALL.); MNHW No 1151.

Trochiloeetes naevius Oniki & Emerson 1982; 85, 1 paratype [f]; Seta Barras, Brazil; ex Ramphodon naevius; MNHW No 803.

Suborder Ischnocera
Family Philopteridae

Allobrueelia abluda Złotorzycka, 1964b: 265; holotype MS No 14/a/22 [f], 1 paratype [l]; Hel, Poland, leg. BUSSE; ex Turdus philomelos BREHM; MNHW No 711; current status: Brueelia turdinae ANSARI, 1956.

Anatoecus dentatus castaneus Złotorzycka, 1970: 24; holotype MS No 44/o/18, 12 paratypes [mf]; Krośnice, Poland, leg. Złotorzycka (holotype, 4 paratypes), Wrocław, Poland, leg. Złotorzycka (8 paratypes); ex Anas querquedula L.; MNHW No 1157; current status: Anatoecus dentatus (SCOPOLI, 1763).

Anatoecus dentatus cognatus Złotorzycka, 1970: 17; holotype MS No 44/ld/6 [f], 1 paratype [f]; Świdnica, Poland; ex Anas platyrhynchos domestica L. (museum skin specimen); MNHW No 714; current status: Anatoecus dentatus (SCOPOLI, 1763).

Anatoecus dentatus complicatus Złotorzycka, 1970: 21; holotype MS No 44/n/10 [f], 2 paratypes [mf]; Józefów ad Warszawa, leg. ŚWIRSKI (holotype, 1 paratype), Nysa, Poland (1 paratype) (museum skin specimens); ex Anas penelope L.; MNHW No 1155; current status: Anatoecus dentatus (SCOPOLI, 1763).

Anatoecus dentatus gratus Złotorzycka, 1970: 35; holotype MS No 44/u/2 [f], 1 paratype [f]; Kukle, Poland, leg. Złotorzycka (holotype), Górki Wschodnie, Poland, leg. ZAJĄC (paratype); ex Bucephala clangula (L.); MNHW No 1161; current status: Anatoecus dentatus (SCOPOLI, 1763).

Anatoecus dentatus longiceps Złotorzycka, 1970: 19; holotype MS No 44/m/9, 1 paratype [f]; Przemków, Poland; ex Anas strepera L. (museum skin specimen); MNHW No 1153; current status: Anatoecus dentatus (SCOPOLI, 1763).

Anatoecus dentatus magnicornutus Złotorzycka, 1970: 52; holotype MS No 44/a/1, 19 paratypes [mf]; Kołczewo, Poland, leg. WOŁK; ex Cygnus olor (GMM.); MNHW No 715; current status: Anatoecus dentatus (SCOPOLI, 1763).

Anatoecus dentatus prehensus Złotorzycka, 1970: 27; holotype MS No 44/6/5 [m], 2 paratypes [mf]; Zawiercie, Poland, leg. DĄBROWSKI; ex Anas cracca L.; MNHW No 1158; current status: Anatoecus dentatus (SCOPOLI, 1763).

Anatoecus icterodes discludus Złotorzycka, 1970: 15; 6 paratypes [f]; Świdnica, Poland; ex Anas platyrhynchos domestica L. (museum skin specimen); MNHW No 716; current status: Anatoecus icterodes (NITZSCH, 1818).

Anatoecus icterodes dissensus Złotorzycka, 1970: 33; holotype MS No 44/u/9 [m], 9 paratypes [mf]; Górki Wschodnie, Poland, leg. ZAJĄC (holotype), Kukle, Poland, leg. Złotorzycka (paratypes); ex Bucephala clangula (L.); MNHW No 1160; current status: Anatoecus icterodes (NITZSCH, 1818).
Anatoecus icterodes eichleri Złotorzycka, 1970: 25; holotype MS No 44/ó/10 [m], 28 paratypes [mf]; Zawiercie, Poland, leg. Dąbrowski, Wrocław-Opatowice, Poland, leg. Złotorzycka; ex Anas crecca L.; MNHW No 717; current status: *Anatoecus icterodes* (Nitzsch, 1818).

Anatoecus icterodes islandicus Złotorzycka, 1970: 35; holotype MS No 44/Ua/2 [m], 1 paratype [m]; North Iceland; ex Bucephala islandica Gm. (museum skin specimen); MNHW No 718; current status: *Anatoecus icterodes* (Nitzsch, 1818).

Anatoecus icterodes oloris Złotorzycka, 1970: 50; holotype MS No 44/a/26 [m], 39 paratypes [mf]; Kołczewo, Poland, leg. Wołk; ex Cygnus olor (Gm.); MNHW No 719; current status: *Anatoecus icterodes* (Nitzsch, 1818).

Anatoecus icterodes parvus Złotorzycka, 1970: 22; holotype MS No 44/o/10, 16 paratypes [mf]; Wrocław, Poland, leg. Złotorzycka; ex Anas querquedula L.; MNHW No 1156; current status: *Anatoecus icterodes* (Nitzsch, 1818).

Anatoecus icterodes pustulosus Złotorzycka, 1970: 29; holotype MS No 44/t/1 [m]; Lednice, Czech Republic, leg. Balát; ex Netta rufina (Pall.); MNHW No 1159; current status: *Anatoecus icterodes* (Nitzsch, 1818).

Anatoecus icterodes simplicatus Złotorzycka, 1970: 20; holotype MS No 44/n/18 [m], 2 paratypes [f]; Nysa, Poland (museum skin specimen) (holotype), Józefów ad Warszawa, Poland, leg. Święski (paratypes); ex Anas penelope L.; MNHW No 1154; current status: *Anatoecus icterodes* (Nitzsch, 1818).

Anatoecus icterodes solivagus Złotorzycka, 1970: 18; holotype MS No 44/m/2 [f]; Sominy, Poland, leg. Złotorzycka; ex Anas strepera L.; MNHW No 1152; current status: *Anatoecus icterodes* (Nitzsch, 1818).

Anatoecus icterodes tadornae Złotorzycka, 1970: 48; 2 paratypes [f]; Rogów ad Grodków, Poland; ex Tadorna tadorna (L.) (museum skin specimen); MNHW No 1163; current status: *Anatoecus icterodes* (Nitzsch, 1818).

Anatoecus icterodes tergalis Złotorzycka, 1970: 44; holotype MS No 44/e/1-1 [m], 11 paratypes [mf]; Lublin ad, Poland, leg. Więszczyki (holotype, 9 paratypes), Jursky Šůr, Czech Republic, leg. Balát; ex Anser fabalis (Lath.); MNHW No 1162; current status: *Anatoecus icterodes* (Nitzsch, 1818).


Corvonirmus perforatus Złotorzycka, 1964b: 244; holotype MS No 1/c/26-1 [m], 8 paratypes [mf]; Wrocław-Opatowice, Poland, leg. Złotorzycka; ex Corvus frugilegus frugilegus L.; MNHW No 735; current status: *Brueelia perforata* (Złotorzycka, 1964).

Cotingacola rupicolae colombiana Carriker Jr., 1956: 369; 1 paratype [m]; Moscopán, Cauca, Colombia; ex Rupicola peruviana accuatorialis; MNHW No 736; current status: *Cotingacola rupicolae* (Carriker Jr., 1956).

Craspedorrhynchus fraterculus Eichler & Złotorzycka 1975: 155; holotype MS No 28/b/3 [m], allotype [f]; Lednice, Czech Republic, leg. Balát; ex Aquila heliaca; MNHW No 737.
Docophorulus capillatus Złotorzycka, 1964c: 408; holotype MS No 16/b/4 [m], 2 paratypes [mf]; Skowronki, Poland (holotype, 1 paratype) leg. Złotorzycka, Hel, Poland (1 paratype) leg. Busse; ex Muscicapa hypoleuca hypoleuca (PALL.); MNHW No 740; current status: Philopterus capillatus (Złotorzycka, 1964).

Docophorulus cumulatus Złotorzycka, 1964c: 410; holotype MS No 4/y/2-1 [m], 43 paratypes [mf]; Jordanów, Poland, leg. Złotorzycka (holotype, 24 paratypes), Wrocław, Poland, leg. Złotorzycka (19 paratypes); ex Emberiza calandra calandra L.; MNHW No 741; current status: Philopterus cumulatus (Złotorzycka, 1964).

Docophorulus desertus Złotorzycka, 1964c: 412; holotype MS No 16/a/3 [f], 2 paratypes [f,l]; Skowronki, Poland (holotype, 1 paratype), leg. Złotorzycka, Zawiercie, Poland (1 paratype), leg. Dąbrowski; ex Muscicapa striata striata (PALL.); MNHW No 742; current status: Philopterus desertus (Złotorzycka, 1964).

Docophorulus fortunatus Złotorzycka, 1964c: 413; holotype MS No 4/p/6-2 [m], 18 paratypes [f]; Kielpino, Poland (holotype, 6 paratypes), Wrocław-Opatowice, Poland, leg. Złotorzycka (12 paratypes); ex Fringilla coelebs coelebs L.; MNHW No 743; current status: Philopterus fortunatus (Złotorzycka, 1964).

Docophorulus rapax Złotorzycka, 1964c: 421; holotype MS No 4/q/1 [m], 3 paratypes [mf]; Hel, Poland, leg. Busse; ex Fringilla montifringilla L.; MNHW No 744; current status: Philopterus rapax (Złotorzycka, 1964).

Docophorulus residuus Złotorzycka, 1964c: 422; holotype MS No 4/z/1 [f], 1 paratype [l]; Nowa Pasłęka, Braniewo, Poland, leg. Busse; ex Emberiza schoeniclus schoeniclus (L.); MNHW No 745; current status: Philopterus residuus (Złotorzycka, 1964).


Eustrigiphilus speotyto Eichler, 1954; holotype MS No 3907b [m], allotype [f]; La Cumbre, Peru; ex Speotyto cunicularia juninensis Berl. & Stolz.; MNHW No 748; current status: Strigiphilus desertae Carriker Jr., 1966.

Falcolipeurus jaczewskii Złotorzycka, 1963c: 154; holotype MS No 29/G/1 [m], 1 paratype [l]; “Damara”, leg. Lübert (holotype), Dònje Erok, Tanzania (paratype); ex Torgos tracheliotus tracheliotus (FORST) (museum skin specimen); MNHW No 749; current status: Falcolipeurus quadrupustulatus (Burmeister, 1838).

Falcolipeurus janiszewskae Złotorzycka, 1963c: 156; holotype MS No 29/D/1 [m], allotype [f], 11 paratypes [mf]; “Scetel”, Africa (holotype, allotype, 6 paratypes); “Rüttwasteppe”, Africa (3 paratypes), Dire-Daua, Ethiopia (2 paratypes); ex Trigonoccephs occipitalis (Burch.) (museum skin specimens); MNHW No 750; current status: Falcolipeurus suturalis (Rudow, 1869).

Falcolipeurus laboriosus Złotorzycka, 1963c: 158; holotype MS No 29/H/1 [m], 12 paratypes [mf]; “Ndjiri”, Africa (holotype, 7 paratypes), Jama, Ethiopia (2 paratypes), Danoa, Ethiopia (3 paratypes); ex Gyps rueppelli rueppelli (Brehm) (museum skin specimens); MNHW No 751; current status: Falcolipeurus lineatus Bedford, 1931.
_Falcolicheurus longiphallus_ Złotorzycka, 1963c: 159; holotype MS No 29/F/14 [m], allotype [f], 10 paratypes [mfl]; 20 km North Meiktila, Myanmar (holotype, allotype, 7 paratypes), Manila, Philippines (2 paratypes), Nuddeah, ?Bengal (1 paratype); ex _Pseudogyps bengalensis_ (G.M.) (museum skin specimens); MNHW No 752.

_Furnaricola acutifrons subsimilis_ Carriker Jr., 1944a: 87; 2 paratypes [mf]; Fundacion Magdalena, Colombia, leg. Carriker Jr.; ex _Certhiaxis cinnamomeus_ (G.M.); MNHW No 753; current status: _Rallicola acutifrons_ (Carriker Jr., 1944).

_Hypocrypturellus coniceps boucardi_ Carriker Jr., 1944b: 226; 4 paratypes [mf]; Cerro Tuxtla, Mexico, leg. Carriker; ex _Crypturellus boucardi boucardi_ sclater; MNHW No 757; current status: _Kellogia boucardi_ (Carriker Jr., 1944).

_Kelloggia brevipes mexicanus_ Carriker Jr., 1944b: 218; 4 paratypes [mf]; Tres Zapotes, Veracruz, Mexico, leg. Carriker; ex _Tinamus major percautus_ van Tyne; MNHW No 758; current status: _Kellogia mexicanus_ Carriker, 1944.

_Koeniginirmus caspius certus_ Złotorzycka, 1967: 757; holotype MS No 43/n/91 [m]; Mikoszewo, Poland, leg. ZaJąc; ex _Larus fuscus_ L.; MNHW No 759; current status: _Quadraceps caspius_ (Giebel, 1874).

_Koeniginirmus ornatus alius_ Złotorzycka, 1967: 763; holotype MS No 43/m/12 [m], 4 paratypes [mf]; Międzyzdroje, Poland, leg. Wołk; ex _Larus argentatus_ Pont. MNHW No 760; current status: _Quadraceps orantus striolatus_ (Nitzsch in Giebel (1866)).

_Koeniginirmus ornatus benignus_ Złotorzycka, 1967: 764; holotype MS No 43/a/76 [m], 3 paratypes [f]; Pohořelice, Czech Republic, leg. Balat (holotype, 1 paratypes), Mikoszewo, Poland, leg. ZaJąc (2 paratypes); ex _Larus marinus_ Pall.; MNHW No 761; current status: _Quadraceps orantus striolatus_ (Nitzsch in Giebel (1866)).

_Koeniginirmus punctatus ancillaris_ Złotorzycka, 1967: 751; holotype MS No 43/l/10-1 [m], 1 paratype [f]; Krynica Morska, Poland, leg. Dąbrowski; ex _Larus canus_ L.; MNHW No 762; current status: _Quadraceps punctatus regressus_ Timmermann, 1952.

_Koeniginirmus punctatus auctosus_ Złotorzycka, 1967: 751; holotype MS No 43/n/92 [m], 2 paratypes [f]; Mikoszewo, Poland, leg. ZaJąc; ex _Larus fuscus_ L.; MNHW No 763; current status: _Quadraceps punctatus regressus_ Timmermann, 1952).

_Koeniginirmus punctatus balticus_ Złotorzycka, 1967: 752; holotype MS No 43/e/91 [m], 1 paratype [m]; Mikoszewo, Poland, leg. ZaJąc; ex _Hydropogne caspia_ (Pall.); MNHW No 764; current status: _Quadraceps punctatus regressus_ Timmermann, 1952).

_Koeniginirmus punctatus ceterus_ Złotorzycka, 1967: 752; holotype MS No 43/i/34 [m], 1 paratype [f]; Mikoszewo, Poland, leg. ZaJąc; ex _Sterna sandvicensis_ (Lath.); MNHW No 765: current status: _Quadraceps punctatus regressus_ Timmermann, 1952).

_Koeniginirmus punctatus flabilis_ Złotorzycka, 1967: 753; holotype MS No 43/g/17 [m]; Mikoszewo, Poland, leg. ZaJąc; ex _Sterna albifrons_ Pall.; MNHW No 766; current status: _Quadraceps punctatus regressus_ Timmermann, 1952).

_Mjoberginirmus musealis_ Złotorzycka, 1967: 745; holotype MS No 50/F/2 [m]; Zipnarolok, Kola, Russia; ex _Uria troille_ L. (museum skin specimen); MNHW No 779; current status: _Quadraceps obliquus_ (Mjöberg, 1910).
Neodocophorus hopkinsi Eichler, 1949: 14; 13 paratypes [mf]; from Bubo bubo L.; MNHW No 783; current status: Strigiphilus strigis (PONTOPPIDAN, 1763). Remarks: locality missing on the specimen label and in the original description.

Neodocophorus uralensis Eichler, 1949: 15; allotype MS No 290 [m]; Tartumaa, Estonia, leg. VÖORE; ex Strix uralensis litturata TENGM.; MNHW No 784; current status: Strigiphilus heterocerus (GRUBE, 1851).

Panurinirmus visendus ZłotorZycka, 1964b: 270; holotype MS No 9/c/1 [f]; Górki Wschodnie, Poland, leg. ZAJAC; ex Panurus biarmicus (L.); MNHW No 786; current status: Penenirmus visendus (ZłotorZycka, 1964).

Penenirmus accuratus ZłotorZycka, 1964b: 271; holotype MS No 26/H/3 [f]; Goszczowice (= Guschwitz) ad Niemodlin (= Falkenberg), Poland; ex Dryocopus martius martius (L.) (museum skin specimen, leg. ZłotorZycka); MNHW No 787; current status: Penenirmus heteroscelis (NITZSCH, 1866).

Penenirmus silesiacus ZłotorZycka, 1964b: 273; holotype MS No 26/e/1 [f], 1 paratype [l]; Ruda Sulowska, Milicz, Poland, leg. ZłotorZycka; ex Dryobates medius (L.); MNHW No 788; current status: Penenirmus auritus (SCOPOLI, 1763).

Picocola contiguus ZłotorZycka, 1965: 67; holotype MS No 26/a/10-1 [m], allotype [f], 3 paratypes [f]; Wrocław-opatowice, Poland, leg. ZłotorZycka; ex Picus viridis viridis L.; MNHW No 789; current status: Picicola candidus (NITZSCH, 1866).

Pleurinirmus affectator ZłotorZycka, 1976a: 210; holotype MS No 8/a/10 [f], 3 paratypes [f]; Mierzeja Wiślana, Poland, leg. BUSSE; ex Sylvia borin borin (BODD.); MNHW No 790; current status: Penenirmus affectator (ZłotorZycka, 1976).

Pleurinirmus phylloscopi ZłotorZycka, 1976a: 210; holotype MS No 8/n/3 [m], 4 paratypes [mf]; Mierzeja Wiślana, Poland, leg. BUSSE (holotype, 2 paratypes), Finland (2 paratypes); ex Phylloscopus trochilus trochilus (L.) (Poland) and Phylloscopus trochilus acredula (L.) (Finland); MNHW No 791; current status: Penenirmus phylloscopi (ZłotorZycka, 1976).

Pleurinirmus rarus ZłotorZycka, 1976a: 212; holotype MS No 8/n/9 [m], 2 paratypes [f]; Wyskok, Kętrzyn, Poland, leg. ZłotorZycka (holotype), Mierzeja Wiślana, Poland, leg. BUSSE (paratypes); ex Phylloscopus collybita collybita (VIEILL.); MNHW No 792; current status: Penenirmus rarus (ZłotorZycka, 1976).

Prunellides annae ZłotorZycka & Eichler, 1984: 221; holotype MS No 7/a/71 [m], 1 paratype [f]; Piotrówka- Kępno, Poland, leg. OKULEWICZ; ex Prunella modularis modularis (L.); MNHW No 793; current status: Philopterus modularis (DENNY, 1842).

Pseudocophorus antennatus Carriker Jr., 1940: 282; 1 paratype [m]; La Cuchilla, Venezuela; ex Pireplea arcula (LAFRESNAYE); MNHW No 794.

Pseudolipeurus subsimils soui Carriker Jr., 1953: 219; 1 paratype [m]; Simiti, Colombia; ex Crypturellus soui caucae (CHAP.); MNHW No 1134; current status: Pseudolipeurus dubius GUIMARÁES, 1942.

Quadraceps retractus ZłotorZycka, 1967: 722; holotype MS No 42/er/1 [m], 1 paratype [f]; Atanasov Lake, Bulgaria, leg. BALAT; ex Charadrius alexandrinus L.; MNHW No 1164; current status: Quadraceps macrocephalus (WATERSTON, 1914).
**Rostrinirmus refractariolus** Złotorzycka, 1964b: 277; 1 paratype [f]; Wrocław, Poland, leg. Złotorzycka; ex *Passer domesticus domesticus* (L.); MNHW No 798; current status: *Sturnidoecus refractariolus* (Złotorzycka, 1964).

**Strigiphilus glaucidii** Złotorzycka, 1974: 337; holotype MS No TBr 413a [m], 3 paratypes [f]; Vesanto, Finland, leg. Alaja; ex *Glaucidium passerinum passerinum* (L.); MNHW No 799; current status: *Strigiphilus splendens* (Giebel, 1874).

**Strigiphilus portigi** Eichler, 1952: 154; holotype MS No 3609 c [m], allotype [f]; Erlangen, Germany, leg. Stammer; ex *Strix aluco aluco* L.; MNHW No 800.

**Sturnidoecus blandus** Złotorzycka, 1964b: 278; holotype MS No 4/o/1 [f]; Górki Wschodnie, Poland, leg. Złotorzycka; ex *Carduelis carduelis carduelis* (L.); MNHW No 801.

**Syrhraptoecus bedfordi** Waterston, 1928: 342; 1 paratype [f]; North Asia; ex *Syrhraptes paradoxus* (Pallas); MNHW No 802.

**Trollipeurus eichleri** Złotorzycka, 1963b: 2; 1 paratype [m]; Paraguay; ex *Coragyps atratus foetens* (Licht.) (museum skin specimen); MNHW No 804; current status: *Falcolipeurus marginalis* (Osborn, 1902).

**Trollipeurus kleinmachnowensis** Złotorzycka, 1963b: 4; 2 paratypes [mf]; ex *Vultur grifus* L. (museum skin specimen); MNHW No 805; current status: *Falcolipeurus assessor* (Giebel, 1874).

**Bovicola orientalis** Emerson & Price, 1982: 186; 2 paratypes [mf]; Puli, Taiwan; ex *Capricornis crispus swinhoei* Gray; MNHW No 733; current status: *Damalinia orientalis* (Emerson & Price, 1982).

**Geomydoecus panamensis** Price & Emerson, 1971: 251; 2 paratypes [mf]; Cerro Punta, Chiriqui, Panama; ex *Macrogeomys cavator* Bangs.; MNHW No 754.


**Acknowledgements**

Our thanks go to Anna Okulewicz (University of Wrocław) for providing us details of Złotorzycka’s biography.

**References**


The Heteroptera collection of Aleksander Wróblewski in the Museum of Natural History, University of Wrocław

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Abstract. The water Heteroptera collection of Aleksander Wróblewski preserved in the Museum of Natural History, University of Wrocław, Wrocław, Poland, is summarized. The collection consists of dry-mounted and ethanol-preserved specimens and microscope slides of 182 species and subspecies, total 3973 specimens. This number includes 1879 type specimens of 29 species and subspecies of Corixidae and Veliidae. A brief biographic note on Aleksander Wróblewski, the late professor of the Poznań branch of the Institute of Zoology, Polish Academy of Sciences, and a renowned specialist on water Heteroptera, is given. All type specimens from the Wróblewski Collection are listed with respective details and bibliographic data.

Key words: Wróblewski, Insecta, Heteroptera, Corixidae, Veliidae, type collection, Wrocław University, Poland.

Introduction

Aleksander Wróblewski (1911-1985) was a hydrobiologist and systematic entomologist whose work was dedicated to water heteropterans, a specialty uncommon among Polish zoologists. Born in Poznań, nearly all his life spent in this academic center of Western Poland. Already as a student of the Poznań University (presently Adam Mickiewicz University), Wróblewski was employed as an assistant in the Department of Systematic Zoology, where in 1936 he obtained his MSc degree. Although his first published scientific study was focused on a rare freshwater crustacean, Wróblewski soon became interested in water bugs and this group remained his main research subject for the entire scientific career. In 1938 he discovered his first new taxon, and most surprisingly it was a Microvelia common around Poznań, but previously not distinguished from a similar species (Wróblewski 1938). In the short period after receiving the MSc and before the WWII, Wróblewski managed to publish two valuable faunistic studies.
Then his work was interrupted by the onset of war and he was drafted into military service. Taken captive by Germans, he spent the five war years in prisoner of war camps. Immediately after the war Wróblewski traveled to Wrocław, where he participated in organizing and restoring largely damaged collections of the Zoological Institute of the University of Wrocław (presently these collections are preserved in the Museum of Natural History). This was only a brief episode in Wróblewski’s career and already in summer 1945 he returned to Poznań to take again a position at the Department of

1. Example of dry-mounted specimens in drawer trays of the Wróblewski Collection
Systematic Zoology. There he received his PhD and in 1950 was appointed as a head of the Museum of Natural History in Poznań, which three years later became a part of the Institute of Zoology, Polish Academy of Sciences. In this institution Wróblewski continued his study of water Heteroptera and soon became a top specialist on the large and diverse genus Micronecta Kirkaldy. His numerous taxonomic papers are focused on the systematics and morphology of Micronecta, and this lineage of Corixidae is best represented in his collection. He was also interested in the shore bugs (Saldidae) and published an important monograph on Polish species of this poorly known family. A long cooperation and friendship with professor Tadeusz Jaczewski, a specialist on Nepomorpha water bugs, resulted in publication of the Keys to Identification of the Insects of Poland: Hebridae, Mesoveliidae, Hydrometridae, Veliidae and Gerridae. Wróblewski was also an editor-in-chief of the “Fauna Słodkowodna Polski” (Freshwater Fauna of Poland) series and the Polskie Pismo Entomologiczne (currently Polish Entomological Journal), a president of the Poznań Section of the Polish Entomological Society and the Polish Hydrobiological Society. More biographical details can be found in Rafalski (1987).

The Wróblewski Collection of Heteroptera is preserved in the Museum of Natural History, University of Wrocław (MNHW). The main part of the collection consists of dry-mounted (Figs 1, 7) and ethanol-preserved (Figs 2-3) specimens and microscope slides (Figs 4-6, 8-12) of 182 identified species and subspecies, total 3973 specimens. This number includes 1879 type specimens of 29 species and subspecies. All type specimens are catalogued and specimen details can be found in electronic MNHW databases. There is also a large ethanol-preserved and partly identified material stored in vials contained in plastic jars. This part of the collection, mostly containing sorted samples of Corixidae from field studies in Poland, with many thousands of individuals, is not organized and catalogued yet. The type specimens are listed below, in an alphabetical order, with respective MNHW database codes, microscope slide numbers (if available) and other details. Abbreviations: m - male, f - female.

**CHECKLIST OF THE HETEROPTERA TYPE SPECIMENS IN THE MNHW WRÓBLEWSKI COLLECTION**

**Family Corixidae**

Corixa albifrons (Motschulsky, 1863); MNHW No 810; neotype [m] (design. Wróblewski 1968); Sri Lanka, Colombo, leg. Madaras. Current status: Micronecta albifrons (Motschulsky, 1863).

Micronecta altera Wróblewski, 1972a: 33; MNHW No 811; holotype [m] (microscope slide AW343), allotype [f] (microscope slide), 1212 paratypes [mf] (1 f and 1 m in microscope slides, 570 m, 640 f in ethanol); all specimens from Sri Lanka, Arulagamwila, Manampitiya, leg. Karunaratne.

Micronecta annae illiesi Wróblewski, 1970: 687; MNHW No 812; 6 syntypes [mf] (2 exx. in microscope slides Au49 and Au50 annotated as holotype (m) and allotype (f), 1 ex. in microscope slide Au40, 4 pinned exx. annotated as paratypes); Australia, NSW, Eucumbene River, 2 miles E Kiendra, leg. Illies. Remarks: all specimens are syntypes.
Micronecta annae kirkaldyi Wróblewski, 1970: 688; MNHW No 996; 1 syntype [m] (microscope slide AW23); Australia, Mornington Island, leg. AITKEN & TINDALE. Current status: Micronecta queenslandica CHEN, 1965.

Micronecta annae tasmanica Wróblewski, 1977: 685; MNHW No 813; 34 syn-types [mf]; Australia, Victoria, Lake Parrumbete, Camperdown, leg. KNOWLESS (1 m
in microscope slide Au73), Australia, Tasmania, Lake Pawleena, leg. Walker (1 m in microscope slide Au82, 10 exx. in ethanol), Australia, Tasmania, Bronte Lagoon, leg. Beecroft (10 exx. in ethanol), Australia, Tasmania, Llewellyn Lake, leg. Sheppard (2 exx. in microscope slides Au80, Au81, 10 exx. in ethanol).

**Micronecta carpathica** Wróblewski, 1958: 324; MNHW No 819; holotype [m] (microscope slide), allotype [f] (microscope slide), 103 paratypes (4 exx. in microscope slides, 55 m and 44 f in ethanol); Poland, Jasło, Wisłoka River, leg. Pniewski.

**Micronecta ceylonica** Wróblewski, 1968: 757; MNHW No 820; holotype [m] (microscope slide AW131), allotype [f] (microscope slide), 13 paratypes (1 m and 1 f in microscope slides, 9 m and 2 f in ethanol); Diyaluma Falls, Koslande, Sri Lanka, leg. Fernando.

**Micronecta fernandi** Wróblewski, 1964: 168; MNHW No 821; holotype [m] (microscope slide AW79), paratype [m] (in ethanol); Sri Lanka, Diyaluma Falls, leg. Fernando.

**Micronecta fieberi** Wróblewski, 1968: 768; MNHW No 822; holotype [m] (microscope slide AW125), allotype [f] (microscope slide), 12 paratypes (2 m in microscope slides, 9 m and 2 f in ethanol); Diyaluma Falls, Koslande, Sri Lanka, leg. Fernando.

4. A case originally belonging to Wróblewski with type specimens of Heteroptera in microscope slides.
slides, 3 m and 7 f in ethanol); India, Kodonad, Cochin, Trivandrum, Periyar River, leg. Borchsenius.

**Micronecta flavens** Wróblewski, 1960: 317; MNHW No 823; holotype [m] (microscope slide AW 77); Sri Lanka, leg. Nietner.

**Micronecta halei** Wróblewski, 1970: 695; MNHW No 824; 36 paratypes (1 f pinned, 15 m and 14 f in ethanol, 4 m and 2 f in microscope slides); Australia, Queensland, Normanton, leg. Aitken & Tindale. Current status: *Micronecta halei* Chen.

**Micronecta hungerfordi** Chen, 1960: 108; MNHW No 994; 2 paratypes (1 in microscope slide, 1 in ethanol); Taiwan, Tai-pei, leg. Chen.

**Micronecta jaczewskii** Wróblewski, 1962: 178; MNHW No 825; holotype [m] (microscope slide AW42); Vietnam, Há-Nội, leg. Galewski.

**Micronecta japonica** Chen, 1960: 109; MNHW No 997; 1 paratype (microscope slide); Japan, Kasari-mura, leg. Miyamoto.

**Micronecta johorensis** Fernando, 1964: 18; MNHW No 826; 5 paratypes (1 m and 1 f in microscope slides, 3 f in ethanol); Malaysia, Johore, Jemalúang.

**Micronecta kiritschenko** Wróblewski, 1963: 472; MNHW No 827; 2 paratypes (n in microscope slide, f pinned); Russia, Nikolsk Ussuriyskiy, leg. Rostovykh.
6. Microscope slides in the Wróblewski Collection
7-12. Examples of type specimens of species described by Aleksander Wróblewski. Micronecta annae illiesi Wróblewski, syntype (7); Microvelia umbricola Wróblewski, head of paratype (8); Micronecta jaczewskii Wróblewski, head of holotype (9); Synaptonecta capillata Wróblewski, head of holotype (10); Micronecta ceylonica Wróblewski, pterothorax of paratype (11); Micronecta orientalis Wróblewski, mouthparts of holotype (12)
**Micronecta lansburyi** Wróblewski, 1972b: 521; MNHW No 828; 2 paratypes (1 m in microscope slide, 1 ex. in ethanol); Australia, N.T., Katherine, leg. Watts.

**Micronecta ludibunda langkana** Wróblewski, 1968: 767; MNHW No 829; holotype [m] (microscope slide AW74), allotype [f] (microscope slide), 5 paratypes (2 m and 3 f in ethanol); Sri Lanka, Polonnaruwa, leg. Fernando.

**Micronecta malayana** Leong, 1966: 86; MNHW No 830; 4 paratypes (1 ex. in microscope slide, 3 exx. in ethanol); Malaysia; Johore.

**Micronecta orientalis** Wróblewski, 1960: 313; MNHW No 831; holotype [m] (microscope slide AW78), allotype [f] (microscope slide), 64 paratypes (13 exx. in microscope slides, 16 m and 35 f in ethanol); Hong Kong, Un Long (fishpond), leg. Thornton.

**Micronecta pocsi** Wróblewski, 1967: 232; MNHW No 832; 132 paratypes (71 exx. pinned, 5 m, 2 f in microscope slides, 9 m, 45 f in ethanol); Vietnam, prov. Ha-Tinh, Hậu-Sơn, leg. Póc.

**Micronecta semilaevis** Horváth, 1899: 102; MNHW No 993; paratype [f] (microscope slide); Algeria. Current status: **Micronecta scholtzi** (Fieber, 1860).

**Micronecta taipeinensis** Chen, 1960: 112; MNHW No 995; 4 paratypes (1 ex. in microscope slide, 3 pinned); Taiwan, Tai-pei, leg. Chen.

**Micronecta taprobanica** Wróblewski, 1972a: 20; MNHW No 833; holotype [m] (microscope slide AW276), allotype [f] (microscope slide), 33 paratypes (16 exx. in ethanol, 6 f, 2 m in microscope slides, 8 f, 1 m pinned); Sri Lanka, Colombo, leg. Karunaratne (holotype, allotype, 5 paratypes); Sri Lanka Prov. Sabaragamuwa, Bopathella Falls, 9 miles NNW Ratnapura (4 paratypes); Sri Lanka, Dambuwa, leg. Perera (4 paratypes); Sri Lanka, Yakalla, 18 miles NE Colombo (10 paratypes); Sri Lanka, Lunawa, leg. Fernando (1 paratype); Sri Lanka, Gangodawila, Nugegoda, leg. Fernando (3 paratypes); Sri Lanka, Uva Prov., Monaragala, leg. Karunaratne (1 paratype), Sri Lanka, NC Prov., Manampitiya, Arulagamwila, (5 paratypes).

**Micronecta wroblewskii** Polhemus, 1979: 105; MNHW No 835; 4 paratypes (1 m in microscope slide, 3 exx. in ethanol); Sri Lanka, Kalu-Ganga-Carney, Ratnapura, leg. Starmühler.

**Micronecta yui** Chen, 1960: 114; MNHW No 836; 5 paratypes (1 m, 2 exx. in microscope slides, 3 exx. pinned); Taiwan, Karenko, Taito, leg. Yu (4 paratypes); Taiwan, Takao, leg. Sauter (1 paratype).

**Sigara vitticeps** Horváth, 1895: 161; MNHW No 834; 1 paratype [f] (dry-mounted); Bosnia, Tezero. Current status: **Micronecta poweri poweri** (Douglas & Scott).

**Synaptonecta capillata** Wróblewski, 1972a: 10; MNHW No 838; holotype [f] (microscope slide AW274), 1 paratype [f] (microscope slide); Sri Lanka, Monaragala, Wattegama, leg. Karunaratne (holotype); Sri Lanka Yakalla, 18 miles NE Colombo (paratype).

**Family Veliidae**

**Microvelia umbricola** Wróblewski, 1938: 213; MNHW No 837; 176 syntypes (5 m in microscope slides, 163 adults and 8 larvae in ethanol); Poland, Poledno, leg. Wróblewski (35 syntypes); Poland, Poznań, leg. Wróblewski (141 syntypes). Current status: **Microvelia buenoi umbricola** Wróblewski.
REFERENCES


Janusz Pluciński and his Coleoptera collections in the Museum of Natural History, University of Wrocław

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ABSTRACT. Janusz Pluciński (1925-1999), a professor of chemistry of the Wrocław University of Technology, was a devoted collector of longhorn beetles (Cerambycidae, Disteniidae and Vesperidae) and leaf-rolling weevils (Rhynchitidae and Attelabidae). After his death, his collections have been donated to the Museum of Natural History, University of Wrocław. They consist of 9180 specimens representing 1570 identified nominal species and subspecies; with a strong representation of Cerambycidae (1254 species and subspecies), Rhynchitidae (106 species and subspecies) and Attelabidae (202 species and subspecies). Pluciński is a vivid example of an amateur coleopterist, whose knowledge has gained a deserved respect among entomologists and his remarkable collections have become a part of the legacy of several generations of naturalists whose specimens are preserved in the Museum of Natural History.

Key words: Pluciński, Insecta, Coleoptera, Cerambycidae, Disteniidae, Vesperidae, Rhynchitidae, Attelabidae, longhorn beetles, weevils, collection, Wrocław University, Poland.

INTRODUCTION

Janusz Pluciński (1925-1999) was a Polish amateur entomologist interested in selected phytophagous beetle families, whose collections belong to largest in Poland. Pluciński spent his youth in Poznań, but moved to Wrocław just after WWII, where he studied chemistry at the Wrocław University of Technology. His entire professional career was associated with this institution, where in 1947, still as a student, he became a vice-assistant in the Department of Organic Chemistry. In 1948 Pluciński moved to the Department of Explosive Material Technology, where he got his PhD in 1961, habilitation in 1969 and became a university professor in 1990, to retire a year later. Pluciński’s professional activities were focused on applied chemistry, mainly techno-
1. Specimens of Cerambycidae from the Pluciński Collection. One of several drawers of Dorcadionini (1) and examples of Gleneini (2)
logy of explosive materials, industrial chemical synthesis and chemistry of surfactants (Burczyk 1999).

Pluciński was able to successfully combine his research and teaching activities at the University with a great passion to insects. He was particularly fond of two distant groups of cucujiform Coleoptera: longhorn beetles (Cerambycidae, Disteniidae and Vesperidae) and leaf-rolling weevils (Rhynchitidae and Attelabidae). Pluciński himself collected beetles mainly in Poland and Bulgaria during his summer holiday trips. However, his broad international contacts enabled him to exchange specimens with specialists from many countries, including Japan and China, and although he never published any article in entomology, his identification services were appreciated by museums and universities in Poland and abroad. Pluciński’s will was that his entire collection and entomological library were to be donated after his death to the Museum of Natural History, University of Wrocław (MNHW), institution with which he closely cooperated for many years. Two of the authors (JK, MW) have had the pleasure of knowing prof. Pluciński and they occasionally visited him in his small flat in Wrocław to spend hours talking about his favourite beetles.

The Pluciński Collection in MNHW retained its original organization and has been catalogued. The specimens are properly curated and both the longhorn beetles and leaf-rolling weevils are the most species-rich collections of these taxa preserved in Polish museums. The entire Pluciński Collection consists of 9180 specimens representing 1570 identified nominal species and subspecies; only a small fraction awaits determination.

**Longhorn beetles in the Pluciński Collection**

The Cerambycidae, Disteniidae and Vesperidae collection (Table 1) comprises 6832 specimens of 1262 identified species and subspecies. Disteniidae and Vesperidae are represented by only three and five species, respectively. The family Cerambycidae (Figs 1-2) includes representatives of 9 subfamilies, 81 tribes, 354 genera and 1254 species and subspecies. The majority of Cerambycidae (83.09%) is Palaearctic, followed by Oriental (12.2%), Afrotropical (3.9%), and a few Nearctic species (0.8%) (Palaearctic taxa are those included in Löbl & Smetana (2010), Oriental those not included in this catalogue). Pluciński was primarily focused on Eurasia and only within selected genera of Saperdini (*Glenea* Newman, *Nupserha* Thomson, *Obereopsis* Chevrolat) he collected species from outside this area. Phytoecini, Dorcadionini, Gleneini and Lepturini belong to the largest groups in the collection. The detailed list of taxa is given below.

**Cerambycidae**

**Apatophyseinae**

*Apatophysis baekmanniana* Semenov, 1907
*Apatophysis caspica* Semenov, 1901
*Apatophysis pavlovskii* Plavilstshikov, 1954
*Apatophysis sinica* Semenov, 1901

**Necydalinae**

*Necydalis gigantea* Kano, 1933
*Necydalis major* Linnaeus, 1758
*Necydalis moriyai* Kusama, 1970
*Necydalis solida* Bates, 1884

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**Table 1**

<table>
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<tr>
<th>Cerambycidae</th>
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<td>Apatophyseinae</td>
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<tr>
<td><em>Apatophysis sinica</em> Semenov, 1901</td>
<td><em>Necydalis solida</em> Bates, 1884</td>
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Cerambycinae
  Achrysonini
  Icosium tomentosum Lucas, 1854
  Anaglyptini
  Anaglyptus arabicus Köster, 1847
  Anaglyptus bellus Matsumura & Matsushita, 1933
  Anaglyptus colobotheoides Bates, 1884
  Anaglyptus gibbosus (Fabricius, 1787)
  Anaglyptus matsushitai Hayashi, 1955
  Anaglyptus mysticus (Linnaeus, 1758)
  Anaglyptus niponensis (Fabricius, 1776)
  Anaglyptus nokosanus Lucas, 1854
  Anaglyptus subfuscatus Pic, 1906
  Paraclytus exculus Bates, 1844
  Paraclytus reitteri Ganglbauer, 1882
  Paraclytus sexguttatus Adams, 1817
  Callichromatini
  Anubis bipustulatus Thomson, 1865
  Aphrodissium cantori Hope, 1839
  Aphrodissium faldermannii vugiai Kano, 1933
  Aromia bungii Faldermann, 1835
  Aromia moschata ambrosiaca (Steven, 1809)
  Aromia moschata moschata (Linnaeus, 1758)
  Cataphractidum rubripenne Hope, 1842
  Chelidonium argentatum (Dalman, 1817)
  Chloridolum japonicum Harold, 1879
  Chloridolum sieversi Ganglbauer, 1887
  Chloridolum thaloides Bates, 1884
  Chloridolum thomsoni Pascoe, 1859
  Embrikstrandia bimaculata (White, 1853)
  Embrikstrandia unifasciata (Ritsema, 1896)
  Leontium lamerei (Pic, 1900)
  Leontium viride Thomson, 1864
  Pachyderia dimidiata Westwood, 1848
  Polyzonus bizonatus White, 1853
  Polyzonus fasciatus Fabricius, 1781
  Polyzonus obtusus Bates, 1879
  Polyzonus tetraspilotus Hope, 1835
  Schwarzerium quadricolle (Bates, 1884)

Callidini
  Callidium rufipes (Motschusky, 1862)
  Callidium acenum (De Geer, 1775)
  Callidium chlorizans Solsky, 1873
  Callidium cornicatum Paykull, 1800
  Callidium villosum Fairmaire, 1900
  Callidium violaceum (Linnaeus, 1758)
  Leiodeses kollarii Redtenbacher, 1848
  Lioderina linearis (Hampe, 1871)
  Phymatodes albicinctus Bates, 1873
  Phymatodes maaki Kraatz, 1879
  Phymatodes quadriracimatus Gressitt, 1935
  Phymatodes testaceus (Linnaeus, 1758)
  Poecilium albi (Linnaeus, 1767)
  Poecilium fasciatum (Villers, 1789)
  Poecilium glabrum (Charpentier, 1825)
  Poecilium lividum (Rossi, 1794)
  Poecilium pusillum (Fabricius, 1787)
  Poecilium rufipes (Fabricius, 1776)
  Pronocera angustula (Kriebhaumer, 1844)
  Pyrrhidium sanguineum (Linnaeus, 1758)
  Ropalopus clavipes (Fabricius, 1775)
  Ropalopus femoratus (Linnaeus, 1758)
  Ropalopus insubricus (Germar, 1824)
  Ropalopus macropus (Germar, 1824)
  Ropalopus siculus (Stierlin, 1864)
  Ropalopus signaticollis Solsky, 1872
  Ropalopus ungaricus (Herbst, 1784)
  Semanotus bifasciatus Motschusky, 1875
  Semanotus japonicus (Lacordaire, 1869)
  Semanotus laurasii (Lucas, 1851)
  Semanotus russicus (Fabricius, 1776)
  Semanotus semenovi Okunev, 1933
  Semanotus sinoaustus Gressitt, 1951
  Semanotus undatus (Linnaeus, 1758)
  Taurumum johannis Baackmann, 1923

Callidiopini
  Ceresium leucosticticum White, 1955
  Ceresium longicorne Pic, 1926
  Ceresium sinicum White, 1855
  Stenodryas clavigera Bates, 1873
  Stenygrinus quadrinotatus Bates, 1873

Cerambycini
  Acalolepta formosana Breuning, 1935
  Acalolepta fraudatrix fraudatrix (Bates, 1873)
  Acalolepta luxuriosa (Bates, 1873)
  Acalolepta permutans permutans (Gressitt, 1938)
  Acalolepta permutans paucipunctata (Gressitt, 1938)
  Acalolepta permutans permutans (Pascoe, 1857)
  Acalolepta sejuncta (Bates, 1873)
  Aeolesthes chrysotrichus (Bates, 1873)
  Aeolesthes sarta Solsky, 1871
  Cerambyx cerdo acuminatus Motschusky, 1852
  Cerambyx cerdo cerdo Linnaeus, 1758
  Cerambyx dux (Faldermann, 1837)
  Cerambyx miles Bonelli, 1812
  Cerambyx multiplicatus Motschusky, 1860
  Cerambyx nodulosus Germar, 1817
  Cerambyx scopolii Fuesly, 1775
  Cerambyx wellensii (Koster, 1845)
  Derolus mauritanicus (Buquet, 1840)
  Dymasias hirayamai Matsushita, 1941
  Gibbocerambyx maculicollis Matsushita, 1933
  Hemadius oenochrous Fairmaire, 1889
  Hoplocerambyx spinicornis Newman, 1842
  Lachnopterus auripennis Newman, 1842
  Marginites fulvidus (Pascoe, 1858)
  Massicus trilineatus (Pic, 1933)
Chlorophorus aritai
Chlorophorus motschulskyi
Chlorophorus kanoi
Chlorophorus mushanus
Brachyclytus singularis
Clytus
Chlorophorus aegyptiacus
Chlorophorus annularis
Chlorophorus aritai
Chlorophorus buqueti
Chlorophorus diadema
Chlorophorus dohertyi
Chlorophorus elodeae
Chlorophorus faldermanni
Chlorophorus figuratus
Chlorophorus glabromaculatus
Chlorophorus gratiosus
Chlorophorus herbstii
Chlorophorus hungaricus
Chlorophorus japonicus
Chlorophorus kanoi
Chlorophorus macaensnis
Chlorophorus miwai
Chlorophorus motschulskyi
Chlorophorus muscosus
Chlorophorus musnashus
Chlorophorus petieteri
Chlorophorus pilosus
Chlorophorus quinquefasciatus
Chlorophorus raficornis
Chlorophorus sartor
Chlorophorus sexguttatus
Chlorophorus simillimus
Chlorophorus t-nigrum
Chlorophorus trifasciatus
Chlorophorus varius
Clytobius davidis
Clytus arietis
Clytus arietoides
Clytus auripilis
Clytus lama
Clytus melaeinus
Clytus raddiensis
Clytus rhanni
Clytus tropicus
Crytoclytus capra
Crytoclytus caproides
Demonax albicinctus
Demonax albomaculatus
Demonax okuni
Demonax translis
Grammographus albosignatus
Grammographus flavicollis
Grammographus notabilis
Isotomus barbarae
Isotomus comptus
Isotomus jarmilae
Isotomus speciosus
Kazuoctlytus lautoides
Neoclytus acuminatus
Plagionotus arcuatus
Plagionotus belalvae
Plagionotus christophi
Plagionotus detritus
Plagionotus floralis
Plagionotus lugubris
Plagionotus pulcher
Pseudosphoposthes
Xylotrechus adspersus
Xylotrechus altaicus
Xylotrechus chinensis
Xylotrechus capricornus
Xylotrechus arvicola
Xylotrechus asellus
Xylotrechus capricornus
Xylotrechus chinensis
Xylotrechus clarinus
Xylotrechus cuneipennis
Xylotrechus emaciatius
Xylotrechus grayi
Xylotrechus hiercus
Xylotrechus ibex
Xylotrechus javanicus
Xylotrechus lautus Matsushita, 1933
Xylotrechus magnicollis (Fairmaire, 1888)
Xylotrechus namanganensis Heyden, 1885
Xylotrechus pantherinus (Savenius, 1825)
Xylotrechus polyzonus (Fairmaire, 1888)
Xylotrechus pyrrhoderus Bates, 1873
Xylotrechus rufilatus Bates, 1884
Xylotrechus rusticus (Linnæus, 1758)
Xylotrechus yanoii Gressitt, 1934

Deiliini

Deilus fugax (Olivier, 1790)
Delagrangeus angustissimus Pic, 1892
Delagrangeus schurmanni Sama, 1985

Graciliini

Aixinopalpis gracilis (Kreynicki, 1832)
Gracilia minuta (Fabricius, 1781)
Lucasianus levaiillantii (Lucas, 1847)
Penichroa fasciata Stephens, 1839

Hesperopanini

Hesperophanes sericeus (Fabricius, 1787)
Stromatium longicorne Newman, 1842
Stromatium unicolor (Olivier, 1795)
Trichoferus campestris (Faltermann, 1835)
Trichoferus fasciculatus (Faltermann, 1837)
Trichoferus griseus (Fabricius, 1792)
Trichoferus machadoi Sama & Schurmann, 1983
Trichoferus roridus (Brulle, 1838)
Turmenigena warenczovi Melgunov, 1893

Hylotrupini

Hylotrepes bajulatus (Linnæus, 1758)

Molorchini

Dolocerus holtzi (Pic, 1905)
Dolocerus reichii Mulsant, 1862
Epania dilaticornis kumatai Hayashi, 1961
Epania shikokensis Hayashi, 1965
Merionoedidae formosana formosana Heller, 1924
Merionoedidae formosana iriomotensis K. Ohbayashi & Nei, 1983

Nathrinini

Nathrius brevipennis (Mulsant, 1839)

Obrini

Obrium brunneum (Fabricius, 1792)
Obrium canthinum (Linnæus, 1767)
Obrium nakanei Ohbayashi, 1959

Prothemini

Prothema ochraceosignatum (Pic, 1915)
Prothema signatum Pascoe, 1856

Phoracanthini

Allotraeus sphaerionimus Bates, 1877
Nysina rufescens (Pic, 1923)
Phoracantha semipunctata (Fabricius, 1775)

Pseudopepturni

Erythresthes bowringii (Pascoe, 1863)
Erythrus championi White, 1853
Erythrus formosanus Bates, 1866

Purpuricenini

Amarysius altajensis Laxmann, 1770
Amarysius sanguinipennis Blessig, 1872
Anoplistes halodendri ephippium (Steven & Dalmann, 1817)
Anoplistes halodendri halodendri (Pallas, 1773)
Anoplistes jacobsoni Baeckmann, 1904
Anoplistes mongolicus amoenus Reitter, 1898
Dicelosternus corallinus Gahan, 1900
Euryclelia cardinallis (Thomson, 1861)
Eurypaghus lundii (Fabricius, 1793)
Pavieia superba Brongniart, 1809
Purpuricenus barbarus (Lucas, 1842)
Purpuricenus budensis (Götz, 1783)
Purpuricenus dalmatianus Sturm, 1843
Purpuricenus desfontainii (Fabricius, 1793)
Purpuricenus globulicollis Dejean, 1839
Purpuricenus kaehleri (Linnæus, 1758)
Purpuricenus litturatus Ganglbauer, 1886
Purpuricenus malaccensis (Lacordaire, 1869)
Purpuricenus sideriger Fairmaire, 1888
Purpuricenus spectabilis Matschulsky, 1858
Purpuricenus temminckii (Guérin-Méneville, 1844)

Pyrestini

Pyrestes cardinallis Pascoe, 1863
Pyrestes curticornis Pic, 1923
Pyrestes haematicus Pascoe, 1857
Pyrestes longicollis (Pic, 1953)

Rosalini

Rosalia alpina (Linnæus, 1758)
Rosalia batesi Harold, 1877

Stenhomalini

Stenhomalus bicolor (Kraatz, 1862)
Stenhomalus incongruus muneaka Hayashi, 1981
Stenhomalus naganoi Hayashi, 1960
Stenhomalus taiwanus Matsushita, 1933
Stenopterini
Callimoxys gracilis (Brullé, 1832)
Callimus abdominalis (Olivier, 1795)
Callimus angulatus (Schrank, 1789)
Callimus femoratus (Germar, 1824)
Stenopterus atei (Linnaeus, 1767)
Stenopterus creticus (Sama, 1995)
Stenopterus flavicornis Köster, 1846
Stenopterus mauritianus (Lucas, 1846)
Stenopterus rollei (Linnaeus, 1767)

Thranini
Thranus multinoctatus signatus Schwarzer, 1925
Thranus variegatus Bates, 1873

Tillomorphini
Clerocyclus banghaasi Reitter, 1895
Epipedocera atra Pic, 1937
Epipedocera laticollis Gahan, 1906
Epipedocera rolleí Pic, 1910
Epipedocera zona Chevolat, 1863

Xystrocerinini
Leptoxenus ibidiiformis Bates, 1877
Xystrocerca festiva Thomson, 1861
Xystrocerca globosa (Olivier, 1795)

Lamiinae
Acanthocini
Acanthocinus aedilis (Linnaeus, 1758)
Acanthocinus carinulatus (Geber, 1833)
Acanthocinus griseus (Fabricius, 1792)
Acanthocinus reticulatus (Razoumov, 1879)
Acanthocinus stillatus Bates, 1884
Exocentrus adspersus Mulsant, 1846
Exocentrus fasciolatus Bates, 1873
Exocentrus galloisi Matsushita, 1933
Exocentrus guttulatus Bates, 1873
Exocentrus lineatus Bates, 1873
Exocentrus lusitanus (Linnaeus, 1667)
Exocentrus punctipennis Mulsant & Guillebeau, 1856
Exocentrus ritae Sama, 1985
Exocentrus stierlini Ganglbauer, 1883
Exocentrus testudineus Matsushita, 1931
Leiopus femoratus Fairmaire, 1859
Leiopus nebulosus caucasicus Ganglbauer, 1887
Leiopus nebulosus nebulosus (Linnaeus, 1758)
Leiopus punctulatus (Paykull, 1800)
Rondibilis saperdina Bates, 1884

Acanthoderinini
Aegomorphus clavipes (Schrank, 1781)
Callapoeus guttatus Bates, 1884

Agapanthini
Agapanthia amurenensis Kraatz, 1879
Agapanthia annularis (Olivier, 1795)
Agapanthia asphodeli (Latreille, 1804)
Agapanthia cardui (Linnaeus, 1767)
Agapanthia coeruleipennis Frivaldszky, 1878
Agapanthia cynarae (Gyllenhal, 1817)
Agapanthia dahlí (Richter, 1821)
Agapanthia daurica Ganglbauer, 1883
Agapanthia detrita Kraatz, 1882
Agapanthia irrutata (Fabricius, 1787)
Agapanthia kirbyi (Gyllenhal, 1817)
Agapanthia lateralis Ganglbauer, 1884
Agapanthia postulifera Pic, 1905
Agapanthia schurmanni Sama, 1979
Agapanthia soror Kraatz, 1882
Agapanthia subchalybaea Reitter, 1898
Agapanthia villosauridescens (De Geer, 1775)
Agapanthia violacea (Fabricius, 1775)
Agapanthia walteri Reitter, 1898
Agapanthiola leucaspis (Steven, 1817)
Aulaconotus pachypezoides Thomson, 1864
Calamobius filum (Rossi, 1790)
Eucomatocera viitata White, 1846
Pseudocalamobius japonicus Bates, 1873
Theophilea cylindricollis Pic, 1895

Ancylonotini
Palinma liturata Bates, 1884
Palinma palimnoides (Schwarzer, 1925)

Apodasyini
Anaesthetis testacea (Fabricius, 1781)
Arhopaloscelis bifasciata (Kraatz, 1879)
Clytosemia pulchra Bates, 1884
Deroiplia albida (Brulle, 1838)
Deroiplia annulicornis (Mulsant, 1838)
Deroiplia genei (Aragona, 1830)
Deroiplia gertián Sama, 1996
Deroiplia pilosa (Wollaston, 1862)
Deroiplia troberti (Mulsant, 1843)
Euseboides matsudai Greisset, 1938
Graphidessa venata Bates, 1884
Mimectatina meridiana (Matsushita, 1933)
Oplosia cinerea (Mulsant, 1839)
Penthides flavus Matsushita, 1933
Rhodopina levisii (Bates, 1873)
Rhopaloscelis maculata Bates, 1877
Rhopaloscelis unifasciata (Blessig, 1873)

Apomecynini
Aimura japonica Bates, 1873
Asaperda agapanthina Bates, 1873
Asaperda rufipes Bates, 1873
Doliops similis Miwa & Mitono, 1933
Microlera ptinoides Bates, 1873
Ropica fuscolaterimaculata Hayashi, 1974
Sybra baculina Bates, 1866
Sybra flavomaculata Breuning, 1939
Sybra ordinata Bates, 1873
Sybra subfasciata (Bates, 1884)
Xylariopsis mimica Bates, 1884
Asthathini
Asthathes episcopalis Chevolrat, 1852
Bacchisa fortunei (Thomson, 1857)
Bacchisa guerryi Pic., 1911

Batocerini
Abatocera irregularis Vollenhoven, 1871
Abatocera leonina Thomson, 1865
Apriona cylindrica Thomson, 1857
Apriona germari Chevolrat, 1852
Apriona rugicollis Chevolrat, 1852
Batocera aeneonigra Thomson, 1859
Batocera andamana Thomson, 1878
Batocera calana Pary, 1844
Batocera celebiana Thomson, 1858
Batocera davidis DevroLle, 1878
Batocera gigas (Drapiez, 1819)
Batocera hercules Boisduval, 1835
Batocera horsfieldi (Hope, 1839)
Batocera laena Thomson, 1858
Batocera lineolata Chevolrat, 1852
Batocera maculata (SchönHerr, 1817)
Batocera matzdorffi Kriesche, 1915
Batocera nebulosa Bates, 1877
Batocera numitor Newman, 1842
Batocera roylei (Hope, 1833)
Batocera rubus Linnaeus, 1758
Batocera rufomaculata De Geer, 1775
Batocera victoriana Thomson, 1856
Batocera wallacei Thomson, 1858
Rosenbergia mandibularis Ritsema, 1881
Rosenbergia weiskei Heller, 1902

Ceroplesini
Thysia wallichi (Hope, 1831)

Crossotini
Moechotypa diphasis (Pascoe, 1871)
Moechotypa formosana (Pic, 1917)

Dorcadionini
Dorcadion abakumovi Thomson, 1965
Dorcadion aethiops (Scopoli, 1763)
Dorcadion anatolicum Pic, 1900
Dorcadion arenarium abruptum (Germar, 1839)
Dorcadion arenarium arenarium (Scopoli, 1763)
Dorcadion atriarce (Pic, 1931)
Dorcadion bangi Heyden, 1894
Dorcadion beckei Kraatz, 1873
Dorcadion biforme (Kraatz, 1893)
Dorcadion bodemeyeri Daniel, 1900
Dorcadion breunigi (Heyrovsky, 1943)
Dorcadion bruneicolle Kraatz, 1873
Dorcadion carinatum (Pallas, 1771)
Dorcadion catenatum Wall., 1838
Dorcadion cinerrarium (Fabricius, 1787)
Dorcadion coiffait Breuning, 1962
Dorcadion crassipes crassipes Ballion, 1878
Dorcadion crassipes validipes Jakovlev, 1906
Dorcadion decipiens (Germar, 1824)
Dorcadion dimidiatum Motschulsky, 1838
Dorcadion divisum (Germar, 1839)
Dorcadion elegans (Kraatz, 1873)
Dorcadion equestre equestre (Laxmann, 1770)
Dorcadion equestre nogelii Fairmaire, 1866
Dorcadion equestre transsilvanicum (Ganglbauer, 1884)
Dorcadion etruscum (Rossi, 1790)
Dorcadion eugeniae (Ganglbauer, 1885)
Dorcadion fulvum cervae (Frivaldszyk, 1892)
Dorcadion fulvum fulvum (Scopoli, 1763)
Dorcadion gallipolitanum (Thomson, 1867)
Dorcadion geblert Kraatz, 1873
Dorcadion glabrofasciata (Daniel, 1900)
Dorcadion glycyrrhizae glycyrrhizae (Pallas, 1773)
Dorcadion glycyrrhizae striatum Goeze, 1777
Dorcadion hampei Mulsant & Rey, 1863
Dorcadion heinzi Breuning, 1964
Dorcadion hellmanni Ganglbauer, 1884
Dorcadion holosericeum (Krynicki, 1832)
Dorcadion hybridum hedvigae (Jureček, 1933)
Dorcadion iconiense Daniel, 1900
Dorcadion infernale Mulsant & Rey, 1863
Dorcadion jakobsoni Jakovlev, 1899
Dorcadion kozani (Breuning, 1962)
Dorcadion kruperti (Ganglbauer, 1883)
Dorcadion laeae Faldermann, 1837
Dorcadion lameeri They, 1896
Dorcadion lineatocolle (Kraatz, 1873)
Dorcadion ljubetense (Pic, 1909)
Dorcadion lugubre (Kraatz, 1873)
Dorcadion merli (Ganglbauer, 1884)
Dorcadion minutum (Kraatz, 1873)
Dorcadion multimaculatum Pic, 1932
Dorcadion murrayi (Küster, 1847)
Dorcadion mystacinum mystacinum Ballion, 1878
Dorcadion mystacinum rufidens Jakovlev, 1906
Dorcadion nivosum Motschulsky, 1838
Dorcadion niveisparsum Thomson, 1865
Dorcadion nivosum Suvorov, 1913
Dorcadion olympicum Kraatz, 1873
Dorcadion parallelum Küster, 1847
Dorcadion pararufipenne Braun, 1976
Dorcadion pararufipenne Braun, 1976
Dorcadion pararufipenne Braun, 1976
Dorcadion pararufipenne Braun, 1976
Dorcadion pedestre pedestre (Poda, 1761)
Dorcadion pedestre kazachi Breuning, 1956
Dorcadion pilosellum (Kraatz, 1873)
Dorcadion pilosopenne Breuning, 1943
Dorcadion pluto Thomson, 1867
Dorcadion preissi (Heyden, 1894)
Dorcadion pseudobithyniense Breuning, 1962
Dorcadion pseudopreissi Breuning, 1962
Dorcadion quadricornutum nodicorne (Tournier, 1872)
Dorcadion regulare (Pic, 1931)
Dorcadion rufipenne Breuning, 1946
Dorcadion rugosum Reitter, 1895
Dorcadion saulcyi Thomson, 1865
Dorcadion scabricolle Dalman, 1817
Dorcadion scopholai (Herbst, 1784)
Dorcadion scrobicollis Kraatz, 1873
Dorcadion semenovi Ganglbauer, 1863
Dorcadion septemlineatum (Waltl, 1838)
Dorcadion sewerianum Ganglbauer, 1883
Dorcadion striolatum (Kraatz, 1873)
Dorcadion subsericatum Pic, 1901
Dorcadion tauricum (Waltl., 1838)
Dorcadion tibiale Jakovlev, 1889
Dorcadion tschitscherini Jakovlev, 1899
Dorcadion turkestanicum Kraatz, 1881
Dorcadion wagneri Köster, 1846
Dorcadion weyersi Fairmaire, 1866
Eodorcadion carinatum blessigi Ganglbauer, 1884
Eodorcadion carinatum carinatum (Fabricius, 1781)
Eodorcadion chinganicum (Suporov, 1854)
Eodorcadion egregium Reitter, 1897
Eodorcadion humeral Geheil, 1823
Eodorcadion orealis Reitter, 1897
Eodorcadion virgatum (Motschulsky, 1854)
Iberodorcadion abulense (Lauffer, 1902)
Iberodorcadion albicans (Chevrolat, 1862)
Iberodorcadion amorii (Marseul, 1856)
Iberodorcadion becercrae (Lauffer, 1901)
Iberodorcadion bolivari (Lauffer, 1898)
Iberodorcadion brillani (Sshauff, 1870)
Iberodorcadion circumcinctum (Chevrolat, 1862)
Iberodorcadion fuliginator fuliginator (Linnaeus, 1758)
Iberodorcadion fuliginator meridionale (Mulsant, 1839)
Iberodorcadion fuliginator obsessum (Gautier, 1870)
Iberodorcadion graellsii graellsii (Graells, 1858)
Iberodorcadion graellsii longipenne (Chevrolat, 1862)
Iberodorcadion heydenii (Kraatz, 1870)
Iberodorcadion korbi (Ganglbauer, 1884)
Iberodorcadion lorguinii (Fairmaire, 1855)
Iberodorcadion marmottani (Escalera, 1900)
Iberodorcadion martinezii (Perez, 1874)
Iberodorcadion molitor (Fabricius, 1775)
Iberodorcadion mosqueruelense (Escalera, 1902)
Iberodorcadion mus (Rosenhauer, 1856)
Iberodorcadion neilense almarzense (Escalera, 1902)
Iberodorcadion neilense neilense (Escalera, 1902)
Iberodorcadion nigrosparsum Verdugo, 1993
Iberodorcadion perezi cedelliannum (Pic, 1900)
Iberodorcadion perezi hispanicum (Mulsant, 1851)
Iberodorcadion perezi nudipenne (Escalera, 1908)
Iberodorcadion segovianum dejeanii (Chevrolat, 1862)
Iberodorcadion segovianum segovianum (Chevrolat, 1862)
Iberodorcadion seguntianum (K. Daniel & J. Daniel, 1898)
Iberodorcadion seoanai krichelidorffii (Pic, 1910)
Iberodorcadion seoanai seoanai (Graells, 1858)
Iberodorcadion spinolae caunense (Lauffer, 1910)
Iberodorcadion spinolae spinolae (Dalman, 1817)
Iberodorcadion terolense (Escalera, 1902)
Iberodorcadion uhagonii (Perez, 1868)
Iberodorcadion zacoi (Schwarzer, 1910)
Neodorcadion bineatum (Germar, 1824)
Neodorcadion fallax (Kraatz, 1873)
Neodorcadion laqueatum (Waltl., 1838)
Neodorcadion orientale (Ganglbauer, 1884)
Neodorcadion virletii (Brullé, 1832)
Politodorcadion politum (Dalman, 1823)
Politodorcadion ribbei Kraatz, 1878

**Dorcaschematini**

Olenecamptus cretaceus cretaceus Bates, 1873
Olenecamptus cretaceus marginatus Schwarzer, 1925
Olenecamptus formosanus Pic, 1914
Olenecamptus taiwanus Dillon & Dillon, 1948

**Gleneini**

Glenea acuta Fabricius, 1801
Glenea adelpha Thomson, 1858
Glenea albocingulata Aurivillius, 1926
Glenea albofasciata Gahan, 1897
Glenea albolineata Thomson, 1860
Glenea albovaria Thomson, 1857
Glenea aequale Gahan, 1897
Glenea angeloni Thomson, 1865
Glenea annulicornis Schwarzer, 1925
Glenea anticepuncta obsoletopunctata Thomson, 1857
Glenea anticepunctata Thomson, 1857
Glenea apicalis Chevrolat, 1857
Glenea arcuata Chevrolat, 1858
Glenea arouensis Thomson, 1858

**Olenecamptini**

Olenecamptus cretaceus creaenae Bates, 1873
Olenecamptus cretaceus marginatus Schwarzer, 1925
Olenecamptus formosanus Pic, 1914
Olenecamptus taiwanus Dillon & Dillon, 1948

**Gleneini**

Glenea acuta Fabricius, 1801
Glenea adelpha Thomson, 1858
Glenea albocingulata Aurivillius, 1926
Glenea albofasciata Gahan, 1897
Glenea albolineata Thomson, 1860
Glenea albovaria Thomson, 1857
Glenea aequale Gahan, 1897
Glenea angeloni Thomson, 1865
Glenea annulicornis Schwarzer, 1925
Glenea anticepuncta obsoletopunctata Thomson, 1857
Glenea anticepunctata Thomson, 1857
Glenea apicalis Chevrolat, 1857
Glenea arcuata Chevrolat, 1858
Glenea arouensis Thomson, 1858
Glenea atriceps Aurivillius, 1911
Glenea astartie Thomson, 1865
Glenea beatrix Thomson, 1879
Glenea beccarii Gahan, 1907
Glenea bellona Thomson, 1879
Glenea blandina Pascoe, 1858
Glenea buqueti Thomson, 1865
Glenea camilla Pascoe, 1867
Glenea cantor Fabricius, 1787
Glenea caraga Pascoe, 1897
Glenea cardinalis Thomson, 1861
Glenea cassandra Gahan, 1907
Glenea celtia Pascoe, 1888
Glenea ceylonica Breuning, 1958
Glenea chlorospila Gahan, 1897
Glenea chrysomaculata Schwarzer, 1925
Glenea cinerea Thomson, 1865
Glenea citrina Thomson, 1865
Glenea concinna Newman, 1842
Glenea coris Pascoe, 1867
Glenea cyanipennis Thomson, 1858
Glenea diana Thomson, 1865
Glenea dimidiata Fabricius, 1801
Glenea distinguenda Gahan, 1889
Glenea diversimembris Pic, 1926
Glenea dorsaloides Breuning, 1856
Glenea elegans (Olivier, 1795)
Glenea elegantissima Breuning, 1956
Glenea exculta Newman, 1842
Glenea extensa Pascoe, 1858
Glenea extrema Sharp, 1900
Glenea fainanensis Pic, 1916
Glenea fasciata Fabricius, 1781
Glenea fatalis Pascoe, 1867
Glenea fissicauda Aurivillius, 1926
Glenea flava Jordan, 1895
Glenea formosana holatripes Breuning, 1953
Glenea fulvomaculata Thomson, 1860
Glenea funerula Thomson, 1857
Glenea gabonica Thomson, 1858
Glenea galathea Thomson, 1865
Glenea giraffa Dalman, 1817
Glenea glauca Newman, 1842
Glenea grisca Thomson, 1860
Glenea grossepunctata Breuning, 1958
Glenea hasseltii Ritsema, 1892
Glenea heptagona Thomson, 1860
Glenea homonospila Thomson, 1865
Glenea indiana (Thomson, 1857)
Glenea iwasaki Kano, 1933
Glenea jordani Lepesme & Breuning, 1952
Glenea junio Thomson, 1865
Glenea kannegieteri Breuning, 1958
Glenea keili Ritsema, 1897
Glenea kraatzii Thomson, 1865
Glenea labuanensis Breuning, 1956
Glenea lacteomaculata Schwarzer, 1925
Glenea latevittata Aurivillius, 1920
Glenea lecta Gahan, 1889
Glenea lefebvrei Guérin-Méneville, 1831
Glenea lepida Newman, 1842
Glenea lineata Gahan, 1897
Glenea lineatocollis Thomson, 1860
Glenea lycoris Thomson, 1865
Glenea manto Pascoe, 1866
Glenea mathematica Thomson, 1857
Glenea maunieri Pic, 1926
Glenea melia Pascoe, 1867
Glenea melissa Pascoe, 1867
Glenea myrsia Pascoe, 1867
Glenea nicanor Pascoe, 1867
Glenea nigromaculata Thomson, 1865
Glenea nigrotibialis Breuning, 1950
Glenea novemguttata Guérin-Méneville, 1831
Glenea numeriferas Thomson, 1865
Glenea nympha Thomson, 1865
Glenea ochraceovittata Thomson, 1865
Glenea orepheila Breuning, 1958
Glenea pascoei Aurivillius, 1923
Glenea paulina Gahan, 1907
Glenea pici Aurivillius, 1920
Glenea plagiata Gardner, 1930
Glenea porphyrio Pascoe, 1866
Glenea posticata Gahan, 1894
Glenea proserpina Thomson, 1865
Glenea proxima Lameere, 1893
Glenea pseudocolobothoides Breuning, 1950
Glenea puella Chevrolat, 1858
Glenea pulchra Aurivillius, 1926
Glenea pustulata Thomson, 1865
Glenea quadrinotata Guérin-Méneville, 1843
Glenea quinquelineata Chevrolat, 1855
Glenea relicta Pascoe, 1858
Glenea rubricollis Hope, 1842
Glenea sanctaemariae Thomson, 1857
Glenea scalaris Thomson, 1865
Glenea signatifrons Gahan, 1897
Glenea silhetica Plavilstshikov, 1927
Glenea sophronia Pascoe, 1867
Glenea speciosa Gahan, 1889
Glenea strigata Thomson, 1860
Glenea suada Gahan, 1907
Glenea submorosa Breuning, 1952
Glenea sumatrana Breuning, 1950
Glenea suturalis Jordan, 1894
Glenea tonkinea Aurivillius, 1926
Glenea tritoleuca Aurivillius, 1923
Glenea trivittata Aurivillius, 1911
Glenea truncatipennis Breuning, 1950
Glenea venus celebensis Ritsema, 1892
Glenea venus Thomason, 1865
Glenea venusta Grépin-Meneville, 1831
Glenea versuta Newman, 1842
Glenea vigintiduomaculata Thomason, 1858
Glenea virens Aurivillius, 1920
Glenea voluptuosa Thomason, 1860
Glenea wiedenfeldi Aurivillius, 1911

Gnomini

Imantocera penicillata (Hope, 1831)

Homoneoeini

Bumetopia sakishimana Hayashi, 1966

Lamini

Aethalodes verrucosus formosanus Kriwesche, 1924
Aristobia approximatrix Thomason, 1865
Aristobia hispida (Saunders, 1853)
Aristobia horridula (Hope, 1831)
Aristobia reticulatrix (Fabricius, 1781)
Aristobia voeti Thomason, 1878
Cremnosterna carissima Pascoe, 1857
Epepeotes ambigenus formosanus Gressitt, 1951
Gerania bosci (Fabricius, 1801)
Herophila fairmairei (Thomason, 1857)
Herophila tristis (Linnaeus, 1767)
Lamia textor (Linnaeus, 1758)
Lamionimus gottschel Kolbe, 1886
Morimus asper (Sulzer, 1776)
Morimus asper funereus Mulsant, 1862
Morimus verecundus (Faldermann, 1836)
Paraleproderia diophthalma (Pascoe, 1857)
Paraleproderia itzingeri Breuning, 1935
Psacothea hilaris hilaris (Pascoe, 1857)

Mesosini

Agelasta perplexa Pascoe, 1858
Cacia watantakkuni Kano, 1933
Coptops japonicus Breuning, 1936
Falsomesosella gracilior Bates, 1884
Mesoeois koshunensis Matsushita, 1933
Mesosa cribrata Bates, 1884
Mesosa curculionoides (Linnaeus, 1761)
Mesosa hirsuta Bates, 1884
Mesosa japonica Bates, 1873
Mesosa longipennis Bates, 1873
Mesosa myops (Dalman, 1817)
Mesosa nebulosa (Fabricius, 1781)
Mesosa senlis Bates, 1884

Monochamini

Anoplophora glabripennis Motschulsky, 1854
Anoplophora horsfieldii (Hope, 1842)
Anoplophora lurida Pascoe, 1856
Anoplophora malasiaca Thomason, 1865
Ceropsius praetorius (Erichson, 1834)
Eupromus ruber (Dalman, 1817)
Mecynippus pubicornis Bates, 1884
Monochamus alternatus Hope, 1842
Monochamus galloprovincialis (Olivier, 1795)
Monochamus grandis Waterhouse, 1881
Monochamus guerryi Pic, 1903
Monochamus nitens (Bates, 1884)
Monochamus saltuarius (Gebler, 1830)
Monochamus sartor sartor (Fabricius, 1787)
Monochamus sartor urussovi (Fischer von Waldheim, 1806)

Monochamus subfuscatus shikokensis Breuning, 1956
Monochamus subfuscatus subfuscatus (Bates, 1873)
Monochamus sutor (Linnaeus, 1758)
Pseudomeges marmoratus Westwood, 1848
Uraeche angusta (Pascoe, 1857)
Uraeche bimaculata Thomason, 1864
Xenicotela pardinina (Bates, 1884)
Xenohammus bimaculatus Schwarzer, 1931

Morimopsini

Dolophrae terrenus Bates, 1884

Parmenini

Lepromoris gibba (Brullé, 1839)
Parmena balleus (Linnaeus, 1767)
Parmena pubescens (Dalman, 1817)
Parmenopsis caucasia Leder, 1880

Petrognathini

Ithocritus ruber Hope, 1839
Morimopsis lacrymans (Thomason, 1864)

Phrissomini

Mesechthistatus binodosus (Waterhouse, 1881)
Mesechthistatus furcifer furcifer (Bates, 1884)
Mesechthistatus furcifer meridionalis (Hayashi, 1951)
Parechthistatus gibbon gibber (Bates, 1873)
Parechthistatus gibbon grossus (Bates, 1884)
Parechthistatus gibbon nakanei Miyake, 1980
Parechthistatus gibbon pseudogrossus Miyake, 1980

Phytoeciini

Cononiza bodanii Pic, 1912
Cononiza detrita (Fabricius, 1792)
Cononiza guernii Breème, 1840
Cononiza warnieri Lucas, 1847
Dirphya imitans (Breuning, 1956)
Dyenmonus trivittatus Aurivillius, 1914
Epiglenea comes (Bates, 1884)
Pogonochoerus neuhauasi Müller, 1916
Pogonochoerus ovatus (Goeze, 1777)
Pogonochoerus perrondi Mulsant, 1839
Pogonochoerus sieversi Ganglebauer, 1886

Pteroplini
Abryna coenosae Newman, 1842
Albana m-griseaum (Mulsant, 1846)
Dexiva variabilis (Schwarz, 1925)
Grammocenus bipartitus Ritsema, 1890
Mesosella similola Bates, 1884
Niphona farcata (Bates, 1873)
Niphona picticornis Mulsant, 1839
Pterolophia angusta (Bates, 1873)
Pterolophia annulata (Chevolat, 1845)
Pterolophia caudata (Bates, 1873)
Pterolophia jugosa (Bates, 1873)
Pterolophia leioepodina (Bates, 1873)
Pterolophia rigida (Bates, 1873)
Pterolophia zebrina (Pascoc, 1858)
Pterolophia zonata (Bates, 1873)
Sthenias franciscamus Thomson, 1865

Saperdini
Cagdosima sauquinoenta Thomson, 1864
Callundine lacordairei Thomson, 1879
Entelopes griseipennis Breuning, 1954
Eumecocera argyroptica (Bates, 1884)
Eumecocera gleoneoides (Gressitt, 1935)
Eumecocera impsistulata (Motschulsky, 1860)
Eumecocera minamii Makihara, 1947
Eumecocera trivittata (Breuning, 1947)
Eumecocera unicolor Kano, 1933
Eutetricapha sedecimpectulata Motschulsky, 1860
Eutetricapha chrystochloris (Bates, 1879)
Eutetricapha metallescens Motschulsky, 1860
Eutetricapha ocelota (Bates, 1873)
Menesia bipunctata (Zoubkoff, 1829)
Menesia discimaculata Aurivillius, 1924
Menesia flavotecta Heyden, 1886
Menesia sulphurata (Gebler, 1825)
Niponostenostola niponensis niponensis (Pic, 1901)
Niponostenostola niponensis pterocrayi (Hayashi, 1960)
Ossonis clytomma Pascoc, 1867
Paraeutetricapha extima (Bates, 1884)
Paraeutetricapha simulans (Bates, 1873)
Paraglenea fortunata (Saunders, 1853)
Paraglenea sinowhoi Bates, 1866
Paramenesia kasugensis (Sei & Kobayashi, 1935)
Paramenesia theaphia (Bates, 1884)
Saperda balsamifera Motschulsky, 1860
Saperda candida (Fabricius, 1787)
Saperda carcharias (Linnaeus, 1758)

Pogonochoerus anatolicus K. Daniel & J. Daniel, 1898
Pogonochoerus caroli Mulsant, 1862
Pogonochoerus decoratus Fairmaire, 1855
Pogonochoerus dimidius Blessig, 1873
Pogonochoerus eugeniae Ganglbauer, 1891
Pogonochoerus fasciculatus (De Geer, 1775)
Pogonochoerus hispidulus (Piller & Mitterpacher, 1873)
Pogonochoerus hispidus (Linnaeus, 1758)
Saperda fayi Bland, 1863
Saperda inornata Say, 1823
Saperda interrupta Gebler, 1825
Saperda lateralis (Fabricius, 1775)
Saperda octopunctata (Scopoli, 1772)
Saperda perforata (Pallas, 1773)
Saperda populnea (Linnaeus, 1758)
Saperda punctata (Linnaeus, 1767)
Saperda puncticollis Say, 1824
Saperda scalaris (Linnaeus, 1758)
Saperda similis Laicharting, 1784
Saperda tetrastigma Bates, 1879
Saperda tridentata Olivier, 1795
Serixia andamanica Gardner, 1930
Serixia aurulenta Pascoe, 1867
Serixia javanica Breuning, 1950
Serixia sedata Pascoe, 1862
Stenostola dubia (Laicharting, 1784)
Stenostola ferrea (Schrank, 1776)
Thyestilla gebleri (Faldermann, 1835)

Tetraopini
Tetrops hauseri Reitter, 1897
Tetrops praeustus (Linnaeus, 1758)
Tetrops starkii (Chevrolat, 1859)

Tmesisternini
Sphingnotus mirabilis (Boisduval, 1835)

Xenoleini
Hirtaeschopalaea nubila Matsushita, 1933

Lepturinae
Encyclopini
Encyclops olivaceus Bates, 1884

Enoploderni
Enoploides sanguineus Faldermann, 1937

Lepturini
Alosterna chalybeella (Bates, 1884)
Alosterna ingrica (Baeckmann, 1902)
Alosterna tabacicolor (De Geer, 1775)
Anastrangalia dubia (Scopoli, 1763)
Anastrangalia reyi (Heyden, 1889)
Anastrangalia sanguinolenta (Linnaeus, 1761)
Anastrangalia scotodes Bates, 1873
Anastrangalia sequens Reitter, 1898
Anoplophora excavata (Bates, 1884)
Anoplophora rufipes (Schaller, 1783)
Anoplophora sexguittata (Fabricius, 1775)
Anoplophoromorpha cyanea (Gebler, 1832)
Anoplophoromorpha monticola Nakane, 1955
Corennys sanguineus Kan, 1933
Corennys sericata Bates, 1884
Cornumnula lineata (Letzner, 1844)
Dokhtouroffia nebulosa Gebler, 1845
Ephies japonicus Nakane & Ohbayashi, 1961
Etorofus vicarius Bates, 1884
Eustrangalis anticereducta Hayashi, 1958
Eustrangalis distenoides Bates, 1884
Idiostrangalia contracta (Bates, 1884)
Ischnostrangalis davidii (Pic, 1934)
Japanostrangalia dentatipennis (Pic, 1901)
Judolia sexmaculata (Linnaeus, 1758)
Judolidia kyushuensis Kusakabe & Ohbayashi, 1992
Kanekoazumensis Matsushita & Tamanuki, 1942
Kanop granulata Bates, 1884
Leptosangrangalia hosohana (Ohbayashi, 1952)
Leptura aethiops Poda, 1761
Leptura annularis annularis Fabricius, 1801
Leptura annularis mimica Fabricius, 1792
Leptura aurulenta Fabricius, 1792
Leptura dimorpha Bates, 1873
Leptura duodecimguttata Fabricius, 1801
Leptura latipennis Matsushita, 1933
Leptura modicenotata Pic, 1901
Leptura ochraceofasciata ochraceofasciata Motshulsky, 1861
Leptura ochraceofasciata ochrotela Bates, 1873
Leptura quadrisfasciata Linnaeus, 1758
Leptura regalis Bates, 1884
Leptura subtilis Bates, 1884
Leptura thoracica Creutzer, 1799
Lepturalia nigripes De Geer, 1775
Mimostrangalia dulcis (Bates, 1884)
Nivellia sanguinosa (Gyllenhal, 1827)
Nusteria distigma (Charpentier, 1825)
Oedecema gebleri Gangelbauer, 1889
Ohyashiyashinigromarginata Hayashi, 1953
Pachytyodes cerambicycformis (Schrank, 1781)
Pachytyodes comotes Bates, 1884
Pachytyodes erraticus (Dalman, 1817)
Pachytyodes longipipes Gebler, 1832
Paracorymbia excisipes (K. Daniel & J. Daniel, 1891)
Paracorymbia stragulata (Germar, 1824)
Paracorymbia tonsa K. Daniel & J. Daniel, 1891
Paranaspia anaspidoides (Bates, 1873)
Parastrangalis lesnei Pic, 1901
Parastrangalis nymphula (Bates, 1884)
Parastrangalis tenuicornis Motshulsky, 1862
Pedostrangalia emmipoda (Mulsant, 1863)
Pedostrangalia femoralis Motshulsky, 1860
Pedostrangalia revestita (Linnaeus, 1767)
Pedostrangalia verticalis (Germar, 1822)
Pseudalosterna misella (Bates, 1884)
Pseudovadonia livida (Fabricius, 1776)
Pyrrhona laeticolor Bates, 1884
Rutpela maculata (Poda, 1761)
Stemurella approximans (Rosenhauer, 1856)
Stemurella bifasciata (Müller, 1776)
Stemurella jaegeri Humbel, 1825
Stemurella melanura (Linnaeus, 1758)
Stemurella nigra (Linnaeus, 1758)
Stemurella novercalis Reitter, 1901
Stemurella septempunctata (Fabricius, 1792)
Stictoleptura cardinalis (K. Daniel & J. Daniel, 1899)
Stictoleptura cordigera (Fuessly, 1775)
Stictoleptura deylollei (Pic, 1895)
Stictoleptura dichroa Blanchard, 1871
Stictoleptura erythroptera (Hagenbach, 1822)
Stictoleptura fonteynai (Mulsant, 1839)
Stictoleptura hybrida (Rey, 1885)
Stictoleptura igai (Tamanuki, 1942)
Stictoleptura maculicornis (De Geer, 1775)
Stictoleptura oblongomaculata (Buquet, 1840)
Stictoleptura pallens (Brullé, 1832)
Stictoleptura palmi (Demelt, 1971)
Stictoleptura picticornis (Reitter, 1885)
Stictoleptura pyrrha (Bates, 1884)
Stictoleptura rubra (Linnaeus, 1758)
Stictoleptura rufa (Brullé, 1832)
Stictoleptura scutellata (Fabricius, 1781)
Stictoleptura tesserula (Charpentier, 1825)
Stictoleptura trisignata (Faimaire, 1852)
Stictoleptura varicornis (Dalman, 1817)
Strangalia attenuata (Linnaeus, 1758)
Strangalia fortunei Pascoe, 1858
Strangalia koyaensis Matsushita, 1933
Strangalia maculata Podá, 1761
Strangalia takeuchi Matsushita & Tamanuki, 1935
Strangalomorpha temuis Solsky, 1873
Vadonia bidignata (Brullé, 1832)
Vadonia imitatrix K. Daniel & J. Daniel, 1891
Vadonia moesica K. Daniel & J. Daniel, 1891
Vadonia steveni (Sperck, 1835)
Vadonia unipunctata (Fabricius, 1787)
Xestoleptura rufiventris Gebler, 1830

Oxymirini
Oxymirus cursor (Linnaeus, 1758)
Oxymirus mirabilis (Motschulsky, 1838)

Rhabolini
Acmaeops angusticollis Gebler, 1833
Acmaeops marginatus Fabricius, 1781
Acmaeops septentrionis Thomson, 1866
Acmaeops smaragdulus Fabricius, 1793
Akimerus schaefferi (Laicharting, 1784)
Brachyta bifasciata (Olivier, 1792)
Brachyta interrogationis (Linnaeus, 1758)
Brachyta punctata (Faldermann, 1833)

Brachyta variabilis (Gebler, 1817)
Cortodera alpina Ménetries, 1832
Cortodera femorata (Fabricius, 1787)
Cortodera flavimana (Waltz, 1838)
Cortodera holosericea (Fabricius, 1801)
Cortodera humeralis (Schaller, 1783)
Cortodera umbripennis Reitter, 1890
Cortodera villosa Heyden, 1876
Dinoptera anthracina Mannheimer, 1849
Dinoptera collaris (Linnaeus, 1758)
Dinoptera minuta Gebler, 1832
Evodinis borealis (Gyllenhal, 1827)
Evodinis clathratus (Fabricius, 1792)
Fallacidae elegans Faldermann, 1837
Gaurotes atripennis (Matsushita, 1933)
Gaurotes virginiae (Linnaeus, 1758)
Gnathacmeae pratensis (Laicharting, 1784)
Gnathacmeae brachypterus K. Daniel & J. Daniel, 1899
Grammoptera abdominalis (Stephens, 1831)
Grammoptera auricollis Mulsant & Rey, 1863
Grammoptera huidii Sama, 1985
Grammoptera ruficornis (Fabricius, 1781)
Grammoptera ustulata (Schaller, 1783)
Japonocorus caeruleipennis Bates, 1873
Lemula decipiens Bates, 1884
Lemula nishimurai Seki, 1944
Lemula rufithorax Pic, 1901
Pachyta bicuneata Motschulsky, 1860
Pachyta erebia Bates, 1884
Pachyta iamed (Linnaeus, 1758)
Pachyta quadrimaculata (Linnaeus, 1758)
Paragaurotes dorius Bates, 1884
Paragaurotes ussuriensis Blessig, 1873
Pidonia amentata (Bates, 1884)
Pidonia bouvieri Pic, 1901
Pidonia dehylis Kraatz, 1879
Pidonia discoidalis Pic, 1901
Pidonia grallatrix Bates, 1884
Pidonia insuturata Pic, 1901
Pidonia limbaticollis ohbayashii (Matsushita, 1933)
Pidonia lurida (Fabricius, 1792)
Pidonia maculithorax (Pic, 1901)
Pidonia masakii Hayashi, 1955
Pidonia miwai (Matsushita, 1933)
Pidonia pulvori (Solsky, 1873)
Pidonia semiobscura Pic, 1901
Pidonia signifera Bates, 1884
Pseudogaurotina excellens (Brancsik, 1874)
Pseudosieversia japonica (Ohyayashi, 1937)
Rhagium bifasciatum Fabricius, 1775
Rhagium fasciculatum Faldermann, 1837
Rhagium heyrovskyi Podany, 1964
Rhagium inquisitor (Linnaeus, 1758)
Rhagium mordax (De Geer, 1775)
Rhagium sycophanta (Schrank, 1781)
Stenocorus amurensis Kraatz, 1879
Stenocorus insitusivus (Germar, 1824)
Stenocorus meridianus (Linnaeus, 1758)
Stenocorus quercus (Götz, 1783)
Stenocorus validicornis univittatus (Reitter, 1914)
Toxotinus reini (Heyden, 1879)
Rhamnusius
Rhamnusius bicolor bicolor (Schrank, 1781)
Rhamnusius bicolor demaggii (Tippmann, 1956)
Sachalinobius
Sachalinobius koltzei (Heyden, 1887)
Xylosteus
Xylosteus bartoni (Oebenberger & Maran, 1933)
Philinae
Philini
Mantitheus pekinensis (Fairmaire, 1889)
Prioninae
Aegosomatini
Aegosoma scabricorne (Scopoli, 1763)
Aegosoma sinicum (White, 1853)
Megopus marginale (Fabricius, 1775)
Nepiodes costipennis White, 1853
Anacolinini
Psephactus remiger (Harold, 1879)
Callipogonini
Callipogon relictus (Semenov, 1899)
Ergatini
Ergates faber (Linnaeus, 1760)
Eurypodini
Euryypoda batesi (Gahan, 1894)
Macrotomini
Bandar pascoei pascoei (Lansberge, 1884)
Bandar pascoei formosa (Gressitt, 1938)
Prinobius myardi (Mulsant, 1842)
Rhaesus serricollis (Motschulsky, 1838)
Xixuthrus microcerus (White, 1853)
Meroscelisini
Tragosoma depsarium (Linnaeus, 1767)
Prionini
Dorysthenes buqueti (Guérin-Méneville, 1844)
Dorysthenes hydropicus (Pascoe, 1857)
Lobarthon balassogloi (Jakovlev, 1885)
Mesopronus angustatus (Jakovlev, 1887)
Microarthron komaroffi (Dohrn, 1885)
Pogonarthron bedeli (Semenov, 1900)
Prionomma orientalis (Olivier, 1795)
Prionus besikanus (Fairmaire, 1855)
Prionus coriarius (Linnaeus, 1758)
Prionus insularis (Motschulsky, 1858)
Prionus sejunctus (Hayashi, 1959)
Prionus yakushimanus (Ohbayashi, 1964)
Priotyrranus clustereoides (Thomson, 1877)
Pseudoprionus biennerti (Heyden, 1885)
Psilotarsus brachypterus (Gebler, 1830)
Psilotarsus turkestanicus (Semenov, 1888)
Trichohammus granulosus (Thomson, 1860)
Spondylidinae
Anisarthrinini
Alexerus moesiaceus (Frivaldszy, 1837)
Anisarthron barbipes (Schrank, 1781)
Asemini
Arhopalus rusticus (Linnaeus, 1758)
Arhopalus syriacus (Reitter, 1895)
Asemum striatum (Linnaeus, 1758)
Cephalallus unicolor (Gahan, 1906)
Megasemum quadricostulatum (Kraatz, 1879)
Nothorhina punctata (Fabricius, 1798)
Tetropium castaneum (Linnaeus, 1758)
Tetropium fascium (Fabricius, 1787)
Tetropium gabieli (Weise, 1905)
Tetropium gracilicorne (Reitter, 1889)
Atimiini
Atima okayamensis (Hayashi, 1972)
Saphanini
Oxyleurus nodiert (Mulsant, 1839)
Saphanus piceus ganglbaueri (Brancsik, 1886)
Saphanus piceus piceus (Laicharting, 1784)
Spondylidini
Spondylis suprestoides (Linnaeus, 1758)
Disteniidae
Disteniini
Distenia gracilis (Blessig, 1872)
Tengius kuroswaayi (Makihara, 1986)
Tengius ohkuboi (Matsushita, 1938)
Vesperiidae
Vesperus conicollis (Fairmaire & Coquerel, 1866)
Vesperus fuentei (Pic, 1905)
Vesperus luridus (Rossi, 1794)
Vesperus strepens (Fabricius, 1792)
Vesperus xatarti (Mulsant, 1839)
Leaf-rolling weevils in the Pluciński Collection

The Rhynchitidae and Attelabidae collection (Table 2, Figs 3-8) comprises 2346 specimens of 308 identified species and subspecies. They come mostly from Europe and Asia (particularly South-East and Japan), but unlike cerambycid collection, African (incl. Madagascar) and American species are also relatively well represented. The family Rhynchitidae is represented by 1000 specimens of 106 species and subspecies, while Attelabidae by 1346 specimens (975 Apoderinae and 371 Attelabinae) of 202 species and subspecies. Tribes Rhynchitini and Apoderini are especially species-rich in the Pluciński Collection. The detailed list of taxa is given below.
Rhynchitidae

**Rhynchitinae**

* Auletini
  * Aletinus akinini (Faust, 1885)
  * Aletinus maculipennis (Jacquelin du Val, 1854)
  * Auletus tubicen Boheman, 1829
  * Auletobius irkutensis Faust, 1893
  * Auletobius sanguisorbae (Schrank, 1798)
  * Eomesauletus politus (Lepeltier & Audient-Serville, 1825)

* Byciscini
  * Aspidobyctiscus clavicornis (Passco, 1875)
  * Aspidobyctiscus coerulans (Voss, 1929)
  * Aspidobyctiscus lacunipennis (Jekel, 1860)
  * Aspidobyctiscus paviei (Aurivillius, 1891)
  * Byctiscus betulae (Linnaeus, 1758)
  * Byctiscus congener Jekel, 1860
  * Byctiscus fausti Sharp, 1889

* Byctiscinae

* Eomesauletus politus
  * Eurostauletus rubrorufus (Solsky, 1880)
  * Hamiltoniauletus cassiniae (Le Conte, 1876)
  * Mesauletobius pubescens (Kiesenwetter, 1851)
  * Pseudauletes lucus (Gyllenhal, 1839)
  * Pseudomesauletus uniformis (Roelofs, 1874)

* Byctiscus impressus (Fairmaire, 1900)
* Byctiscus populi (Linnaeus, 1758)
* Byctiscus princeps (Solsky, 1872)
* Byctiscus rugosus (Geber, 1830)
* Byctiscus venustus (Passco, 1875)
* Listrobyctiscus corvinus (Passco, 1885)
* Nelistrobyctiscus gaggates (Passco, 1875)

**Deporaini**

* Caenorhinus glastinus (Le Conte, 1857)
* Caenorhinus mannerheimii (Hummel, 1823)
* Caenorhinus marginatus (Passco, 1883)
* Capylarodepus klapperichi (Voss, 1941)
* Chokkirius truncatus (Sharp, 1889)
* Chonostropheus chujoi Voss, 1956
* Chonostropheus seminiger (Reitter, 1881)
* Chonostropheus tristis (Fabricius, 1794)
* Deporaus affectatus Faust, 1887
* Deporaus betulae (Linnaeus, 1758)
* Deporaus bicolor (Voss, 1938)
* Deporaus unicolor (Roelofs, 1874)
* Exrhynchites puberulus (Faust, 1895)
* Paradeporus depressus (Faust, 1882)

Heteropodera cantonensis (Voss, 1927)
Heteropodera crenatus (Jekel, 1860)
Heteropodera geniculatus (Jekel, 1860)
Heteropodera interpositus Kessel in litt.
Heteropodera pauperulus (Voss, 1927)
Heteropodera pullus (Jekel, 1860)
Heteropodera sulcicollis (Jekel, 1860)
Leptapodera affinis (Schilsky, 1906)
Leptapodera balticus (Roelofs, 1874)
Leptapodera basalis (Jekel, 1860)
Leptapodera carbonicolor (Motschulsky, 1860)
Leptapodera collaris (Jekel, 1860)
Leptapodera nigroapicatus (Jekel, 1860)
Leptapodera praecellens (Sharp, 1889)
Leptapodera quadripunctatus (Gyllenhal, 1833)
Leptapodera rubida (Motschulsky, 1860)
Leptapodera rufobasalis (Heller, 1908)
Leptapodera rufus (Fabricius, 1801)
Leptapodera sejegatus (Voss, 1924)
Leptapodera sinicus (Voss, 1927)
Leptapodera submaculatus (Voss, 1927)
Opanasenkovius verrucosus (Pascoe, 1881)
Paracycnotrachelus chimensis (Jekel, 1860)
Paracycnotrachelus collaris (Jekel, 1860)
Paracycnotrachelus consimilis Voss, 1929
Paracycnotrachelus curvaticeps (Pic, 1932)
Paracycnotrachelus cygnus (Fabricius, 1801)
Paracycnotrachelus longiceps (Motschulsky, 1860)
Paracycnotrachelus moluccaram Voss, 1929
Paracycnotrachelus montanus (Jekel, 1860)
Paracycnotrachelus nieteri (Jekel, 1860)
Paracycnotrachelus rufobasalis (Heller, 1908)
Paracycnotrachelus wallacei (Faust, 1890)
Pararachelophorus brachmanus Voss, 1924
Pararachelophorus longicornis (Roelofs, 1874)
Pararachelophorus nodicornis Voss, 1924
Philippinocorynus sejunctus (Faust, 1883)
Physopodera aemula (Faust, 1894)
Physopodera biguttata (Fabricius, 1801)
Physopodera bilineata (Faust, 1883)
Physopodera crucifer (Heller, 1922)
Physopodera flavotorsosa (Faust, 1898)
Physopodera gracilicornis (Voss, 1929)
Physopodera proxima (Voss, 1929)
Physopodera ruficlavus (Voss, 1929)
Psuedocyctotrachelus ledyardi (Heller, 1915)
Strigapodera indicus (Heller, 1908)
Strigapodera javanicus (Jekel, 1860)
Strigapodera truncatocorynus (Fabricius, 1798)

Clitostylini
Allapodera cyanoevires (Jekel, 1860)
Allapodera dentipes (Faust, 1883)
Maculphrysus inspersus (Voss, 1929)

Maculphrysus quadriraculatus (Faldermann, 1835)
Morphocorynus nigriscollis (Roelofs, 1874)
Pseuodophyrsus parvulus (Voss, 1928)

Hoplapodera
Homopodera ansius (Faust, 1894)
Hoplapodera calliginosus (Faust, 1894)
Hoplapodera echinatus (Gyllenhal, 1833)
Hoplapodera gemmatus (Thunberg, 1874)
Hoplapodera gemmosus (Jekel, 1860)
Hoplapodera hystrix (Fabricius, 1801)
Paroplapodera amoenus Voss, 1926
Paroplapodera armatus Voss, 1926
Paroplapodera bistrispinipenis (Faust, 1894)
Paroplapodera bituberculatus Voss, 1926
Paroplapodera breviceps Voss, 1926
Paroplapodera coniceps Voss, 1926
Paroplapodera dorai Pascoe, 1885
Paroplapodera fallax (Gyllenhal, 1839)
Paroplapodera fasciatus Voss, 1928
Paroplapodera pardalis (Snellen van Vollenhoven, 1865)
Paroplapodera semiannulatus (Jekel, 1860)
Paroplapodera spiniferus (Roelofs, 1880)
Paroplapodera tentator (Faust, 1895)
Paroplapodera turbidus Voss, 1926
Paroplapodera validus Voss, 1926
Paroplapodera vanillifem (Roelofs, 1875)
Paroplapodera vitticeps (Jekel, 1860)
Phymatopodera flavimanus (Motschulsky, 1860)
Phymatopodera latipennis (Jekel, 1860)
Phymatopodera subornata (Sharp, 1889)
Rhamnapodera damoos Voss, 1839
Rhamnapodera sinifer (Faure, 1871)
Rhamnapodera spiculata (Jekel, 1860)
Rhamnapodera verticalis Voss, 1924
Strigapoderopsis submarginatus (Gyllenhal, 1839)
Tomapodera coerulipennis (Schilsky, 1903)
Tomapodera rufocollis (Fabricius, 1871)
Tomapodera subconicollis Voss, 1926

Trachelophorini
Madagasocycnelus elegans (Voss, 1929)
Madagasocycnelus humeralis (Olivier, 1807)
Metriotrichelus festivus (Klug, 1833)
Trachelophoridius flavicornis (Gyllenhal, 1839)
Trachelophoridius taratavonensis Voss, 1929
Trachelophorus abdominatus (Gyllenhal, 1839)
Trachelophorus ardez (Gyllenhal, 1839)
Trachelophorus fausti Voss, 1929
Trachelophorus giraffa (Jekel, 1860)
Trachelophorus madagassus (Hustache, 1922)
Trachelophorus signatus Voss, 1929
Vossitrachelophorus limbatis (Faust, 1889)
Attelabinae

Attelabini

*Attelabus cyanellus* Voss, 1925
*Attelabus nitens* (Scopoli, 1763)
*Attelabus sulcifrons* (Argod-Vallon, 1895)
*Catalabus quadriplagiatus* Voss, 1953
*Cyrtolabus christophi* (Faust, 1884)
*Cyrtolabus mutus* (Faust, 1890)
*Henicolabus gigantensis* (Faust, 1882)
*Henicolabus gigantoides* (Voss, 1925)
*Henicolabus hypomelas* (Fairmaire, 1878)
*Henicolabus lewisi* (Sharp, 1889)
*Henicolabus octomaculatus* (Jekel, 1860)
*Henicolabus simplex* Voss, 1925
*Humerilabus fausti* (Voss, 1925)
*Isolabus indigaceus* (Pascoe, 1883)
*Isolabus jekeli* Legalov, 2002
*Isolabus magnus* Voss, 1925
*Lamprolabus biafastatus* (Frivaldszky, 1892)
*Lamprolabus bispinosus* (Gyllenhal, 1833)
*Lamprolabus gestroi* (Faust, 1894)
*Lamprolabus spiculatus* (Boheman, 1845)
*Lamprolabus trapezicollis* (Heller, 1922)
*Omolabus centomyrciae* (Voss, 1925)
*Omolabus corvinus* (Gyllenhal, 1839)
*Omolabus laeticollis* (Gyllenhal, 1839)
*Omolabus nitidus* (Fabricius, 1801)
*Paramocoelabus discolor* (Fahrus, 1839)
*Paramocoelabus feae* (Faust, 1894)
*Phialodes rufipennis* Roelofs, 1874

Euopini

*Euops championii* Voss, 1929
*Euops chinensis* Voss, 1922
*Euops cuprinus* Voss, 1956
*Euops elongatus* Voss, 1925
*Euops guineensis* Voss, 1922
*Euops lespedezae koreanus* Sawada & Morimoto, 1985
*Euops lespedezae lespedezae* Sharp, 1889

Euops punctatostriatius (Motschulsky, 1860)
*Euops pustulosus* Sharp, 1889
*Euops splendidus* Voss, 1930
*Euops togoensis* Faust, 1895
*Euops viridifuscus* Voss, 1922

Euscelini

*Clinolabus buqueti* (Jekel, 1860)
*Clinolabus melanocoryphus* (Germain, 1824)
*Eleuscelus lineatus* (Voss, 1925)
*Emphyleuscelus corallinus* (Gyllenhal, 1839)
*Euscelus mundanus* (Sharp, 1889)
*Euscelus peruansus* Voss, 1925
*Euscelus scutellatus* (Klug, 1829)

Euscelophilini

*Calolabus cupreus* (Roelofs, 1874)
*Euscelophilus burmanus* Marshall, 1948
*Euscelophilus camelus* Voss, 1937
*Euscelophilus chinesis* (Schilsky, 1906)
*Euscelophilus gibbicollis* (Schilsky, 1906)
*Trachelolabus floridus* Zhong, 1993

Hybolabini

*Heterolabus fabricii* Legalov, 2002
*Himatolabus axillaris* (Gyllenhal, 1839)
*Himatolabus rhoides* (Boheman, 1829)
*Homoeolabus analis* (Illiger, 1794)
*Hybolabus ater* (Olivier, 1799)
*Hybolabus columbinus* (Erichson, 1848)
*Hybolabus cyaneus* (Klug, 1825)
*Hybolabus peruansus* Voss, 1925
*Synolabus bipustulatus* (Fabricius, 1776)

Lagenoderini

*Lagenoderus gnomoides* White, 1840
*Phymatopsinus pustula* (Ancey, 1881)
*Pleurolabus algoensis* (Périn-Guéry, 1888)
*Pleurolabus costulatus* (Jekel, 1860)
*Scotopsinus verrucifer* (Jekel, 1860)

Pilobalini

*Pseudopilolabus sumptuosus* (Gory, 1834)
*Pseudopilolabus viridans* (Gyllenhal, 1839)

REFERENCES

Pawel STACHOWIAK and his weevil collection in the Museum of Natural History, University of Wroclaw

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ABSTRACT. Paweł STACHOWIAK (1952-2014), a forester and entomologist from Poznań, was the only coleopterist after WWII who extensively studied weevils of Western Poland and published numerous comprehensive faunistic surveys of various regions, national parks and nature reserves. He passed away in 2014 but his collections were acquired by the Museum of Natural History, University of Wroclaw (MNHW) already in 2004. Their main part consists of 52119 dry-mounted specimens representing 290 genera and 1111 identified nominal species and subspecies of Curculionoidea. This is an important collection of voucher specimens that have been used in 40 faunistic articles on the weevils of Poland published by STACHOWIAK. MNHW is also in possession of a large and still not organized collection of unsorted dried weevils and other beetles from STACHOWIAK’s field studies in 1970-2004, preserved in thousands of vials and boxes. This part of the collection is estimated at over half a million specimens. A biography of P. STACHOWIAK with details of his scientific activities and his full bibliography are given.

Key words: STACHOWIAK, Insecta, Coleoptera, Curculionoidea, weevils, collection, bibliography, Wroclaw University, Poland.

INTRODUCTION

Paweł Stanisław STACHOWIAK (1952-2014) (Fig. 1) was a Polish entomologist and forester. Born on the 5th of May 1952 in Krzysztofowice, he obtained his basic education in a primary school in Zielona Góra. Already during his school years STACHOWIAK showed a great interest in nature and especially insects, and after completing the Forestry Technical School in Rzepin, in 1971 he entered the Forestry Faculty of the Poznań University of Life Sciences. Already in the first grade STACHOWIAK became a member of the Forestry Students’ Research Group and the Polish Entomological Society, to
develop his entomological interests. In 1977 he got his MSc degree for a thesis entitled “Weevils (Curculionidae) of trees and bushes in the Zielonka Forest”. Already as a student Stachowiak was employed as a technical assistant in the Institute of Forest Protection, Poznań University of Life Sciences. In 1976-1981 he worked in the Department of Experimental Forestry in Siemianice as a specialist, and then for one year in the Wielkopolski National Park. In 1983-1992 Stachowiak was employed, again as a technical specialist, in the Department of Forest Entomology, Poznań University of Life Sciences, where he submitted a dissertation “Folivore beetles in sapling cultivations in the forest department Krzystowice and the Department of Experimental Forestry in Siemianice” and in 1986 was awarded a PhD degree. Since 1990-ties he has been struggling with an incurable disease, and in 2004, aware of his terminal condition, arranged for his collection, library and his handwritten notebooks to be transferred to the Museum of Natural History, University of Wrocław (MNHW). Paweł Stachowiak died on the 25th of June 2014.

Stachowiak’s early fascination with weevils lasted his entire life and his scientific activities were focused on this large and diverse group of beetles. He shared this interest with the junior author (MW), we first met around 1980 in Siemianice and then stayed in contact for many years, occasionally collaborating on several faunistic projects. Paweł Stachowiak was an indefatigable and enormously effective field collector, whose activities were restricted almost exclusively to the territory of Poland. He has published 54 papers (a complete list can be found in the References), among them 40 entirely or partly focused on weevils. During his fieldwork he discovered six species new to the
fauna of Poland (Stachowiak 1978, 1979, 1988a, 1997, Stachowiak & Wanat 2001, Wanat et al. 2003). Even a greater accomplishment was a rediscovery in the Białowieża National Park the weevil species Euryommatus mariae Roger, described 130 years earlier from the Beskidy Mts and since then never collected again (Stachowiak 1997). Stachowiak was probably the only coleopterist since the middle of 19th c. who was lucky enough to collect this relic and legendary weevil using a beating net, while all later records were based on specimens taken from traps or reared. Stachowiak also significantly contributed to the knowledge of the weevil fauna of various regions, national parks and nature reserves in Poland: Wielkopolski National Park (Stachowiak & Baraniak 1980), Babia Góra National Park (Stachowiak 1980), Zielonka Forest near Poznań (Stachowiak 1984), Wolin National Park (Stachowiak 1987a), Karkonosze National Park (Stachowiak 1988b, 1993a), three forest reserves near Kępno, Central Poland (Stachowiak 1992d), Bieszczady Mts (Stachowiak 1994a), Bielinek Nature Reserve (Stachowiak 1994b), Bukowa Forest near Szczecin (Stachowiak 1995b) or Białowieża Primeval Forest, including its Belarusian part (Stachowiak 1995c, 1997, Stachowiak & Gutowski 1999). He also published several synoptic studies in which he summarized distributional data on selected weevil taxa in Poland (Stachowiak 1987b, 1993b, 1999, 2001, 2002). Stachowiak’s work was based not only on his own field studies but also involved important historical museum collections - he identified
3. A large part of the collection consists of thousands of labelled vials and boxes with specimens documenting Stachowiak’s faunistic and ecological projects.
weevils of the Wielkopolska Region in the collections of MYRZIK (STACHOWIAK 1995a) and SZULCZEWSKI (STACHOWIAK 1996). Occasionally, he also studied cases of teratology in weevils (STACHOWIAK 1982).

STACHOWIAK’s numerous studies were devoted to forest ecology, focused mainly on the role of weevils in forest ecosystems (SZMIDT & STACHOWIAK 1980, 1981, BARANIAK & STACHOWIAK 1985ab, STACHOWIAK 1988c, 1991ab, 1992a-c, 1993c, PRZEZBORSKI & STACHOWIAK 1989, LUTEREK et al. 1995). However, he was also interested in other economically important groups of insects and various specific problems related to forest management (BARANIAK & STACHOWIAK 1983, 1985cd, 1988, BANASZAK et al. 1984, STACHOWIAK & SZMIDT 1985, KORCZYŃSKI et al. 1984ab, BALAZY et al. 1985, BARANIAK et al. 1985, STACHOWIAK & STACHOWIAK 1997). He also participated in a study of food preferences of the white stork Ciconia ciconia (L.) (PINOWSKA et al. 1991). In STACHOWIAK’s bibliography one can also find an article on a monument commemorating most merited persons involved in nature conservation in Poland (STACHOWIAK 1981). His last publication was a faunistic record of a rare staphylinid beetle occurring on Babia Góra Mt. (MAZUR & STACHOWIAK 2009).

The STACHOWIAK Collection is one of the most recent acquisitions of MHNH and the largest separate collection in the Museum in terms of the number of specimens. Apart from the main mounted, organized and identified collection of weevils (Fig. 2) and approximately 40 drawers and boxes with many other insects, it comprises also thousands of glass vials and matchboxes full of field samples collected in 1970-2004 (Fig. 2). This part is still only provisionally sorted, and the samples frequently contain beetles representing various other families. The number of specimens in this unmounted collection is estimated to likely exceed half a million.

The main weevil collection of STACHOWIAK comprises 52119 dry-mounted specimens representing all families of Curculionoidea living in Europe. The specimens are identified and over 95% of them come from Poland, while only a small fraction is from abroad, mostly from other European countries, Turkey, Morocco and USA, obtained as a gift or in exchange from various weevil specialists. This collection is completely catalogued and specimen details of 1111 species and subspecies are available from MHNH electronic databases. The STACHOWIAK Collection does not contain primary type specimens; there are only 2 paratypes of Catapion koestlini DIECKMANN and 2 paratypes of Omphalapion pseudodispar WANAT, currently included in the main type specimen MHNH collection. Voucher specimens represent a reference material for 40 publications, an invaluable collection documenting approximately three decades of extensive faunistic studies of Polish weevils. Further details of the STACHOWIAK Collection can be found in Table 1.

The STACHOWIAK Collection is one of the largest collections of Curculionoidea in Poland and the only substantial post-war source of distributional data concerning weevils of western Poland, where for many years only P. STACHOWIAK has been studying this enormously large and diverse superfamily. It has a significant scientific value and it is very fortunate that after the premature death of its owner, the collection has not been scattered or destroyed, but is now deposited in a natural history museum, where under a proper care it has the greatest chances to serve in further studies.
REFERENCES


Table 1. Summary of taxa and specimens in the Curculionoidea MNHW Stachowiak Collection.

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