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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 Wrocław (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);



1-3. W. KOLBE (1), R. SCHOLZ (2, reproduced from Anonym 1935) and G. POLENTZ (3)

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 Pątnów 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 *Oomorplus concolor* (STURM, 1807)), and *Enicmus kolbei* WANKA, 1929 (junior synonym of *Latridius gemellatus* (MANNERHEIM, 1844)).



4-5. General view of drawers from the KOLBE Collection

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, Malczyce, 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



6-7. Specimens of Staphylinidae (6) and Tenebrionidae (7) from the KOLBE Collection



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 *et 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.

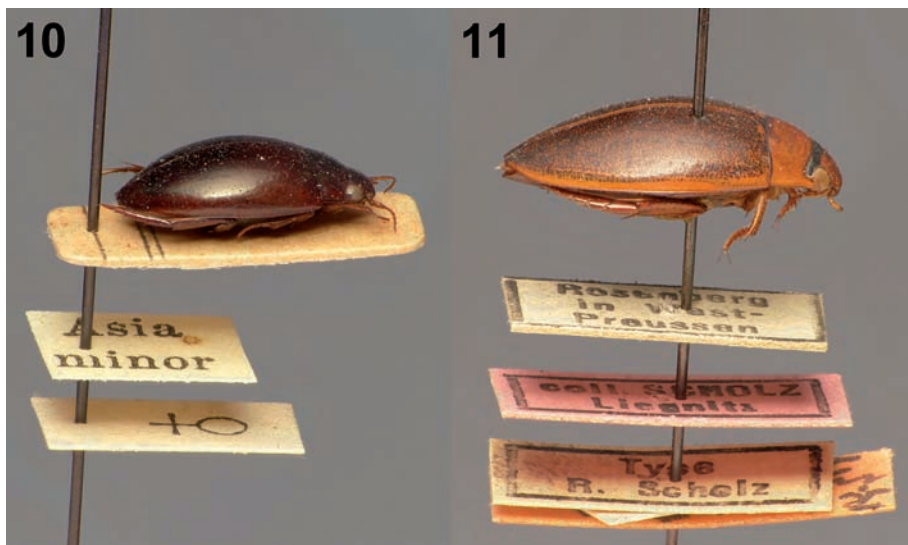
In 1900-1935 SCHOLZ published over 150 papers focused mainly on beetles. Most of them are short faunistic records of interesting beetle species discovered in Silesia,



8-9. A drawer and specimens of Dytiscidae from the SCHOLZ Collection

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. FERY 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.

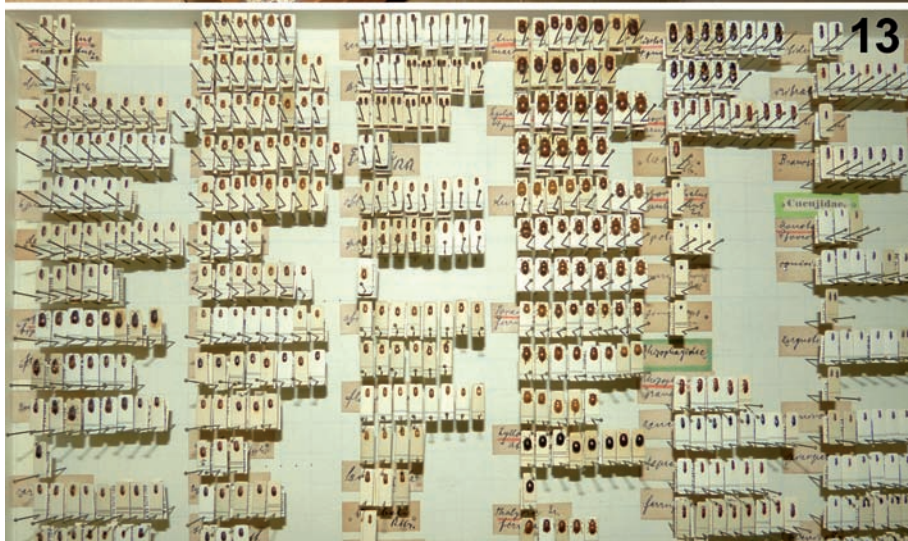
POLENTZ was a member of the Schlesische Verein für Insektenkunde since 1901, and since 1928 he cooperated with the Zoological Museum of the University of Wrocław (present-day MNHW). This cooperation gave him an access to a large library and collections of ANSORGE, DIETL, FUISTING, MATUSCHKA, KOLBE and 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 Kąty 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 Wałcz 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.



12-13. General view of the POLENTZ Collection (12) and contents of Nitidulidae drawer (13)



## HISTORICAL BEETLE COLLECTIONS AFTER 1945

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 (JAŁOSZYŃSKI *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 & COLONNELLI 2004, OSELLA & BELLO 2010).

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## REFERENCES

- ANONYM, 1929. Wilhelm KOLBE †. Kol. Rundschau, **15**: 245.  
ANONYM, 1935. Richard SCHOLZ †. Ent. Bl., **31**: 177.  
BURAKOWSKI, B., MROCKOWSKI, M., STEFAŃSKA, J., 1971-2000. Katalog Fauny Polski, cz. XXIII, Chrząszcze Coleoptera. Warszawa, vol. 1-22, 6536 pp.

- CALDARA, R., 1979. Revisione tassonomica delle specie paleartiche del genere *Tychius* GERMAR (Coleoptera Curculionidae). Mem. Soc. Ital. Sci. Nat. Mus. Civ. St. Nat. Milano, **25(3)**: 53-218.
- CALDARA, R., O'BRIEN, Ch. W., 1998. Systematics and evolution of weevils of the genus *Bagous*. VI. Taxonomic treatment of the species of the western Palearctic Region (Coleoptera Curculionidae). Mem. Soc. Entomol. Ital., **76**: 131-347.
- FERY, H., 1992. Revision der *saginitus*-Gruppe der Gattung *Coelambus* THOMSON (Coleoptera: Dytiscidae). Linzer biol. Beitr., **24(1)**: 339-358.
- HINKE, O., 1919. Wilhelm KOLBE. Lebensbild eines schlesischen Coleopterologen. Ent. Bl., **15**: 7-9.
- HORION, A., 1953. Faunistik der Mitteleuropäischen Käfer. Band III: Malacodermata, Sternoxia (Elateridae bis Throscidae). Ent. Arb. Mus. Frey, Sonderband, 340 pp.
- HORN, W., KAHLE, I., FRIESE, G., GAEDIKE, R., 1990. *Collectiones entomologicae*. Ein Kompendium über den Verbleib entomologischer Sammlungen der Welt bis 1960. Akademie der Landwirtschaftswissenschaften der DDR, Eberswalde, 573 pp.
- JAŁOSZYŃSKI, P., RUTA, R., 2012. Karl LETZNER (1812-†1889), pionier śląskiej entomologii. Wiad. entomol., **31**: 198-201.
- JAŁOSZYŃSKI, P., WANAT, M., KUBISZ, D., RUTA, R., KONWERSKI, Sz., 2013. A synopsis of the family Aderidae in Poland (Coleoptera: Tenebrionoidea). Genus, **24(2)**: 199-216.
- KINEL, J., 1957. W trzy lata po objęciu pracy w Muzeum Zoologicznym Uniwersytetu we Wrocławiu. Przegląd Zoologiczny, **1 (4)**: 305-312.
- KOLBE, W., 1892. Unter Moos lebende Käfer. Z. Ent., **17**: 4-12.
- , 1893. Die Entwicklung von *Mylabris viciae* OLIV. Z. Ent., Breslau, **18**: 1-3.
- , 1894. Beiträge zur Larvenkenntniss schlesischer Käfer. Z. Ent., Breslau, **19**: 11-16.
- , 1895. Beiträge zur Larvenkenntniss schlesischer Käfer. Z. Ent., Breslau, **20**: 1-8.
- , 1896. Mittheilungen über die Entwicklung schlesischer Käfer. Z. Ent., Breslau, **21**: 1-12.
- , 1897. Das verlorene Wasser bei Panten. Beitrag zur schlesischen Käferfauna. Z. Ent., Breslau, **22**: 14-21.
- , 1899. Ueber das Eintreten eines Sommerschlafes bei Chrysomeliden. Z. Ent., Breslau, **24**: 26-37.
- , 1900. Die Lebensgeschichte der *Hydrothassa hannoverana* FABR. Z. Ent., Breslau, **25**: 19-23.
- , 1902. Entwicklungs- und Lebensweise der *Phyllobrotica 4-maculata* L. Z. Ent., Breslau, **27**: 1-8.
- KOŠTÁL, M., HOLECOVÁ M., 2001. Neotype designation of *Onyxacalles pyrenaicus* and description of its sibling species *Onyxacalles boehmei* sp. nov. from Central Europe (Coleoptera: Curculionidae). Entomol. Probl. **32(1)**: 73-78.
- KUBISZ, D., 2006. Oedemeridae i Scaphitidae Polski (Coleoptera, Tenebrionoidea). Monografie Faunistyczne, **24**, 166 pp.
- KUBISZ, D., RUTA, R., JAŁOSZYŃSKI, P., KONWERSKI, S., KRÓLIK, R., 2010. A faunistic review of beetle families Tetratomidae and Melandryidae (Coleoptera: Tenebrionoidea) of Poland. Polish Ent. J., **79**: 107-138.
- KUŠKA, A., 1995. Omomilki (Coleoptera, Cantharidae): Cantharinae i Silinae Polski. Monografie Faunistyczne, **21**, 201 pp.
- NOWOTNY, H., POLENTZ, G., 1933. Beiträge zur schlesischen Käferfauna. Ent. Anz., **13**: 12-15, 31-35.
- OSELLA, G., BELLO, C., 2010. Revisione di *Minyops* SCHOENHERR, 1823 e *Paraminyops* nov. gen. (Coleoptera, Curculionidae, Molytinae). Mem. Mus. Civ. St. Nat. Verona - 2 ser., Sez. Sci. Vita, **19**: 5-136.
- PAWŁOWSKI, J., 1975. Trechinae (Coleoptera, Carabidae) Polski. Monografie Fauny Polski, **4**, 210 pp.
- PAX, F., 1949. Erinnerungen an die Wanderjahre eines Schlesiers. Koleopterologische Zeitschrift, **1**: 53-66.
- , 1960. Zum 80. Geburtstage des schlesischen Coleopterologen Georg Polentz. Mitt. Dtsch. Ent. Ges., **19(2)**: 22-24.
- POLENTZ, G., 1928. Käferschutz. Z. Ent., Breslau, **16(2)**: 10-12.
- , 1929. Käferfänge um eine Grosstadt. Int. Ent. Z., **23**: 128-132.
- , 1936. Beiträge zur Coleopterenfauna schlesischer Maulwurfsnester. Mitt. Ent. Ges. Halle, **14**: 12-20.
- , 1939. *Dromius Kuntzei* spec. nov. (Col. Carabidae). Mitt. Ent. Ges. Halle, **17**: 42-43.
- RUTA, R., GAWROŃSKI, R., JAŁOSZYŃSKI, P., MILKOWSKI, M., 2010. Contribution to the knowledge of Corylophidae (Coleoptera: Cucujoidea) of Poland. Polish Ent. J., **79(3)**: 223-234.
- SCHOLZ, R., 1900. Monströses Abdomen bei *Stenocorus fasciatus* F. (Col.). Ill. Z. Ent., Breslau, **5**: 298.

- , 1904. Der Tonapparat (Stridulationsorgan) bei *Leptura maculata* PODA. (Col.). Ins.- Börse, **21**: 268-269.
- , 1905a. Der Fang der Ameisenkäfer. Ins.-Börse, **22**: 115-116.
- , 1905b. Der Tonapparat von *Scolytus Ratzeburgi* JANSON und die Entwicklung des Tonapparates bei einigen *Scolytus*-Arten. (Col.). Ins.-Börse, **22**: 143-144.
- , 1916a. *Ptilinus fissicollis* REITT., ein für Deutschland neuer Käfer. Ent. Mitt., **5**: 252.
- , 1916b. Wissenschaftl. Ergebnisse der Bearbeitung von O. LEONHARD'S Sammlungen. 8. Zweiter Beitrag zur Kenntnis und Verbreitung paläarktischer Wasserkäfer (Haliplidae, Dytiscidae). Ent. Mitt., Berlin-Dahlem, **5**: 163-182.
- , 1923. 6. Beitrag zur Kenntnis und Verbreitung paläarktischer Dytisciden (Col.). Ent. Bl., Berlin, **19**: 181-185.
- , 1926. Die Larve von *Cephennium Reitteri* BRIS. (Col.). Ent. Bl., **22**: 103-104.
- , 1927a. Die Käfer des Kreises Liegnitz. Heimatbuch der beiden Liegnitzer Kreise, Liegnitz, 43-48.
- , 1927b. Zur Lebensgeschichte des *Attagenus punctatus* SCOP. Col. Centralbl., **2**: 97-101.
- , 1927c. 7. Beitrag zur Kenntnis und Verbreitung paläarktischer Dytisciden (Col.). Col. Centralbl., Berlin, **2**: 134-151.
- , 1929a. 8. Beitrag zur Kenntnis und Verbreitung paläarktischer Dytisciden (Col.). Col. Centralbl., Berlin, **4**: 2-9.
- , 1929b. Haliplidae (Col.). In: Bestimmungs-Tabellen der europäischen Coleopteren, 97. Heft. Troppau, 19 pp.
- , 1931. Wilhelm Kolbe †. Z. Ent., Breslau, **17**: 6-7.
- , 1932. 9. Beitrag zur Kenntnis und Verbreitung paläarktischer Dytisciden (Col.). Col. Centralbl., Berlin, **5**: 193-202.
- SCHOLZ, R., HINKE, O., 1919. Käfer in Bauten und Nestern. Jh. Ver. Schles. Insk. Breslau, **10-12**: 38-46.
- WANAT, M., BOROWSKI, J., 2013. *Dieckmanniellus chevrieri* (Boheman, 1845) new for the Polish fauna, and new records of two other species of Nanophyidae (Coleoptera: Curculionoidea). Genus, **24(2)**: 223-229.
- WANAT, M., COLONNELLI, E. 2004. *Ceutorhynchus varius* REY, 1895, status revised (Coleoptera: Curculionidae), its diagnostic characters and distribution in Europe. Annales Zoologici, **54(2)**: 453-459.



**Table 1.** Summary of Coleoptera in W. KOLBE, R. SCHOLZ and G. POLENTZ Collections (arranged alphabetically; taxa include varieties).

family	KOLBE		SCHOLZ		POLENTZ	
	species & subspecies	specimens	species & subspecies	specimens	species & subspecies	specimens
Aderidae	4	58	5	23	4	17
Agyrtidae	3	98	3	24	4	24
Alexiidae	8	36	20	40	13	49
Anobiidae	76	1147	124	555	99	543
Anommidae	1	3	5	12	0	0
Anthicidae	45	542	79	286	42	205
Anthribidae	21	379	21	145	25	138
Apionidae	114	3931	274	1790	141	841
Attelabidae	3	46	5	29	37	195
Biphylidae	1	4	2	9	3	11
Bolboceratidae	1	1	2	5	0	0
Bostrichidae	14	95	18	66	15	77
Bothrideridae	3	7	2	5	0	0
Brentidae	4	13	1	2	1	1
Buprestidae	92	728	183	664	162	671
Byrrhidae	28	451	42	203	31	197
Byturidae	2	93	3	26	3	22
Cantharidae	18	256	134	581	92	487
Carabidae	809	9354	1371	6398	981	4557
Cerambycidae	246	2008	462	1593	293	1187
Cerophytidae	0	0	1	4	1	2
Cerylonidae	5	249	8	85	6	53
Chrysomelidae	334	8272	334	2438	240	1286
Ciidae	25	856	32	464	32	128
Clambidae	6	320	7	59	8	53
Cleridae	30	272	36	125	32	184
Coccinellidae	70	4856	143	844	86	925
Corylophidae	16	402	22	114	13	70
Cryptophagidae	82	3271	113	860	116	851
Cucujidae	4	8	4	11	5	28
Curculionidae	990	17694	1430	8862	886	3987
Dascillidae	1	17	2	15	2	14
Dasytidae	75	651	106	279	61	174
Dermestidae	47	800	79	339	47	286
Derodontidae	2	22	2	10	2	12

Drilidae	2	12	2	2	3	7
Dryopidae	10	90	14	102	16	110
Dytiscidae	188	3039	153	572	155	1166
Elateridae	142	2493	243	1334	163	1104
Elmidae	16	402	27	148	22	127
Endecatomidae	1	2	0	0	0	0
Endomychidae	12	278	17	81	17	95
Erotylidae	22	92	26	120	21	114
Eucinetidae	1	25	2	6	1	7
Eucnemidae	8	31	9	27	11	46
Georissidae	3	18	4	17	3	8
Geotrupidae	19	140	30	96	0	0
Glaphyridae	18	92	32	58	24	70
Gyrinidae	12	286	12	40	16	149
Haliplidae	18	469	21	109	21	269
Helophoridae	29	930	45	617	27	203
Heteroceridae	14	227	25	146	19	98
Histeridae	90	2039	144	825	102	562
Hybosoridae	2	3	1	2	1	5
Hydraenidae	50	1564	85	869	42	292
Hydrochidae	4	116	6	9	4	56
Hydrophilidae	70	2581	104	1410	9	63
Hydroscaphidae	1	3	1	3	0	0
Hygrobiidae	1	2	1	1	1	6
Kateretidae	15	333	25	225	18	137
Laemophloeidae	17	89	23	68	17	99
Lampyridae	9	87	14	53	12	51
Latridiidae	48	2006	94	819	83	481
Leiodidae	127	2093	204	1162	186	995
Limnichidae	3	45	7	27	5	27
Lucanidae	9	78	22	78	0	0
Lycidae	4	78	6	24	6	29
Lymexylonidae	2	23	5	21	3	39
Malachiidae	64	604	106	276	47	196
Melandryidae	26	239	29	136	31	201
Meloidae	51	250	87	229	62	206
Melyridae	3	5	4	4	1	1
Mordellidae	22	411	25	114	28	151
Mycetophagidae	11	397	24	133	18	119
Mycteridae	3	19	4	20	3	14
Nanophyidae	9	223	24	88	0	0

Nemonychidae	3	46	3	13	3	15
Nitidulidae	72	2519	156	1377	136	1065
Nosodendridae	1	17	1	17	1	9
Noteridae	2	77	2	47	3	31
Ochodeidae	1	2	2	6	2	12
Oedemeridae	31	269	37	143	30	222
Omalisidae	1	28	2	8	1	13
Orsodacnidae	1	99	0	0	0	0
Passalidae	6	20	2	3	0	0
Phalacridae	24	758	37	311	27	226
Phloeophilidae	1	2	0	0	1	1
Phloeostichidae	1	35	1	14	1	9
Prostomidae	1	15	1	11	1	14
Psephenidae	1	3	1	4	1	5
Ptiliidae	41	3299	52	479	42	308
Pyrochroidae	3	40	4	27	4	22
Pythidae	1	6	2	7	1	8
Rhipiphoridae	3	21	8	14	4	25
Rhizophagidae	21	970	25	333	9	85
Rhynchitidae	27	559	36	229	14	111
Rhysodidae	2	5	4	21	3	12
Salpingidae	14	223	17	114	15	85
Scarabaeidae	300	3023	466	1668	108	737
Scirtidae	14	618	15	103	14	113
Scraptiidae	24	755	33	117	23	120
Silphidae	31	423	50	228	10	63
Silvanidae	9	303	16	101	15	88
Spercheidae	1	18	1	9	1	14
Sphaeritidae	1	14	1	11	1	8
Sphaeriusidae	1	18	1	9	1	7
Sphindidae	3	93	4	21	3	22
Staphylinidae	1154	35814	1562	12431	1469	9604
Tenebrionidae	331	1775	547	1693	224	630
Tetratomidae	6	124	7	65	6	36
Throscidae	7	153	9	47	6	39
Trogidae	6	74	10	39	8	49
Trogossitidae	8	47	12	44	9	55
Zopheridae	23	139	43	179	35	197
<b>total</b>	<b>6513</b>	<b>131258</b>	<b>9952</b>	<b>56979</b>	<b>6913</b>	<b>38638</b>



**Table 2.** Summary of Coleoptera aquatica (Hydradephaga), a separate SCHOLZ Collection (arranged alphabetically; taxa include varieties).

<b>family</b>	<b>species &amp; subspecies</b>	<b>specimens</b>
Dytiscidae	483	4839
Gyrinidae	53	359
Haliplidae	40	649
Hygrobiidae	1	10
Noteridae	15	121
<b>total</b>	<b>592</b>	<b>5978</b>

