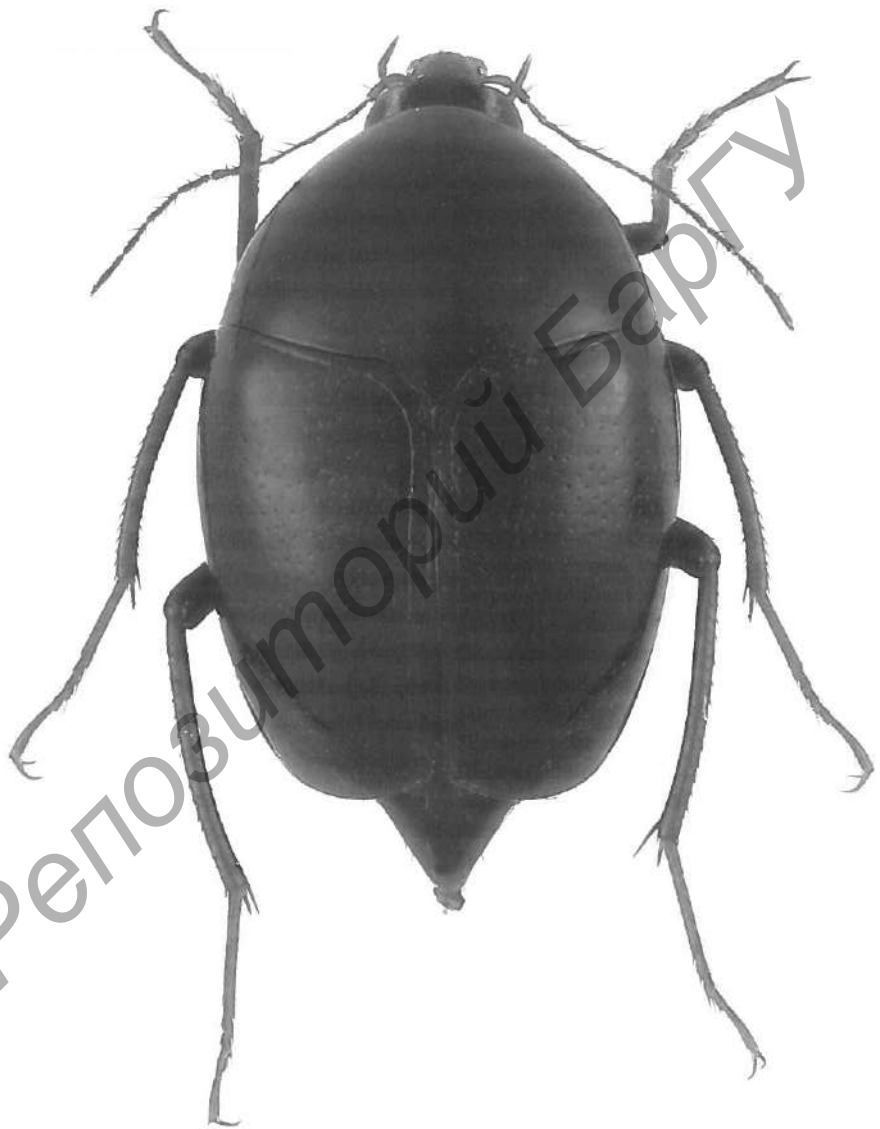

Pseudobironium confusum Löbl & Tang, 2013

Hydrophiloidea – Staphylinoidea

Revised and Updated Edition

VOLUME 1

Edited by

I. Löbl
D. Löbl

BRILL

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VOLUME 2

Introduction

Taxonomy provides the basic building blocks of our understanding of the diversity of life on this planet. It stems from innate human curiosity; confronted with an unknown species or object we ask "what is it?" Taxonomists recognize taxa, define them and place them within the framework of known organisms, providing the means for their subsequent identification. Without taxonomy, our knowledge of biodiversity would probably have remained on a par with that of our pre-Linnaean ancestors.

Taxonomy is of fundamental importance in many fields, including genetics, physiology, ecology, pest management, nature conservation, and legislation. Taxonomic catalogues serve as guides to the diversity of life. They summarize the systematics and taxonomy that permit assessment of faunal diversity and classification, and make explicit historical taxonomic changes. Catalogues are essential for achieving a universally accepted nomenclature that ensures the unambiguous transfer of biological information.

The first edition of the Catalogue of Palaearctic Coleoptera was issued between 2003 and 2013. It was warmly welcomed by the community of coleopterists and joined the ranks of the entomological works that are continually referred to. Though the Catalogue may seem redundant given the abundance of data sets available online, in practice the reality is quite different. Clearly, the present "online-culture", no matter how convenient or fashionable it is, does not meet all the needs of those who have a real interest in, and work on, mega-diverse components of the fauna.

A new, updated edition of the Catalogue had not been planned, but several circumstances led to the publication of the present work, which is the first in the new series:

- An unexpectedly high flow of new information. The present volume includes the polyphagous superfamilies Hydrophiloidea (now with the former Histeroidea) and Staphylinoidea. It lists 41.800 names of taxa, exceeding by about 6.500 names those listed the Volume 2 of the Catalogue, issued in 2004.
- A significant number of coleopterists having expressed interest in a new, updated edition of the Catalogue.
- Michael Schülke and Aleš Smetana who had already updated data on Palaearctic Staphylinidae, the bulk of the present volume, accepted publication of their work in this form.
- The possibility of providing also an electronic version.
- Political changes requiring adequate distributional information.
- A desire to counter-balance the effect of poorly supported alpha taxonomy, in an academic climate polluted by fund-holders who base evaluation on bibliometry rather than on the contents and effectiveness of works.

The on-going world-wide destruction of habitats resulting in a major biodiversity crisis demands an urgent assessment of what life is still left. Common sense suggests giving priority to taxonomy while it is still possible, rather than concentrating on other biological studies, such as evolutionary history, that can be conducted as well, if not better, in the future. Non-taxonomists, basing their opinions of the rate at which species are described and the number of authors describing taxa, consider the situation satisfactory, but their opinions are often based on meta-analyses of secondary sources that may not be reliable. Paradoxically,

taxonomists, more than other biologists, have been saying for several decades that impediments to taxonomic research are increasing. While "biodiversity" has become a buzzword used continuously and on any occasion, not least by politicians of all stripes, the taxonomists who uncover this biodiversity have the impression of being forgotten. Taxonomists report that there is a diversion of funding away from fundamental research towards phylogenetic biology, meta-analyses and technological sophistications, which may be interesting but which, in the absence of primary monographs and revisions may be "art for art's sake" rather than purposeful. The fact that such works, however attractively presented, may lack useful content is usually overlooked.

To examine these claims, and see how far the evaluation culture affects taxonomy, we have taken the Palaearctic Staphylinidae, the most species-rich family of all living things in the largest biogeographical region, as a test case. We use only hard data obtained from primary sources. The results, though necessarily partial, are significant and summarized below.

New Palaearctic Staphylinidae have been described by 160 individuals (first authors only counted) since the beginning of the century (January 1, 2000 to December 31, 2014). We have subdivided this population into three categories according to their origin (*Eastern*: Chinese, Japanese and Korean; *Western*: European Union + Norway, Switzerland, and former Yugoslavia; *Other*: from the remaining Euro-Asians and the North American countries) (contribution from North Africa is absent), and according to activity (*Professionals*: in universities, museums, institutes with taxonomy as part of research programmes, graduate and post-graduate students, and *Non-Professionals*: retired professionals, professionals in institutes not having taxonomy as part of research, amateurs). Taxa described by individuals who have changed their status are assigned accordingly to the authors status when the work was carried out.

The 73 "Eastern" taxonomists have described 1,081 new taxa. University workers have been most productive: 17 individuals have described 425 taxa, and additional 233 taxa were described by 30 studens. Six museal workers are authors of 199 taxa, and 23 taxa have been described by 6 workers of other institutions. The 8 non-professionals have described 189 taxa. We lack information for addidional 6 individuals, authors of 12 taxa.

The 68 "Western" taxonomists have described 3,986 new taxa during the same period: 8 active in universities have described 38 taxa, 13 active in museums have described 422 taxa, and 3 active in other biological institutes have described 59 taxa. The remaining 3,466 taxa were described by non-professionals. Thus, about 87% of the Western and 71.3% of the total alpha-taxonomical production is to be credited to individuals lacking financial support.

The 19 "Other" taxonomists have described 470 taxa, among them 15 are active professionals and authors of 175 taxa, the remaining four are retired or amateurs and authors of 295 taxa.

The data suggest that the Eastern universities are interested in the mega-divers components of their faunas. They support students in descriptive alpha-taxonomy and are concerned by relief, while Western universities have drastically reduced such work and have not supported a single student. The Western museums are, as far as alpha-taxonomy concerned, significaltly more active that universities. Nevertheless, their contribution hardly equals 12% of that produced by western amateurs and retired professionals.

There seem to be multiple reasons for the "Western" trend. Probably the main change is a shift in paradigms, from the discovery of life forms and their study to activities that better satisfy political and public expectations of quick and more visible results. Other major factors are the requirement to generate revenue

or funding, the fact that universities are no longer interested in teaching taxonomy (the training of students being often left to museum curators), and the application of technological quick fixes to cover the lack of expertise. Examples of the latter include bar-coding, based on a belief that "molecular fingerprints" are a replacement for contextual knowledge of species (much as if human fingerprints could replace all of our knowledge of humans) and the time- and money-consuming digitization of collections that produce a cocktail of useful, irrelevant and erroneous data, which when made available online to non-experts without quality control can lead to a world-wide mess. While these technologies can be very useful if appropriately applied, they are quickly converted into absurdities if the only goal is the amount of information made available rather than its quality. In addition, the side effects of the Nagoya Convention on Biological Diversity discourage from field research, complicate currect practice by its bureaucratic requierements and uncertainties, and may seriously impede future effort to improve knowledge of global biodiversity.

The extracted data suggest also that years of high profile conferences and initiatives such as the "Biodiversity Decade", "Global Biodiversity Information Facility", "Catalogue of Life", "Encyclopedia of Life", "Integrated Taxonomic Information System", the Rio Convention, the emphasis on Biotic Surveys, and the use of modern technologies have not produced the expected results, as far as the assessment of the diversity of life forms concerned. Much of the support is directed to global projects, based on previously published data and often led by major institutes, even though the bulk of new information about taxonomic diversity is due to the interest and good will of a community that works unsupported, or in smaller institutions with reduced resources. Consequently, the trend leads to a diminishing number of professional alpha-taxonomists, and threats non-professionals. To use a parable, much of the recent iniciatives are like building new, modern hospitals at the cost of diminished population of underestimated physicians.

Taxonomic Information

The present Catalogue includes all available names, both valid and invalid (the synonyms of the family group names excepted), of extant beetle taxa described before January 1, 2015 and known to occur in the Palaearctic Region, as it is defined below. The higher classification follows Beutel & Leschen (2005), but the family rank of the former hydrophilid subfamilies is accepted, and the former scydmaenidaeis are placed as a subfamily within the Staphylinidae. All taxa below subfamily rank are arranged alphabetically within the higher taxon and the synonyms follow the respective valid name alphabetically. The formally valid subgenera in *Stenus* are considered paraphylitic: therefore the species are listed alphabetically, with the respective subgenera given in square brackets.

With respect to present facilities in access to information, the editors adopted the policy that the gap between publication date of the Catalogue and the date of the corresponding deadline entry should be as short as possible. Therefore, also data published in 2014 are included though some may have remained unknown to the respective authors. The present volume includes data on almost 42,000 valid taxa and their synonyms (about 35,300 taxa in the 2004 edition).

Extinct taxa, names rejected by the ICZN (*International Code of Zoological Nomenclature, Fourth Edition.* London: International Trust for Zoological Nomenclature, 1999), misspellings, misidentifications and other nomina nuda are not included in the body of the Catalogue. However, concepts that are important for nomenclatural purposes, may be included, and if necessary, unavailable name may be discussed in the chapter New Nomenclatural and Taxonomic acts, and Comments. Similarly, infrasubspecific names, such as those established as "morpha", "natio", "race", "subvariety" and "aberration", or proposed as variety and form of a subspecies or another variety, and names published, e.g., as *A-us b-us c-us*, but specified in the text that they are actually proposed for a "natio" or "race", etc., are not considered subspecific and are therefore excluded from the Catalogue. Names proposed as varieties and forms before 1961 are included, if deemed subspecific under the provisions of the ICZN, Article 45.6. Unjustified emendations are available and included.

The currently valid names of the family-group taxa include the name of the author and the year of the publication.

The names of the genus-group taxa are given with the name of the author, and the year and page of publication. The page given is the page where the name and the actual description of the taxon is printed. The type species of all genus-group names are given in their original combination. If the type species is currently regarded as a junior synonym, the valid senior synonym is given in brackets in its original combination.

The names of the species-group taxa are given with the name of the author, and the year and page of publication. The page given is the page where the name and the actual description of the taxon is printed. In bi-languaged Chinese/English and Japanese/English publications both respective pages of the actual description may be given. For species-group taxa subsequently transferred to another genus, the name of the original genus is given in parentheses, following the page of publication.

Some authors (e.g., V. Apfelbeck, H. John) published the same description twice, or even more times, in separate papers. Such publications produce, de facto, primary homonyms and objective synonyms. The first publication in such cases is referred to as indicated above, followed by the mark =, the year and first page of

the subsequent description/s in square brackets. This is particularly important for taxa that are erroneously associated with their junior description.

The following symbols, all given in square brackets following the page of publication, or the original combination when applicable, are used for taxonomic information: HN for homonyms, eventually PHN for primary homonyms and SHN for secondary homonyms, RN for replacement names, NO for nomina oblita, NP for nomina protecta, DA for doubtful assignment, and EA for erroneous assignment.

Taxa considered incertae sedis and nomina dubia are listed separately at the end of the nearest applicable taxon.

Taxonomic and nomenclatural acts published after December 31, 2014 are considered only when they concern taxa described on or before that date.

Distributional Information

The limits of the Palaearctic region, as those of other biogeographical regions, are arbitrarily defined (Map 1). For practical reasons, the boundaries of the Palaearctic Region, as they were established for the Catalogue (see above), usually follow national boundaries. The region includes Europe, Africa north of the Sahara, and Asia except for the part that is arbitrarily defined as belonging to the Oriental Region.

For each species and subspecies an outline of its present distribution is given. Fossil records are not considered. The information is given by means of symbols, presented at three levels.

The first level is the subdivision of the Palaearctic Region into three main parts, Europe (letter **E**, bold), North Africa (letter **N**, bold) and Asia (letter **A**, bold).

Europe includes the Azores, Iceland and Turkey west of the Bosporus. The eastern boundaries are a matter of controversy. In the Catalogue, Europe includes Russia west of the main ridge of the Ural Mountains, the Permsk Oblast, Bashkortostan Republic and Orenburskaya Oblast, and the small part of Kazakhstan west of the Ural River. It includes the Caucasian republics of Georgia, Armenia and Azerbaijan. The south-eastern boundaries are the political boundaries of the Asian part of Turkey, Iran, Kazakhstan, and the Caspian and Black seas. Taxa known from "Russia" are in absence of detailed information given under the symbol RU.

Former Yugoslavia (Serbia and Montenegro from 2003 to 2006) has been split into Serbia and Montenegro, and Kosovo. The term Yugoslavia, listed in the body of the Catalogue under the symbol YU, is still used in absence of more exact knowledge of the distribution of the respective taxa.

North Africa includes Morocco (incl. Western Sahara), Algeria, Tunisia, Libya and Egypt west of the Suez Canal, and the Canary and Madeira islands.

Asia includes Sinai and the Arabian Peninsula (including Suqutra), Turkey east of the Bosporus, the Middle East and Central Asian countries, Russia east of the main ridge of the Ural mountains, Korea, Japan (including Ryukyu [= Nansei] Islands and the Japanese Pacific Islands), the entire People's Republic of China, Taiwan, Bhutan, Nepal, North India along the base of the Himalaya (Arunachal Pradesh, Uttarakhand (= Uttaranchal, northwestern area of former Uttar Pradesh), Himachal Pradesh), Jammu & Kashmir and all of Pakistan. Thus, India is the only state for which the strict political boundaries are not respected. Large parts of Uttar Pradesh south of Nepal are overpopulated plains. Information on Coleoptera from this North Indian state is based almost exclusively on its Himalayan districts lying west of Nepal, which are in the present state Uttarakhand.

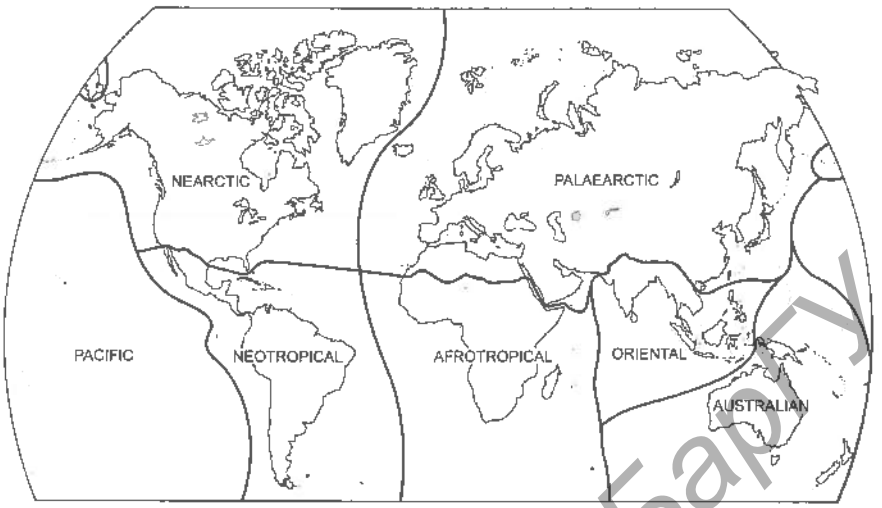
The second level of the geographic information is provided by two-letter symbols for countries, major areas of Russia and North Indian states, and by three-letter symbols for provinces of mainland China and for Taiwan (see Table 1, Map 3).

The symbols are arranged in alphabetical order within the first-level subdivision. Some, usually older, distributional records cannot be accommodated within the structure of the Catalogue (e.g., Arabia, Caucasus, North India, Siberia). Such information is given in quotation marks (e.g., "Caucasus") behind the last symbol of the respective first-level symbol. Russia is subdivided into six major sub-regions (Map 2), each of which has its own two-letter symbol. These, as well as the symbol RU for Russia, are used only when more detailed information is not available. Similarly, the symbol CH for the People's Republic of China, as well as the seven two-letter symbols for China's major regions, are used only in the absence of more detailed geographical information.

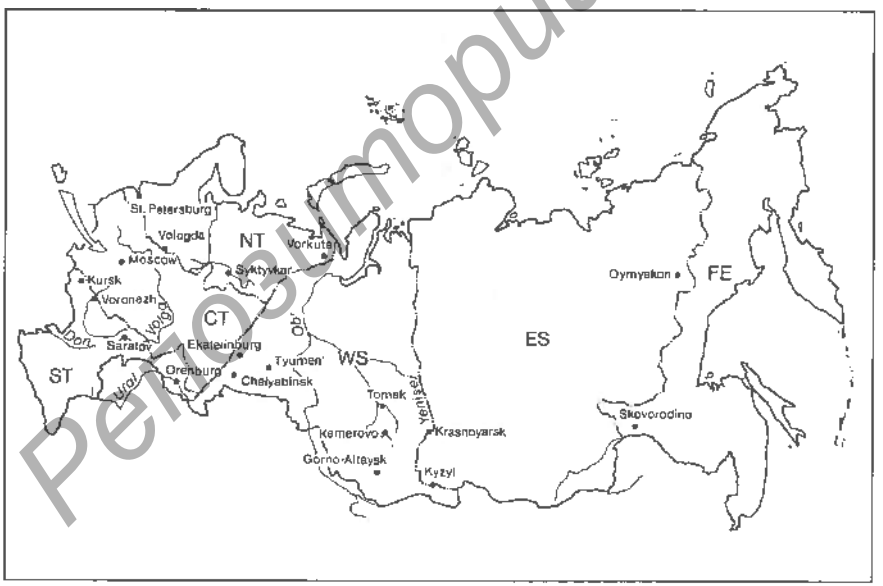
In general, the published distributional information is based on both identified material in collections and on published records, scattered in an enormous number of taxonomic and faunistic papers that are virtually impossible to review in their entirety. Revisions of collections reveal a high proportion of misidentifications, attaining 40% of specimens in some large museums. The degree of identification reliability and of the records derived from identifications is correlated to faunal diversity and quality of systematic revisions. Thus, the reliability in general increases from south to north and from poorly studied groups to "popular" groups. At present, a number of modern catalogues or check-lists, covering the beetle faunas of many European and some extra-European countries or archipelagos, are available. The use of data contained in these and other faunistic works is left to the discretion of the authors, who may also add unpublished information available to them. The second-level geographic information is not necessarily exhaustive, it should rather be considered as a base for future faunal research.

The third-level geographic information concerns species and subspecies with restricted distribution. Taxa of this category may be strict endemites, or taxa comparatively widely distributed in one area but restricted in another area. For example, the distributional record of a species widely distributed in North Africa with isolated occurrence on Pantelleria would appear as follows: E: IT (Pantelleria) N: AG MO TU. The third-level information is facultative. It is given in parentheses after the respective second-level symbol. The official language of the respective state is used for records in languages using the Latin alphabet, or it is transliterated from the Cyrillic alphabet. Records in languages using non-Latin or Cyrillic characters (e.g., Chinese or Japanese pictographs) are translated into English, and the translated geographical terms are spelled as closely as possible to those used in the Times Atlas®, or in other well-known sources. Detailed geographical information may refer to natural geographical features such as islands, mountains, lakes, valleys, caves, or to administrative entities, such as districts.

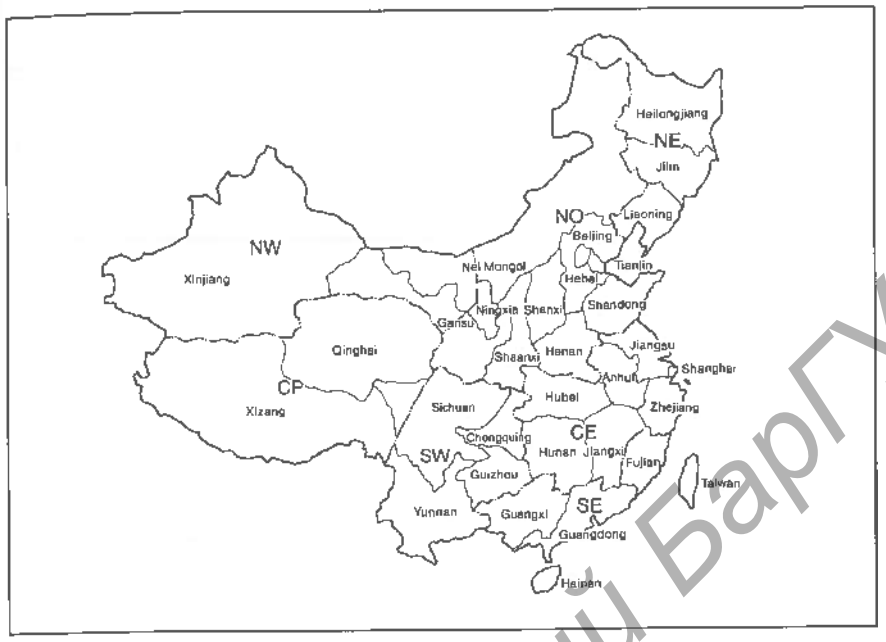
The extralimital distribution of some Palaearctic species is indicated by three letter symbols in bold, cosmopolitan species by the symbol COS, all located at the end of the respective geographical information (see Table 1). Introductions are indicated by the letter "i" (e.g., Ei: GB). The extralimital regions for the needs of the Catalogue are defined as follows (see Map 1): Nearctic (NAR): north of Mexico; Neotropical (NTR): south of the and Indonesia south to the Lydekker line; Australian (AUR): south of the Lydekker line, and Pacific (PAC) United States; Afrotropical (AFR): south of the North African states included in the Palaearctic Region; Oriental (ORR): areas south of the People's Republic of China and Taiwan, areas south of the Himalaya in India, the Philippines, Malaysia



MAP 1 *The limits of the geographic Regions as defined for the purpose of this Catalogue*



MAP 2 *Subdivisions of Russia*



MAP 3 *Subdivisions and provinces of the People's Republic of China*

TABLE 1 *Geographical symbols*

E	**Europe**	FI	Finland
AB	Azerbaijan	FR	France (incl. Corsica, Monaco)
AL	Albania	GB	Great Britain (incl. Channel Islands)
AN	Andorra	GE	Germany
AR	Armenia	GG	Georgia
AU	Austria	GR	Greece (incl. Crete)
AZ	Azores	HU	Hungary
BE	Belgium	IC	Iceland
BH	Bosnia Herzegovina	IR	Ireland
BU	Bulgaria	IT	Italy (incl. Sardinia, Sicily, San
BY	Belarus		Marino)
CR	Croatia	KO	Kosovo
CT	Russia: Central European	KZ	Kazakhstan
	Territory	LA	Latvia
CZ	Czech Republic	LS	Liechtenstein
DE	Denmark	LT	Lithuania
EN	Estonia	LU	Luxembourg
FA	Faeroe Islands	MA	Malta

TABLE 1 *Geographical symbols* (cont.)

MC	Macedonia	SK	Slovakia
MD	Moldavia	SL	Slovenia
ME	Montenegro	SP	Spain (incl. Gibraltar)
NL	The Netherlands	SR	Svalbard (Spitzbergen)
NR	Norway	ST	Russia: South European Territory
NT	Russia: North European Territory	SV	Sweden
PL	Poland	SZ	Switzerland
PT	Portugal	TR	Turkey
RO	Romania	UK	Ukraine
RU	Russia	YU	Serbia and Montenegro
SB	Serbia		
N	**North Africa**	LB	Libya
AG	Algeria	MO	Morocco (incl. Western Sahara)
CI	Canary Islands	MR	Madeira Archipelago
EG	Egypt	TU	Tunisia
A	**Asia**	KZ	Kazakhstan
AE	Arab Emirates	LE	Lebanon
AF	Afghanistan	MG	Mongolia
AP	India: Arunachal Pradesh	NC	North Korea
BA	Bahrain	NE	China: Northeast Territory
BT	Bhutan	NO	China: Northern Territory
CE	China: Central Territory	NP	Nepal
CH	China	NW	China: Northwest Territory
CY	Cyprus	OM	Oman
ES	Russia: East Siberia	PA	Pakistan
FE	Russia: Far East	QA	Qatar (incl. United Arab
HP	India: Himachal Pradesh		Emirates)
IN	Iran	RU	Russia
IQ	Iraq	SA	Saudi Arabia
IS	Israel	SC	South Korea
JA	Japan	SD	India: Sikkim, Darjeeling District
JO	Jordan	SE	China: Southeastern Territory
KA	India: Kashmir		(incl. Macao, Hong Kong)
KI	Kyrgyzstan	SI	Egypt: Sinai
KU	Kuwait	SW	China: Southwestern Territory

SY	Syria	UZ	Uzbekistan
TD	Tajikistan	WP	China: Western Plateau
TM	Turkmenistan	WS	Russia: West Siberia
TR	Turkey	YE	Yemen (incl. Suqutra)
UP	India: Uttarakhand (= Uttaranchal, Uttar Pradesh)		

China: Provinces, Autonomous Regions or Municipalities, and Taiwan

ANH	Anhui (Anhwei)	JIX	Jiangxi (Kiangsi)
BEI	Beijing (Peking or Peiping)	LIA	Liaoning
CHQ	Chongqing	MAC	Macao
FUJ	Fujian (Fukien)	NIN	Ningxia (Ningsia)
GAN	Gansu (Kansu)	NMO	Nei Mongol (Inner Mongolia)
GUA	Guangdong (Kwantung)	QIN	Qinghai (Tsinghai)
GUI	Guizhou (Kweichow)	SCH	Sichuan (Szechwan)
GUX	Guangxi (Kwangsi)	SHA	Shaanxi (Shensi)
HAI	Hainan	SHG	Shanghai
HEB	Hebei (Hopeh)	SHN	Shandong (Shantung)
HEI	Heilongjiang (Heilungkiang)	SHX	Shanxi (Shansi)
HEN	Henan (Honana)	TAI	Taiwan (Formosa)
HKG	Hong Kong	TIA	Tianjin (Tsiensin)
HUB	Hubei (Hupeh)	XIN	Xinjiang (Sinkiang)
HUN	Hunan	XIZ	Xizang (Tibet)
JIA	Jiangsu (Kiangsu)	YUN	Yunnan
JIL	Jilin (Kirin)	ZHE	Zhejiang (Chekiang)

World Zoogeographical Regions

AFR	Afrotropical Region
AUR	Australian Region
NAR	Nearctic Region
NTR	Neotropical Region
ORR	Oriental Region

Bibliographic Information

The total number of references in the present volume exceeds 10,400. The references are given to primary sources of the genus-group and species-group names included in the Catalogue, for works supporting the New Acts published in the present volume, and for relevant modern secondary sources of Staphylinidae, the latter marked by a * after the publication year. Secondary sources are restricted to references which concern other taxonomical acts than new names (e.g., new synonyms, new ranks, new combinations and assignments, or which provide new country records or deletions). No bibliographical reference is given to family-group names, and neither to secondary sources concerning other families than Staphylinidae. Names of all authors, if applicable, are given for each reference. An effort was put forth to unify the spellings of the names. For names that appeared in publications in two or more different orthographies, the one used in the Catalogue is that which was considered to be correct after thorough verification (e.g., the spelling Josef Müller for the author who also published as Giuseppe Müller). In such cases the alternative spelling follows the original one in brackets. The original name is used for authors that subsequently adopted additional names, or honorary epithets (e.g., A. Semenov, and not A. Semenov-Tian-Shanskyi). Initials are given for all authors, even if they are missing in the original publication. Names published in two or more alternative spellings, that seem to be equally correct, are spelled following Schmitt, Hübner & Gaedike (1998): *Nomina Auctorum. Auflösung von Abkürzungen taxonomischer Autoren-Namen. Nova Supplementa Entomologica* 11: 3–189. Names in Cyrillic are transliterated as for any other Cyrillic text, unless an alternative spelling was preferred by the author, or the alternative name is generally used in the literature (e.g., Jakobson, Tschitschérine). It should be noted that lower case prepositions such as French "de" and German "ivon" are not given with the author's name in the list of the taxa.

Titles of references are given in full, i.e. not abbreviated, with subtitles, as originally published. Text written in Cyrillic is transliterated. Titles in languages using non-Latin or non-Cyrillic characters are translated into English and are presented in square brackets, followed by the indication of the original language in parentheses.

Titles of periodicals are given in full. Series numbers are given in parentheses, and always precede the boldface volume number. The numbers of separate issues are provided when they are paginated separately, in which case they are in parentheses following the volume number. In other cases they are facultative. Unnumbered pages are indicated in square brackets. The titles of some periodicals vary over the years. For these periodicals the titles are given as they appeared for the respective items referred to (e.g., *Coleopterologische Rundschau* / *Koleopterologische Rundschau*). Contrarily, the journal *Entomologische Blätter* had several subtitles during its existence, the last of them being *Entomologische Blätter für Biologie und Systematik der Käfer*. Since there is no danger of confusion with any other periodical, the journal is cited simply as *Entomologische Blätter*. If the year of the volume differs from the actual year of publication, the former follows the volume number and is given is square brackets. If periodicals have no volume number, the year of the volume is given.

The *Bulletin de la Société Entomologique de France* is one of the more important periodicals in the field of systematics. The title changed for more than 60 years, appearing usually as *Bulletin des séances, Bulletin trimestriel* or *Bulletin entomologique*. The first numbered volume, 37, was published 100 years after the creation

of the *Annales* and the *Bulletin* of the French Entomological Society in 1832. To avoid confusion, this periodical is consistently referred to as *Bulletin de la Société Entomologique de France,* and, from 1832 to 1931, is identified by the originally given publication year, often preceding the true year of publication. From the year 1932, the volume number is given.

For ease of access, references of the same author and year were placed in order based on the first page number of the paper, with Roman numerals being placed last, with respect to the number of the respective issue. Books were placed first for a given year, unless a page range was cited, in which case the first-page rule was followed. Papers of the same year and with the same first page numbers were placed in order of their last page number. Thus the references are not arranged chronologically within each year.

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family HELOPHORIDAE Leach, 1815	†M. HANSEN
family EPIMETOPIDAE Zaitzev, 1908	†M. HANSEN
family GEORISSIDAE Laporte, 1840	†M. HANSEN
family HYDROCHIDAE Thomson, 1859	†M. HANSEN

family SPERCHEIDAE Erichson, 1837	†M. HANSEN
family HYDROPHILIDAE Latreille, 1802	†M. HANSEN
family SPHAERITIDAE Shuckard, 1839	I. LÖBL
family SYNTELIDAE Lewis, 1882	I. LÖBL
family HISTERIDAE Gyllenhal, 1808	S. MAZUR
family HYDRAENIDAE Mulsant, 1844	M.A. JÄCH
family PTILIIDAE Erichson, 1845 / Motschulsky, 1845	C. JOHNSON
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family LEIODIDAE Fleming, 1821	M. PERREAU
family SCYDMAENIDAE Leach, 1815	
subfamily Scydmaeninae Leach, 1815	
tribe Cephenniini Reitter, 1882	S. VÍT & C. BESUCHET
tribe Chevrolatini Reitter, 1882	S. VÍT
tribe Eutheiini Casey, 1897	S. VÍT
tribe Cyrtoscydmini L.W. Schaufuss, 1889	A. DAVIES
tribe Scydmaenini Leach, 1815	S. VÍT
subfamily Mastiginae Fleming, 1821	S. VÍT
family SILPHIDAE Latreille, 1806	J. RŮŽIČKA & J. SCHNEIDER
family STAPHYLINIDAE Latreille, 1802	
subfamily Pselaphinae Latreille, 1802	I. LÖBL & C. BESUCHET
subfamily Scaphidiinae Latreille, 1806	I. LÖBL
all remaining subfamilies	A. SMETANA

New Nomenclatural and Taxonomic Acts, and Comments

Hydrophilidae

M. Fikáček, S.K. Ryndevich, Y.N. Minoshima & A. Prokin

New synonymy

Cercyon (*Cercyon*) *chujoi* Satô, 1985, **syn. nov.** of *Cercyon yayeyama* Chûjô & Satô, 1970. *Cercyon chujoi* was erroneously established as valid in the first edition of The Coleoptera of Japan in Color, Vol. II (Satô in Uéno et al., 1985), to designate the species previously described as *C. yayeyama*. The error was corrected in subsequent editions of the book and the name *C. chujoi* has not been used subsequently, while *C. yayayama* is currently used and considered as valid. Meanwhile, the junior name was not yet explicitly placed in synonymy.

Resurrected names

Enochrus (*Methydrus*) *japonicas* (Sharp, 1873) and *E.* (*Methydrus*) *haroldi* (Sharp, 1884) were considered synonyms by Jia & Wang (2010), though they differ in external characters and by their aedeagi. Therefore, *E.* (*Methydrus*) *haroldi* is here resurrected.

Comments

Enochrus (*Holcophilydrus*) *kishidai* Kamiya, 1935, *Enochrus* (*Holcophilydrus*) *umbratus* (Sharp, 1884) and *Enochrus* (*Holcophilydrus*) *ussuriensis* Kniž, 1912 were synonymized with *E. simulans* (Sharp, 1873), and *Philydrus vilis* (Sharp, 1884) was synonymised with *Enochrus* (*Methydrus*) *affinis* (Thunberg, 1794) by Jia & Wang (2010). We consider these synonyms as doubtful because the respective type material was not examined (that of *E. kishidai* is supposed to be lost), and both *Holcophilydrus* and the East Asian members of *Methydrus* lack careful revision.

Megasternum immaculatum (Stephens, 1829c) was recently resurrected by Foster et al. (2014) as a valid species separate from *M. concinnum* (Marsham, 1802). The taxonomic act was based on unpublished studies of British *Megasternum* by P.M. Hammond, London, with diagnostic characters found in the morphology of genitalia and dorsal coloration. The presence of two possible cryptic species treated under *M. concinnum* was independently indicated also by DNA data in Germany (L. Hendrich, München, pers. comm.). The two species recognized in Great Britain and Germany are likely the same, but this needs to be confirmed by further studies. In addition, the oldest available name for the species now treated as *M. immaculatum* needs to be confirmed by study of type specimens (G.N. Foster, Ayr, pers. comm.) and its distribution outside Great Britain needs to be clarified. For all these reason we indicate *M. immaculatum* to occur in Great Britain only at the moment, and consider all names treated until now as synonyms of *M. concinnum* as doubtfully assigned (as some of them may actually be synonyms of *M. immaculatum*).

Hydrophilidae

A.F. Newton

New replacement name

Cercyon (*Cercyon*) *spatiferides* Newton, **nom. nov.** for *Cercyon* (*Cercyon*) *spatifer* Hebauer, 2002 [nec *Cercyon* (*Cercyon*) *spathifer* Smetana, 1978][PHN] [Note: original spellings deemed identical (ICZN 1999, Art. 58.11)]

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