RESEARCH ARTICLE



Insect species described by Karl-Johan Hedqvist

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Academic editor: Hannes Baur Received 20 May 2016 Accepted 11 July 2016 Published 29 August 2016				
http://zoobank.org/D7907831-3F36-4A9C-8861-542A0148F02E				

Citation: Forshage M, Broad GR, Papilloud ND-S, Vårdal H (2016) Insect species described by Karl-Johan Hedqvist. Journal of Hymenoptera Research 51: 101–158. doi: 10.3897/jhr.51.9296

Abstract

The Swedish entomologist, Karl-Johan Hedqvist (1917–2009) described 261 species of insects, 260 species of Hymenoptera and one of Coleoptera, plus 72 genera and a small number of family-level taxa. These taxa are catalogued and the current depositories of the types are listed, as well as some brief notes on the history of the Hedqvist collection. We also discuss some issues that can arise when type-rich specimen collections are put on the commercial market.

Keywords

Chalcidoidea, Pteromalidae, Braconidae, Type catalogue

Introduction

Karl-Johan Hedqvist (1917–2009) was a well-known Swedish hymenopterist who published a large body of work in applied entomology, faunistics and systematics, with a special focus on Chalcidoidea (particularly Pteromalidae), but also dealing with all major groups of parasitoid Hymenoptera. In 2011 his collection of more than 50 000 specimens of Hymenoptera from around the world (Figure 1) was purchased from his relatives by the Natural History Museum (London) (henceforth abbreviated to BMNH) (Figure 2). Since Hedqvist spent a significant part of his career as a taxonomist at the Stockholm Museum of Natural History (NHRS), voices were raised arguing that his collection at least in part belonged there. We have investigated the

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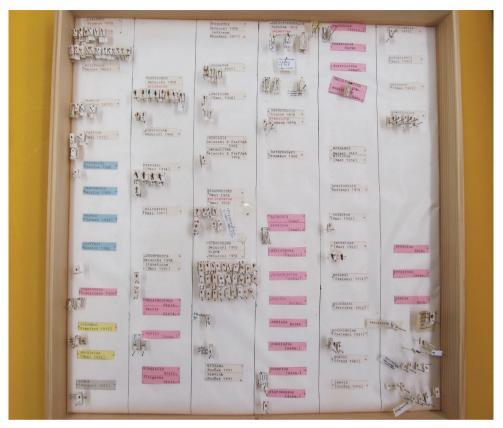


Figure 1. A representative original drawer from coll. Hedqvist.

different provenances of material in the collection and together established criteria to be used in determining in which institution the type specimens belong. On the basis of these criteria and on expectations relating to specimen deposition on the behalf of employers and various collectors, the material was divided between BMNH and NHRS. We have also commenced specimen exchanges as part of a wider exchange program of Hymenoptera specimens between the two museums.

As well as the obvious utility of an annotated catalogue of type material to Hymenoptera researchers, as many species were originally described as being deposited in Hedqvist's personal collection, we think that hymenopterists may be interested in the details of the BMNH acquisition and the agreements between BMNH and NHRS. Specimens purchased by BMNH have been registered under the registration number BMNH(E) 2011-27, with the parts of the collection subsequently transferred to NHRS under number 2012-NHRS-005 (Figure 3). This catalogue only deals with the type specimens of taxa described by Hedqvist; the collection he bequeathed is obviously much larger than these taxa and includes large numbers of both named and unnamed specimens of many Hymenoptera families.



Figure 2. Coll. Hedqvist arrived at BMNH.

Brief biographic sketch

Hedqvist was born on July 18, 1917 in Bodarna of Västerbotten County in northern Sweden. In the summer of 1939, at the age of 22, he took his first insect-related job as a field assistant looking at forest pest insects. Retaining a focus on forest entomology, he moved to Stockholm for further studies and an assistant position at the Swedish Forest Research Institute from 1949. In this capacity, he travelled extensively around Sweden, working on forest pest management. At the same time he was building up a large personal insect collection and started publishing widely (from 1945) on faunistics and applied entomology, on a wide range of subject taxa across the major insect orders Coleoptera, Lepidoptera, Hymenoptera and Hemiptera. In 1951 he married and settled down in Vallentuna, north of Stockholm. He and his wife Margit eventually had two children.

In the mid-50s, Hedqvist embarked upon his career as a taxonomist, describing first a new bark beetle and then what would become a very large number of Hymenoptera species and genera. In 1959 he got a position as an amanuensis (a kind of research assistant position) at the Swedish Museum of Natural History in Stockholm (NHRS), where he had the opportunity to focus more on taxonomy. Nevertheless he left the position in favour of employment as a field entomologist back at the Swedish Forest Research Institute in 1963. Later, in 1971, he moved back to NHRS, holding a newly established position as a taxonomist with special focus on parasitoid wasps, funded by



Figure 3. A drawer of Hedqvist types in NHRS.

the Swedish Research Council. Hedqvist received an honorary doctorate from the Uppsala University in 1977 for his work on the taxonomy of parasitoid wasps. During his time at NHRS he supervised two successful PhD students in the systematics of parasitoid wasps, Lars-Åke Janzon and Göran Nordlander. Hedqvist stayed at the Stockholm museum until his retirement in 1984. After retirement, he kept up his taxonomic and faunistic work from home, as well as his active involvement in the Stockholm Entomological Society (adding a stint as president to his previous period as secretary) but published only a few more taxonomic contributions, until he passed away in 2009.

Based on his initial route into the parasitoid wasps, much of Hedqvist's work concerns parasitoids of insects that are considered forest pests, and especially parasitoids of the bark beetles (Curculionidae: Scolytinae). The most significant focus of his taxonomic work was the huge and complicated chalcidoid family, Pteromalidae, but he also worked with several other groups of parasitoid wasps. In 2003 he published a Swedish checklist of the Chalcidoidea with province records for the entire superfamily based almost exclusively on specimens in his own collection. This was followed in 2007 by a similar checklist of Proctotrupoidea, and he was preparing a volume on Braconidae at the time of his death.

For a somewhat more detailed biography (in Swedish), including a complete bibliography, we direct the interested reader to Hansson (2010).

Criteria for type deposition

Specimens that were in Hedqvist's collection at the time of its purchase have been deposited in collections according to the following criteria.

- * Holotypes of taxa described when Hedqvist was employed in NHRS from 1971– 1984) have been deposited in NHRS. Those from the 1959–1963 period however are in the BMNH, for the reason that this stint was unknown to us at the time of the initial agreement (omitted from Hansson's biography (2010) as well as the official records from the central secretariat of NHRS, and obvious mainly from the museum's very detailed annual reports (KVA 1961–1965)).
- * Holotypes of species described on the basis of Swedish specimens have mostly been deposited in NHRS; other holotypes (described outside the period 1971–1984) have been retained by BMNH.
- * Paratypes, where there are multiple paratypes, have been divided between BMNH and NHRS.
- * Some specimens that were present in Hedqvist's collection resulted from expeditions or inventories carried out by institutes (primarily NHRS and ZMLU). Some had loan labels or belonged to older collections of various institutes. Many apparently came from donations to NHRS, or were handed to Hedqvist by colleagues at the NHRS or by private collectors for identification. In many cases we have received confirmation from the collectors (B. Gustafsson, L.-Å. Janzon, et al., pers. comm.) that they intended and expected the specimens to be added or returned to the NHRS collection, or in some cases returned to them personally, rather than being gifts to Hedqvist's personal collection. It has proved impractical to establish the exact status and ownership of each specimen; only some which are clear loans have been returned to NHRS and elsewhere.
- * For a large number of Chalcidoidea taxa some 820 species Hedqvist's records in the 2003 catalogue (or elsewhere in his writings) represent the only Swedish records. Thus, his collection holds many specimens that are important as vouchers for the national occurence of these taxa, and are nationally important especially in the light of the ongoing Swedish Taxonomy Initiative. Wherever numbers allowed, such taxa have been shared between NHRS and BMNH. In exchange, material is being donated from the Swedish Malaise Trap Project to BMNH.
- * Hedqvist's handwritten folders of notes on specimens, including many faunistic records, are in the BMNH, but digitised versions are shared with NHRS.

Material and methods

Type catalogue

We have listed all taxa described by Hedqvist in alphabetical order. The issue number of journals is given only in cases where pagination is separate for each issue. For each taxon there is then a page reference.

The current status of names is according to the best knowledge available to the authors, and mostly based on standard taxonomic databases such as Taxapad (Yu et al. 2012), the Universal Chalcidoidea Database (Noyes 2016) and specific web searches. Family and subfamily placements also follow these and other (e.g. Shaw 1990; Johnson 1992; Broad et al. 2016) publications.

Type repository is given in abbreviated format. Sex and geographical origin (country level or similar) is given for holotypes. The numbers of paratypes present in different repositories is listed without separating sexes or citing label data. Detailed specimen data are available in the original publications. Obvious mistakes are corrected. Paratypes are frequently exchanged with or donated to other collections, and sometimes there have been errors in publications, or specimens have not been returned; for these and other reasons, there are very frequently discrepancies between the published paratype repositories and the current situation. In cases where there are more specimens labelled as paratypes than mentioned in the original publication, we must remember that "all the specimens included by the author in the new taxon" (§72.4.1, ICZN 1999) unless "expressly excluded" by being listed with some other status are part of the type series. All specimens available to the author at the time of description are thus considered to belong to the type series, unless published or unpublished evidence suggests they were not considered for establishing the author's concept of the species. In this case, paratypes not mentioned in the original description can often be regarded as part of the type series, unless they are different in some sense that would have been mentioned, or the species described as monotypic with a unique holotype, in which case the extra specimens must be considered to be deliberately excluded from the type series - or unless there is some particular reason to believe that they came to the author's attention after publication.

Unfortunately, we have been unable to find the holotypes (or in some cases any type material) of 28 species. Very few of these taxa were published as being in Hedqvist's collection so it is possible that many of them will be found, unregistered, in institutional collections. The missing holotypes are listed in Table 1. Notably, most of the types of Hedqvist's species of Microgastrinae, Cheloninae and Opiinae are missing, and a substantial number of Mymaridae, but only few of other groups.

Recognition of Hedqvist specimens

In order to facilitate recognition of Hedqvist specimens, in general and for future location of currently missing types, we give a short description of typical characteristics.

Taxon
Anagrus tullgreni Heqvist, 1954
Camptoptera lapponica Heqvist, 1954
Pachyceras janssoni Heqvist, 1955
Camptoptera strobilicola Heqvist, 1956 (?)
Chelonus caboverdensis Hedqvist, 1965
Phanerotoma caboverdensis Hedqvist, 1965
Rhogas caboverdensis Hedqvist, 1965
Microgaster insularis Hedqvist, 1965
Apanteles brevimetacarpus Hedqvist, 1965
Apanteles rufithorax Hedqvist, 1965
Apanteles compressithorax Hedqvist, 1965
Apanteles robustus Hedqvist, 1965
Apanteles proagynus Hedqvist, 1965
Apanteles hyalinis Hedqvist, 1965
Apanteles procoxalis Hedqvist, 1965
Apanteles lindbergi Hedqvist, 1965
Apanteles salensis Hedqvist, 1965
Apanteles danaisae Hedqvist, 1965
Apanteles progahinga Hedqvist, 1965
Opius caboverdensis Hedqvist, 1965
<i>Opius insularis</i> Hedqvist, 1965
Opius lindbergi Hedqvist, 1965
Eurytoma tilicola Hedqvist, 1966
Plutothrix cisae Hedqvist, 1966
Eurytoma annilai Hedqvist, 1974
Legolasia dinotiscoides Hedqvist, 1974
Brimeria clavata Hedqvist, 1977
Kvaseria flavipes Hedqvist, 1978

Table 1. Missing types. Taxa described by Hedqvist where holotypes have not been located, listed in chronological order, in their original combinations.

Hymenoptera specimens mounted by Hedqvist are typically glued onto rectangular or more or less quadratic pieces of cardboard. In the early years, specimens are typically glued with the ventral side to the board (Figure 4A, cf also Figure 6D), probably revealing his background as a coleopterist. This often makes it difficult to observe characters in the face and on sides, particularly when both pairs of wings are stretched out and glued to the board. However from his later years, specimens are usually glued on their right-hand side, head usually facing left or up, and with the right pair of wings spread and glued to the board (Figures 4B, C, 5). This often allows inspection of larger parts of the body, even when no great effort has been made to homogenise posture, spread out body parts or clean the specimen.

Hedqvist's own locality labels are mostly printed, with details added by hand (Figure 6A–C). Most specimens are collected in Sweden, and label data starts with an abbreviation of the Swedish province, most commonly Sk., Upl. and Vb. (for Skåne,

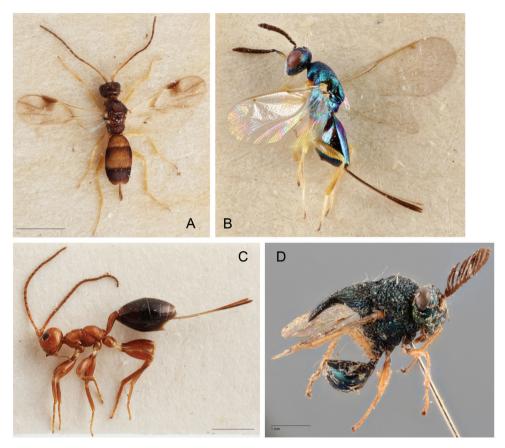


Figure 4. Examples of type specimens of Hedqvist. **A** Holotype of *Paracedria suecica* Heqvist, 1956 in NHRS **B** Holotype of *Torymus canariensis* Hedqvist, 1977 in BMNH **C** Holotype of *Spathius canariensis* Hedqvist, 1976 in NHRS **D** A paratype of *Schizaspidia tawiensis* Hedqvist, 1978 in NHRS.

Uppland and Västerbotten respectively) and a locality name; then a second row date (day/month year, all in arabic numerals). The name is typically given on a third row as "K.-J. Hedqvist", but many small variations occur. The abbreviated version "KJH" or "K.-J.H." is common if little space is available, and on entirely hand-written labels. Entirely handwritten labels are more common from later years, especially after Hedqvist's retirement. The handwriting is small and rather uneven but perfectly legible, usually even in his last years when it was getting notably shaky. Sometimes a separate label for the host plant or host insect is added (as in Figures 6A and 6D).

Of course, a lot of the material he worked on was collected or mounted by himself, so the mounts vary (Figure 4D shows a very different example), and in many cases identification labels provide the only way to connect a specimen with Hedqvist. Identification labels and type labels are usually similar in structure as locality labels, with a preprinted part and details added in handwriting. A number of identification labels however are entirely in his handwriting and without his name or signature (Figure 6C). Red type labels typically have "HOLOTYPUS" or "PARATYPUS", and "K-J

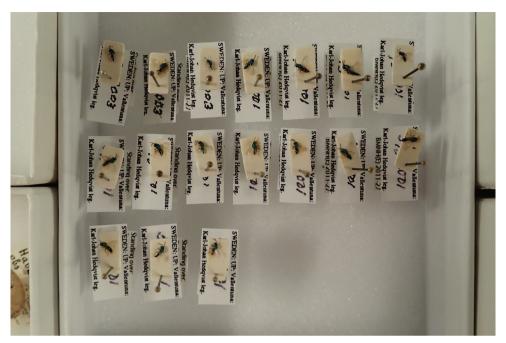


Figure 5. A unit tray with a series of specimens showing the characteristic variation of Hedqvist's mounts.

Hedqvist det. 19" printed (Figures 6A and 6B). More rarely, in early taxa, there is a small red label saying "Holotyp" without the name, combined with a regular identification label (Figure 6D). However, as our difficulties in finding many types have shown, there are several cases where type labels have been omitted or mixed up.

Collection abbreviations

AEIC	American Entomological Institute, Gainesville, USA						
BMNH	Natural History Museum, London, UK						
CFUA	Universidad Austral de Chile, Valdivia, Chile						
CNC	Canadian National collection of Insects, Ottawa, Canada						
EEZA	Estación Experimental de Zonas Aridas, Almeria, Spain						
KUEC	Kyushu University, Fukuoka, Japan						
MDLA	Museo do Dundo, Dundo, Angola						
MHNG	Muséum d'Histoire Naturelle de Genève, Geneva, Switzerland						
MNHN	Muséum National d'Histoire Naturelle, Paris, France						
MZH	Finnish Museum of Natural History, Helsinki, Finland						
NHRS	Naturhistoriska Riksmuseet, Stockholm, Sweden						
OUMNH	Oxford University Museum of Natural History, Oxford, UK						
RMCA	Musée Royal de l'Afrique Central, Tervuren, Belgium						
SLUU	Swedish University of Agricultural Sciences, Ultuna, Uppsala, Sweden						

С 1 cm Α В 1. Varmdo Canary Is. Tenerife 41956 Las Canadas Heolevist 1213 1970 K.-J.Hedqvist Spathiu S canariensis cedria Sp.n. gen. Hedgrist det. 1972 R.Sp. wist det. 1977 NHRS-HEVA **NHRS-HEVA** 000002288 000004170 D

Figure 6. Examples of labels of Hedqvist. **A** Labels from holotype of *Paracedra suecica* Heqvist, 1956 in NHRS **B** Labels from holotype of *Spathius canariensis* Hedqvist, 1976 in NHRS **C** Two identification labels of non-type specimens without Hedqvist's name or signature **D** Holotype with labels of *Thomsonisca chinaspidis* Heqvist, 1958 in BMNH.

SSFRI	Swedish State Forest Research Institute, Stockholm, Sweden (now assimi-
	lated into the Swedish Agricultural University SLU at Uppsala, Sweden)
ULCI	Universidad de la Laguna, Tenerife, Spain
USNM	National Museum of Natural History, Washington DC, USA
ZMBN	Zoological Museum, University of Bergen, Norway
ZMHB	Museum für Naturkunde der Humboldt Universität, Berlin, Germany
ZMLU	Zoological Museum, Lund University, Lund, Sweden
ZMUC	Zoologisk Museum, Københavns Universitet, Copenhagen, Denmark
ZMUN	Zoologisk Museum, Oslo Universitet, Oslo, Norway

- coll. T.-E. Leiler, now at NHRS
- coll. H. Lindberg, now at MZH
- coll. J. Mateu, now at EEZA
- coll. Institute of Agricultural and Forest Zoology, University of Helsinki, Finland, now at MZH

	cs			ş			cs		
	species group names	(of which valid)	fraction valid	genus group names	(of which valid)	fraction valid	family group names	(of which valid)	fraction valid
HYMENOPTERA	260	207	0.80	72	36	0.50	8	3	0.38
<u>Chalcidoidea</u>	182	153	0.84	59	30	0.51	5	3	0.60
Pteromalidae	97	89	0.92	47	27	0.57	4	2	0.50
Eupelmidae	24	18	0.75	0	0	n a	0	0	n a
Eulophidae	22	21	0.95	8	2	0.25	1	1	1.00
Eurytomidae	12	6	0.50	1	0	0.00	0	0	n a
Eucharitidae	8	7	0.88	1	1	1.00	0	0	n a
Mymaridae	8	3	0.38	2	0	0.00	0	0	n a
Encyrtidae	3	1	0.33	0	0	n a	0	0	n a
Perilampidae	3	3	1.00	0	0	n a	0	0	n a
Torymidae	2	2	1.00	0	0	n a	0	0	n a
Leucospidae	1	1	1.00	0	0	n a	0	0	n a
Ormyridae	1	1	1.00	0	0	n a	0	0	n a
Chalcididae	1	1	1.00	0	0	n a	0	0	n a
<u>Ichneumonoidea</u>	66	44	0.67	10	5	0.50	1	0	0.00
Braconidae	65	44	0.68	10	5	0.50	1	0	0.00
Ichneumonidae	1	0	0.00	0	0	n a	0	0	n a
<u>Megalyroidea</u>	6	6	1.00	1	1	1.00	2	0	0.00
Megalyridae	6	6	1.00	1	1	1.00	2	0	0.00
<u>Proctotrupoidea</u>	2	2	1.00	1	0	0.00	0	0	n a
Diapriidae	0	0	n a	1	0	0.00	0	0	n a
Roproniidae	1	1	1.00	0	0	n a	0	0	n a
Vanhorniidae	1	1	1.00	0	0	n a	0	0	n a
<u>Chrysidoidea</u>	1	1	1.00	1	0	0.00	0	0	n a
Bethylidae	1	1	1.00	1	0	0.00	0	0	n a
<u>Tenthredinoidea</u>	1	0	0.00	0	0	n a	0	0	n a
Diprionidae	1	0	0.00	0	0	n a	0	0	n a
<u>Platygastroidea</u>	1	1	1.00	0	0	n a	0	0	n a
Scelionidae	1	1	1.00	0	0	n a	0	0	n a
<u>Stephanoidea</u>	1	0	0.00	0	0	n a	0	0	n a
Stephanidae	1	0	0.00	0	0	n a	0	0	n a
COLEOPTERA	1	1	1.00	0	0	n a	0	0	n a
Curculionidae	1	1	1.00	0	0	n a	0	0	n a
Σ	261	208	0.80	72	36	0.50	8	3	0.38

Table 2. New names published by Hedqvist. Number of new names and their current status, assigned according to current classification (in a few cases different from Hedqvist's view).

Hedqvist's taxonomic publications

Hedqvist described 261 insect species in 88 papers published between 1954 and 2004 (all but one 1954–1985) in various journals, often the Scandinavian ones, Entomologisk Tidskrift, Opuscula Entomologica and Entomologica Scandinavica, but very often also in local journals connected with the countries or museums where the specimens were from. For the active period 1954-1985, he published on an average 2.7 papers a year (0-7, but zeros are very rare and only in the last years), with 2.9 new species per paper or 7.9 new species per year (0-28). These are mainly taxonomic papers, often with little other content than descriptions, but in several cases with some biological observations and attempts to synthesise available knowledge (particularly concerning parasitoids of saproxylic Coleoptera). The largest part of these papers are of "notes" type: descriptions of a few new taxa, but several are taxonomic revisions of small groups, and a few are revisions of larger scope or treatment of larger materials (mainly 1959–1970). The bulk of the new taxa are made up of new species, but there are also a few family-group taxa, and 72 new genera (Table 2) (the new genera almost always with simultaneously described new species as type species, only 4 cases have type species that were described earlier by someone else). Very few papers, and none before 1979, were written together with co-authors. (Please note the shift in spelling of the name from Heqvist to Hedqvist between 1961 and 1962. Hedquist, as frequently seen in taxonomic literature, is a misspelling).

Results

Taxa described by Hedqvist

Names are listed in strictly alphabetical order as originally given. In order to find names pertaining to a particular family of interest, consult Table 3.

Ablaxia robusta Hedqvist, 1978c, p. 315f, valid species (Pteromalidae: Pteromalinae) Female holotype and one paratype now in NHRS (NHRS-HEVA000002194-NHRS-HEVA000002195), one paratype in BMNH; one paratype missing.

Afrolelaps Hedqvist, 1963a, p. 47, type species *Afrolelaps maculata* Hedqvist, 1963, junior synonym of *Dipara* Walker, 1833 (Pteromalidae: Diparinae)

Afrolelaps albomaculata Hedqvist, 1963a, p. 49f plus fig. 1b on p. 48, valid as *Dipara albomaculata* (Hedqvist, 1963) (Pteromalidae: Diparinae)

Female holotype and 1 paratype from Angola deposited in MDLA, 2 paratypes now in BMNH and 1 paratype in NHRS (in original publication stated to be deposited in Angola), 2 paratypes supposedly in NHRS missing.

Family-group	Genus
COLEOPTERA	
Curculionidae	Hylocorus
HYMENOPTERA	
Chalcidoidea	
Chalcididae	Tanycoryphus
Encyrtidae	Coelopencyrtus, Parablastothrix, Thomsonisca
Eucharitidae	Gollumiella, Losbanus, Rhipiphallus, Schizaspidia, Stilbula
Eulophidae	Aprostocetus, Astichus, Balinia, Beornia, Durinia, Entia, Entiidae, Gimlia,
-	Necremnus, Oinia, Sarasvatia, Visnuella
Eupelmidae	Anastatus, Calosota, Chirolophus, Eupelmella, Eupelmus, Polymoria
Eurytomidae	Eudecatoma, Eurytoma, Pseudrileya
Leucospidae	Leucospis
Mymaridae	Anagrus, Baburia, Camptoptera, Herulia, Litus
Ormyridae	Ormyrus
Perilampidae	Chrysolampus, Perilampus
Pteromalidae	passim
Torymidae	Torymus
Chrysidoidea	
Bethylidae	Snappania
Diaprioidea	
Diapriidae	Sundholmiella
Ichneumonoidea	
Braconidae	passim
Ichneumonidae	Itoplectis
Megalyroidea	
Megalyridae	Dinapsini, Dinapsis, Iseurini, Megalyridia, Megalyrini
Platygastroidea	
Scelionidae	Telenomus
Proctotrupoidea	
Roproniidae	Ropronia
Vanhorniidae	Vanhornia
Stephanoidea	
Stephanidae	Foenatopus
Tenthredinoidea	
Diprionidae	Diprion

Table 3. Genus and family-group level names under which to look for information about different families in the alphabetical taxa list.

Afrolelaps maculata Hedqvist, 1963a, pp. 47–49, valid as *Dipara maculata* (Hedqvist, 1963) (Pteromalidae: Diparinae), and type species of *Afrolelaps* Hedqvist, 1963 Female holotype from Angola, deposited in MDLA.

Amazonisca Heqvist, 1959c, p. 196 and key p. 178f, type species *Amazonisca batesi* Heqvist, 1959, valid genus (Pteromalidae: Cleonyminae)

Amazonisca batesi Heqvist, 1959c, p. 198 and fig. 7 on p. 197, valid species (Pteromalidae: Cleonyminae), and type species of *Amazonisca* Heqvist, 1959 Female holotype from Brazil in OUMNH.

Anagrus capensis Heqvist, 1960c, p. 426f, valid species (Mymaridae) Female holotype from South Africa in ZMLU.

Anagrus tullgreni Heqvist, 1954b, p. 272f, junior synonym of *Anagrus atomus* (Linnaeus, 1767) (Mymaridae)

Female holotype and 45 paratypes, all from Sweden, according to original description deposited in SSFRI; 12 paratypes now in BMNH, holotype and 33 paratypes currently missing.

Anastatus capensis Hedqvist, 1970, p. 406f, valid species (Eupelmidae: Eupelminae) Female holotype from South Africa now in BMNH.

Apanteles brevimetacarpus Hedqvist, 1965, p. 12f, valid species (Braconidae: Microgastrinae)

Female holotype and 1 paratypes from Cape Verde apparently deposited in coll. Lindberg, now missing (not in MZH), 1 male paratype now in BMNH.

Apanteles caboverdensis Hedqvist, 1965, p. 17f, junior synonym of *Apanteles hemara* Nixon, 1965 (Braconidae): Microgastrinae

Female holotype and 20 paratypes from Cape Verde originally deposited in coll. Lindberg, now missing (not in MZH), 2 paratypes now in BMNH.

Apanteles compressithorax Hedqvist, 1965, p. 14f, junior synonym of Cotesia pistrinariae (Wilkinson, 1929: Microgastrinae)

Female holotype and 10 paratypes from Cape Verde apparently deposited in coll. Lindberg, now missing (not in MZH), 2 paratypes now in BMNH.

Apanteles danaisae Hedqvist, 1965, p. 23 plus fig. 22 on p. 22, valid as *Cotesia danaisae* (Hedqvist, 1965) (Braconidae: Microgastrinae)

Fifty-six paratypes from Cape Verde apparently deposited in coll. Lindberg, now missing (not in MZH), holotype and 5 paratypes now in BMNH, 2 paratypes in NHRS (NHRS-HEVA000003782-NHRS-HEVA000003783).

- *Apanteles hyalinis* Hedqvist, 1965, p. 18f, valid species (Braconidae: Microgastrinae) Male holotype from Cape Verde apparently deposited in coll. Lindberg, now missing (not in MZH).
- *Apanteles jubmeli* Hedqvist, 1972, p. 63f, valid species (Braconidae: Microgastrinae) Female holotype and one paratype from Sweden now in NHRS (NHRS-HE-VA000002275-NHRS-HEVA000002276), two paratypes now in BMNH.

Apanteles lindbergi Hedqvist, 1965, p. 21f, junior synonym of *Apanteles sodalis* (Haliday, 1834) (Braconidae: Microgastrinae)

Female holotype and 4 paratypes from Cape Verde apparently deposited in coll. Lindberg, now missing (not in MZH), 2 paratypes now in BMNH.

Apanteles proagynus Hedqvist, 1965, p. 17, valid species (Braconidae: Microgastrinae) Male holotype and 1 paratype from Cape Verde apparently deposited in coll. Lindberg, now missing (not in MZH).

Apanteles proalastor Hedqvist, 1965, p. 20f, junior synonym of *Apanteles hemara* Nixon, 1965 (Braconidae: Microgastrinae)

Female holotype and 1 paratype from Cape Verde originally deposited in coll. Lindberg, now missing (not in MZH), 1 paratype now in BMNH.

Apanteles procoxalis Hedqvist, 1965, p. 19f, valid species (Braconidae: Microgastrinae) Female holotype and 23 paratypes from Cape Verde apparently deposited in coll. Lindberg, now missing (not in MZH), 2 paratypes now in BMNH.

Apanteles progahinga Hedqvist, 1965, p. 23f, valid as *Cotesia progahinga* (Hedqvist, 1965) (Braconidae: Microgastrinae)

Female holotype and 5 paratypes from Cape Verde apparently deposited in coll. Lindberg, now missing (not in MZH), 2 paratypes now in BMNH.

Apanteles robustus Hedqvist, 1965, p. 15 plus fig. 13 on p. 16, valid species (Braconidae: Microgastrinae)

Female holotype from Cape Verde apparently deposited in coll. Lindberg, now missing (not in MZH).

Apanteles rufithorax Hedqvist, 1965, p. 13f, valid species (Braconidae: Microgastrinae) Female holotype and 1 paratype from Cape Verde apparently deposited in coll. Lindberg, now missing (not in MZH).

Apanteles salensis Hedqvist, 1965, p. 22, junior synonym of *Glyptapanteles eucosmae* (Wilkinson, 1929) (listed as *Protapanteles eucosmae* in Yu *et al.*, 2012) (Braconidae: Microgastrinae)

Female holotype from Cape Verde apparently deposited in coll. Lindberg, now missing (not in MZH).

Apanteles salverdensis Hedqvist, 1965, p. 14 plus fig. 11 on p. 15, junior synonym of Apanteles appellator Telenga 1949 (Braconidae: Microgastrinae)

Female holotype and 1 paratype from Cape Verde originally deposited in coll. Lindberg, now missing (not in MZH).

Apanteles striatopleurus Hedqvist, 1965, p. 16, valid species (Braconidae: Microgastrinae) Female holotype from Cape Verde originally deposited in coll. Lindberg, now in MZH.

Aspilota kempei Hedqvist, 1973f, p. 91 plus figs 1, 2c-d, 3a on p. 92, valid as *Dino-trema kempei* (Hedqvist, 1973) (Braconidae: Alysiinae) Female holotype from Sweden now in NHRS (NHRS-HEVA000002277).

Aspilota necrophila Hedqvist, 1973b (1972 in Yu et al., 2012), pp. 217–219, valid as Dinotrema necrophilum (Hedqvist, 1973) (Braconidae: Alysiinae)

Female holotype from Sweden now in NHRS (NHRS-HEVA000002278), one paratype now in BMNH.

Aspilota nidicola Hedqvist, 1973b (1972 in Yu et al., 2012), p. 216f, valid species (Braconidae: Alysiinae)

Female holotype from Sweden now in NHRS (NHRS-HEVA000002279), one paratype now in BMNH.

Aprostocetus dryocoetae Hedqvist, 1963c, pp. 147f, valid as *Baryscapus dryocoetae* (Hedqvist, 1963) (Eulophidae: Tetrastichinae)

Female holotype and 1 paratype from Sweden now in BMNH.

Astichus intermedius Hedqvist, 1969b, pp. 167–169 plus fig. 4b on p. 171, valid species (Eulophidae: Entiinae)

Female holotype and 2 paratypes from Sweden now in BMNH, 2 paratypes in NHRS, 4 paratypes in CNC.

Astichus maculatus Hedqvist, 1969b, p. 170f, valid species (Eulophidae: Entiinae) Female holotype and 2 paratypes from Sweden now in BMNH.

Astichus polyporicola Hedqvist, 1969b, p. 172 plus fig. 2a on p. 169 and fig. 4c on p. 171, valid species (Eulophidae: Entiinae)

Female holotype and 25 paratypes from Canada in CNC, 8 paratypes now in BMNH.

Aulosaphes capensis Hedqvist 1963b, p. 43f, valid as Afrotritermus capensis (Hedqvist, 1963) (Braconidae: Lysiterminae)

Male holotype from South Africa in ZMLU.

Baburia Hedqvist, 2004, p. 235, type species *Baburia narendrani* Hedqvist, 2004, preoccupied name (nec *Baburia* Koçak, 1981 in Lepidoptera), junior synonym of *Acmopolynema* Oglobin, 1946 (Mymaridae)

Baburia fasciata Hedqvist, 2004, p. 236 plus fig. 7 on p. 239, junior synonym of Acmopolynema tachikawai Taguchi, 1971 (Mymaridae)

Female holotype from Sri Lanka now in BMNH.

Baburia narendrani Hedqvist, 2004, p. 235f plus fig. 5 on p. 238, fig. 6 on p. 239, valid as *Acmopolynema narendrani* (Hedqvist, 2004) (Mymaridae), type species of *Baburia* Hedqvist, 2004

Female holotype and 1 paratype from Sri Lanka now in BMNH.

Balinia Hedqvist, 1978a, p. 63, type species *Balinia stylata* Hedqvist, 1978, junior synonym of *Acrias* Walker, 1847 (Eulophidae: Entiinae)

Balinia stylata Hedqvist, 1978a, p. 63f, valid as *Acrias stylata* (Hedqvist, 1978) (Eulophidae: Entiinae), and type species of *Balinia* Hedqvist, 1978

Female holotype and 5 paratypes from Brazil now in BMNH, 5 paratypes in NHRS (NHRS-HEVA000002151-NHRS-HEVA000002155).

Balrogia Hedqvist, 1977a, p. 79f, type species *Balrogia striata* Hedqvist, 1977, valid genus (Pteromalidae: Erotolepsiinae)

Balrogia striata Hedqvist, 1977a, p. 80 plus fig. 2 on p. 79, valid species (Pteromalidae: Erotolepsiinae)

Female holotype from Brazil now in BMNH.

Beornia Hedqvist, 1975d, p. 133f, type species *Beornia femorata* Hedqvist, 1975, valid genus (described in Pteromalidae: Chrysolampinae, but now in Eulophidae: Entiinae)

Beornia femorata Hedqvist, 1975d, p. 134 plus fig. 1 on p. 135, valid species, and type species of *Beornia* Hedqvist, 1975 (Eulophidae: Entiinae nec Pteromalidae or Perilampidae)

Female holotype and 1 paratype from Sweden now in NHRS (NHRS-HE-VA000002156-NHRS-HEVA000002157), 1 paratype in BMNH. 1 paratype currently missing.

Blacus nidicola Hedqvist, 1974h, p. 184 plus fig. 1 on p. 185, currently valid as a subspecies of *Blacus maryi* Hellén, 1958 (Braconidae: Brachistinae)

Female holotype and 1 paratype from Sweden now in NHRS (NHRS-HE-VA000002280-NHRS-HEVA000002281), 1 paratype now in BMNH.

Boeria Hedqvist, 1969c, p. 185 and key pp. 174–176, type species *Boeria saetosa* Hedqvist, 1975, preoccupied (nec *Boeria* Kirkaldy, 1908 in Hemiptera), replaced with *Hedqvistina* Koçak, Hüseyinoglu & Kemal, 2008 (Pteromalidae: Diparinae)

Boeria saetosa Hedqvist, 1969c, p. 185 plus fig. 8 on p. 186, valid as *Hedqvistina sae-tosa* (Hedqvist, 1969) (Pteromalidae: Diparinae), and type species of *Boeria* Hedqvist, 1969 and its replacement name *Hedqvistina* Koçak, Hüseyinoglu & Kemal, 2008

Female holotype and 4 paratypes from South Africa in BMNH (1 paratype ex coll. Hedqvist).

Bofuria Hedqvist, 1978b, p. 137 and key p. 135, type species *Bofuria maculata* Hedqvist, 1978, valid genus (Pteromalidae; Colotrechninae)

Bofuria maculata Hedqvist, 1978b, p. 137, valid species (Pteromalidae: Colotrechninae), and type species of *Bofuria* Hedqvist, 1978 Female holotype from Brazil now in BMNH.

Bomburia Hedqvist, 1978b, p. 135f, type species *Bomburia femorata* Hedqvist, 1978, valid genus (Pteromalidae: Colotrechninae)

Bomburia femorata Hedqvist, 1978b, p. 136f, valid species (Pteromalidae: Colotrechninae), and type species of *Bomburia* Hedqvist, 1978

Female holotype from Brazil now in NHRS (NHRS-HEVA000003596), one paratype now in BMNH.

Bracon caboverdensis Hedqvist, 1965, p. 4, junior synonym of *Bracon unimaculatus* Szépligeti, 1913 (Braconidae: Braconinae)

Female holotype and 6 paratypes from Cape Verde apparently deposited in coll. Lindberg, now missing (not in MZH).

Bracon xyletini Hedqvist, 1973e, p. 89 plus fig. 1 on p. 90, junior synonym of *Bracon mirus* Szépligeti, 1901 (Braconidae: Braconinae)

Female holotype from Sweden now in NHRS (NHRS-HEVA000002282).

Brimeria Hedqvist, 1977b, p. 153, type species *Brimeria clavata* Hedqvist, 1977, junior synonym of *Sceptrothelys* Graham, 1956 (Pteromalidae; Pteromalinae)

Brimeria clavata Hedqvist, 1977b, p. 153 plus fig. 1 on p. 154, junior synonym of *Sceptrothelys grandiclava* (Walker, 1835) (Pteromalidae: Pteromalinae), and type species of *Brimeria* Hedqvist, 1977

Female holotype from Sweden deposited in coll. Hedqvist according to original description, but missing; will be deposited in NHRS if retained.

Brokkia Hedqvist, 1977b, p. 154, type species *Brokkia paradoxa* Hedqvist, 1977, junior synonym of *Rakosina* Bouček, 1956 (Pteromalidae: Pteromalinae)

Brokkia paradoxa Hedqvist, 1977b, p. 154f, junior synonym of *Rakosina deplanata* Bouček, 1956 (Pteromalidae: Pteromalinae), and type species of *Brokkia* Hedqvist, 1977 Female holotype from Sweden now in NHRS (NHRS-HEVA000003595).

Bruesisca Heqvist, 1961, p. 93, type species *Cleonymus submersus* Brues, 1910, valid genus (Pteromalidae: Cleonyminae)

Calosota affinis Hedqvist, 1970, p. 416 plus fig. 10d-f on p. 415 and fig. 11b on p. 417, valid species (Eupelmidae: Calosotinae)

Female holotype and 1 paratype from South Africa in BMNH (paratype ex coll. Hedqvist).

Calosota capensis Hedqvist, 1970, p. 410f plus fig. 5g-i on p. 408 and fig. 6c on p. 409, valid species (Eupelmidae: Calosotinae)

Female holotype from South Africa now in BMNH. 3 paratypes apparently missing.

Calosota cyanea Hedqvist, 1970, pp. 414–416 plus fig. 7g-i on p. 411 and fig. 8c on p. 412, valid species (Eupelmidae: Calosotinae)

Female holotype plus 2 paratypes from South Africa in BMNH.

Calosota ferrierei Hedqvist, 1970, p. 414 plus fig. 9a on p. 413, fig. 10a-c on p. 415 and fig. 11a on p. 417, valid species (Eupelmidae: Calosotinae)

Female holotype from Uganda and 2 paratypes in BMNH, 2 paratypes missing.

Calosota flavostylus Hedqvist, 1970, p. 413f plus fig. 7d-f on p. 411 and fig. 8b on p. 412, valid species (Eupelmidae: Calosotinae)

Female holotype from South Africa in BMNH; two specimens labelled as paratypes, although not mentioned in original description, in BMNH.

Calosota punctata Hedqvist, 1970, p. 418 plus fig. 12a-c on p. 419, valid species (Eupelmidae: Calosotinae)

Female holotype from South Africa in BMNH.

Calosota purpurata Hedqvist, 1970, p. 416f plus fig. 10g-i on p. 415, valid species (Eupelmidae: Calosotinae)

Female holotype from South Africa in BMNH.

Calosota robusta Hedqvist, 1970, p. 410 plus fig. 5d-e on p. 408 and fig. 6b on p. 409, valid species (Eupelmidae: Calosotinae)

Female holotype plus 1 paratype from South Africa in BMNH; 1 paratype deposited in coll. Hedqvist according to original description but missing.

Calosota rugosopunctata Hedqvist, 1970, p. 417f plus fig. 12d-e on p. 419, junior synonym of *Balcha cylindrica* Walker, 1862 (Eupelmidae: Calosotinae) Female holotype from South Africa in BMNH.

Calosota septentrionalis Heqvist, 1956c, p. 96f, junior synonym of *Calosota aestivalis* Curtis, 1836 (Eupelmidae: Calosotinae)

Female holotype and 1 paratype from Sweden now in BMNH.

Calosota testaceipes Hedqvist, 1970, p. 412f plus fig. 7a-c on p. 411, valid species (Eupelmidae: Calosotinae)

Female holotype and 2 paratypes from South Africa in BMNH (one paratype ex coll. Hedqvist).

Calosota turneri Hedqvist, 1970, p. 408f, valid species (Eupelmidae: Calosotinae) Female holotype plus 4 paratypes from South Africa in BMNH (1 paratype ex coll. Hedqvist).

Camptoptera lapponica Heqvist, 1954b, pp. 273–275, junior synonym of *Camptoptera cardui* (Förster, 1856) (Mymaridae)

Female holotype and 1 paratype, all from Sweden, according to original description deposited in SSFRI; currently missing.

Camptoptera strobilicola Heqvist, 1956a, pp. 37–39, junior synonym of *Camptoptera magna* Soyka, 1946 (Mymaridae)

Female holotype and 1 paratype from Norway deposited in ZMUN, where 2 females and 1 male with matching collecting data not labelled as types were found and not considered types (probably erroneously) by Trjapitsyn (2014); according to original description, 42 paratypes deposited in SSFRI, also currently missing.

Cantharoctonus brunneus Hedqvist, 1963b, p. 38f, valid species (Braconidae: Rhysipolinae) Female holotype from USA in USNM.

Cerocephala petiolata Hedqvist, 1969a, p. 459, valid species (Pteromalidae: Cero-cephalinae)

Female holotype from Democratic Republic of Congo in RMCA.

Chalcedectoides Hedqvist, 1967a, p. 182, type species *Chalcedectoides saharensis* Hedqvist, 1967, junior synonym of *Agrilocida* Steffan, 1964 (Pteromalidae: Cleonymidae)

Chalcedectoides saharensis Hedqvist, 1967a, pp. 182–184, junior synonym of *Agrilocida ferrierei* Steffan, 1964 (Pteromalidae: Cleonyminae), and type species of *Chalcedectoides* Hedqvist, 1967

Female holotype from Algeria in MHNG, 2 paratypes now in BMNH, 5 paratypes missing (paratypes published as divided between coll. Hedqvist and coll. Mateu, though none are in EEZA where most of coll. Mateu is deposited).

Chalcedectes niger Hedqvist, 1967a, pp. 180–182, junior synonym of *Chalcedectus sinaiticus* (Masi, 1936) (Pteromalidae: Cleonyminae)

Female holotype from Algeria in MHNG, one paratype now in BMNH, one missing (not in EEZA, where most of coll. Mateu is deposited). *Chelonus caboverdensis* Hedqvist, 1965, p. 9 plus fig. 5 on p. 10, valid species (Braconidae: Cheloninae)

Female holotype and 1 paratype from Cape Verde apparently deposited in coll. Lindberg, now missing (not in MZH), 1 paratype now in BMNH.

Chirolophus hyalinus Hedqvist, 1970, p. 430 plus fig. 19 on p. 431, valid as *Calosota hyalina* (Hedqvist, 1970) (Eupelmidae: Calosotinae)

Female holotype from South Africa in BMNH.

Choetospilisca Hedqvist, 1969a, p. 452 and key p. 450f, type species *Choetospilisca tabidoides* Hedqvist, 1969, valid genus (Pteromalidae: Cerocephalinae)

Choetospilisca tabidoides Hedqvist, 1969a, p. 452 plus fig. 1a on p. 543 (*tabiloides* is a later misspelling), valid species (Pteromalidae: Cerocephalinae), and type species of *Choetospilisca* Hedqvist, 1969

Female holotype plus 6 paratypes from Brazil now in BMNH.

Chrysolampus niger Hedqvist, 1968b, p. 156f, valid species (Perilampidae: Chrysolampinae)

Female holotype from the Philippines in ZMUC.

Cirdania Hedqvist, 1974a, p. 145, type species *Cirdania styliclava* Hedqvist, 1974, junior synonym of *Toxeuma* Walker, 1833 (Pteromalidae: Pteromalinae)

Cirdania styliclava Hedqvist, 1974a, p. 145f plus fig. 6–7 on p. 147, valid as *Toxeuma styliclava* (Hedqvist, 1974) (Pteromalidae: Pteromalinae), and type species of *Cirdania* Hedqvist, 1974

Female holotype and 2 paratypes from Sweden now in NHRS (NHRS-HE-VA000002196- NHRS-HEVA000002198), 5 paratypes now in BMNH. According to original description 8 paratypes were deposited in coll. Hedqvist and 2 in ZMLU, thus 1 paratype appears to be missing.

Cleonymus albomaculatus Heqvist, 1960a, p. 415 plus fig. 1 on p. 416, valid species (Pteromalidae: Cleonyminae)

Female holotype from South Africa in ZMLU.

Cleonymus canariensis Hedqvist, 1983a, p. 129f plus figs 1a-c, 2a on p. 131, valid species (Pteromalidae: Cleonyminae)

Female holotype from the Canary Islands now in BMNH, one paratype now in NHRS (NHRS-HEVA000002201).

Coelopencyrtus cephalotus Hedqvist, 1973d, p. 94f, junior synonym of *Coelopencyrtus callidii* (Jansson, 1957) (Encyrtidae: Encyrtinae)

Female holotype from Sweden now in NHRS (NHRS-HEVA000002147).

Conodipara Hedqvist, 1971b, p. 58, replacement name for *Turneria* Hedqvist, 1969, type species *Turneria scutellata* Hedqvist, 1969, valid genus (Pteromalidae: Diparinae)

Conophorisca Hedqvist, 1969c, p. 199f and key pp. 174–176, type species *Conophorisca annulata* Hedqvist, 1969, valid genus (Pteromalidae: Diparinae)

Conophorisca annulata Hedqvist, 1969c, p. 201 plus fig. 19 on p. 200, valid species (Pteromalidae: Diparinae), and type species of *Conophorisca* Hedqvist, 1969

Female holotype from South Africa in BMNH, 1 paratype deposited in coll. Hedqvist according to original description but missing.

Cosmophoridia Heqvist, 1955b, p. 93, type species *Cosmophorus flaviceps* Marshall, 1898, downgraded and valid as a subgenus of *Streblocera* Westwood, 1833 (Braconidae: Euphorinae)

Cosmophorus lapponicus Heqvist, 1955b, p. 97f, junior synonym of *Cosmophorus klugi* Ratzeburg, 1848 (Braconidae: Euphorinae)

Female holotype from Sweden now in BMNH.

Cosmophorus narendrani Hedqvist, 2004, p. 233 plus fig. 1 on p. 236, valid species (Braconidae: Euphorinae)

Female holotype from Sri Lanka now in BMNH.

Dasyneurophaga Heqvist, 1957, p. 26f, type genus *Dasyneurophaga japonica* Heqvist, 1964, valid genus (Pteromalidae: Pteromalinae)

Dasyneurophaga japonica Heqvist, 1957, p. 27 plus fig. 2 on p. 25, valid species (Pteromalidae: Pteromalinae), and type species of *Dasyneurophaga* Heqvist, 1957

Female holotype plus 6 paratypes (3 of which were not labelled as types) from Japan now in BMNH, 1 paratype missing.

Dinapsini Hedqvist, 1967b, p. 139f, type genus *Dinapsis* Waterston, 1922, cited as "Dinapsini Hedqv." from 1959, where it was launched as as "tribus nov." (Hedqvist, 1959a, p. 486) but lacking a description and thus unavailable from that date according to §13.1 of the code, made available here through diagnosis in key, in any case invalid as a junior objective synonym and junior homonym of Dinapsinae Waterston, 1922 (Megalyridae).

Dinapsis albicoxa Hedqvist, 1967b, p. 244f, valid species (Megalyridae) Female holotype from Madagascar in MNHN.

Dinapsis hirtipes Hedqvist, 1967b, p. 245 plus fig. 2a-b on p. 243, valid species (Megalyridae) Female holotype in MNHN according to original description; one paratype now in BMNH. *Dinapsis oculohirta* Hedqvist, 1967b, p. 242 plus fig. 2c on p. 243, valid species (Megalyridae)

Female holotype from Madagascar in MNHN; of 12 paratypes mentioned in original description (without repository specified), 2 now in BMNH.

Dinapsis nubilus Hedqvist, 1967b, p. 243f, valid species (Megalyridae) Female holotype from Madagascar in MNHN.

Dinapsis seyrigi Hedqvist, 1967b, p. 241 plus fig. 1a on p. 242 and fig. 2d on p. 243, valid species (Megalyridae)

Female holotype from Madagascar in MNHN.

Dipara canadensis Hedqvist, 1969c, p. 193 plus fig. 13g on p. 192, valid species (Pteromalidae: Diparinae)

Female holotype from Canada now in BMNH.

Dipara nigrita Hedqvist, 1969c, p. 195 plus fig. 16 on p. 196, valid species (Pteromalidae: Diparinae)

Female holotype from Democratic Republic of Congo in RMCA.

Dipara nigrofasciata Hedqvist, 1969c, p. 194f, valid species (Pteromalidae: Diparinae) Female holotype from Madagascar in RMCA.

Dipara turneri Hedqvist, 1969c, p. 193f, valid species (Pteromalidae: Diparinae) Female holotype and 2 paratypes from South Africa in BMNH, 2 paratypes in RMCA.

Diparisca Hedqvist, 1964, p. 54f, type species *Diparisca ferrieri* Hedqvist, 1964, junior synonym of *Spalangiopelta* Masi, 1922 (Pteromalidae, described in Diparinae, currently in Ceinae)

Diparisca ferrierei Hedqvist, 1964, p. 55f, valid as *Spalangiopelta ferrierei* (Hedqvist, 1964) (Pteromalidae: Ceinae), type species of *Diparisca* Hedvist, 1964 Female holotype and 1 paratype from Brazil now in BMNH.

Diparomorpha Hedqvist, 1971b, pp. 57–59, type species *Diparomorpha machadoi* Hedqvist, 1971, junior synonym of *Dipara* Walker, 1833 (Pteromalidae: Diparinae)

Diparomorpha machadoi Hedqvist, 1971b, p. 57f, valid as *Dipara machadoi* (Hedqvist, 1971) (Pteromalidae: Diparinae), and type species of *Diparomorpha* Hedqvist, 1971 Female holotype from Angola deposited in MDLA according to original description.

Diprion butovitschi Hedqvist, 1967c, pp. 72–75, junior synonym of *Diprion pini* (Linnaeus, 1758) (Diprionidae)

Female holotype from Sweden deposited (according to original description) at SSFRI; 59 plus "hundreds" of paratypes mentioned in publication; holotype and 10 paratypes now in BMNH; other paratypes missing.

Dolichodipara Hedqvist, 1969c, p. 180f and key pp. 174–176, type species *Dolichodipara scutellata* Hedqvist, 1969, simultaneous synonym of *Myrmicolelaps* Hedqvist, 1969, the latter deemed junior by first revisor (Desjardins, 2007) (Pteromalidae: Diparinae)

Dolichodipara scutellata Hedqvist, 1969c, p. 181f plus fig. 4 on p. 180, valid as *Myr-micolelaps scutellata* (Hedqvist, 1969) (Pteromalidae: Diparinae), and type species of *Dolichodipara* Hedqvist, 1969

Female holotype from Namibia in BMNH, one paratype deposited in coll. Hedqvist according to original description but missing.

Durinia Hedqvist, 1978a, p. 64, type species *Durinia elegans* Hedqvist, 1978, junior synonym of *Acrias* Walker, 1847 (Eulophidae: Entiinae)

Durinia elegans Hedqvist, 1978a, p. 65 plus fig. 2 on p. 64, valid as *Acrias elegans* (Hedqvist, 1978) (Eulophidae: Entiinae), and type species of *Durinia* Hedqvist, 1978, junior synonym of *Acrias* Walker, 1847

Female holotype and 3 paratypes from Brazil now in NHRS (NHRS-HE-VA000002158-NHRS-HEVA000002161), 4 paratypes now in BMNH; paratype numbers unclear in description (perhaps as many as 60; in that case, most are currently unaccounted for).

Dvalinia Hedqvist, 1977a, p. 78, type species *Dvalinia axillaris* Hedqvist, 1977, valid genus (Pteromalidae: Colotrechninae)

Dvalinia axillaris Hedqvist, 1977a, p. 78f, valid species (Pteromalidae: Colotrechninae), and type species of *Dvalinia* Hedqvist, 1977

Female holotype from Brazil now in BMNH, 1 paratype in NHRS (NHRS-HE-VA000002205); original description does not specify number of paratypes so additional ones might possibly be present in other collections.

Dvaliniinae Hedqvist, 1978b, p. 135, type genus *Dvalinia* Hedqvist, 1977 (currently not recognised and thus a junior synonym of Pteromalidae: Colotrechninae)

Ecphylus carinatus Hedqvist, 1967d, p. 68f plus fig. 2b on p. 67, junior synonym of *Ecphylus silesiacus* (Ratzeburg, 1848) (Braconidae: Doryctinae)

Female holotype and 9 paratypes from Iran in MHNG, 1 paratype in BMNH.

Ecphylus pinicola Hedqvist, 1967d, p. 70, valid species (Broad et al., 2016) although often regarded as a junior synonym of *Ecphylus silesiacus* (Ratzeburg, 1848) (Braconidae: Doryctinae)

Female holotype and 23 paratypes from Sweden now in BMNH; in original description 26 paratypes are mentioned, thus 3 paratypes missing.

Elachertus lasiodermae Hedqvist, 1977c, p. 236f, valid species (Eulophidae: Eulophinae) Female holotype and 10 paratypes from the Canary Islands now in BMNH, 12 paratypes in NHRS (NHRS-HEVA000002162-NHRS-HEVA000002173); 3 paratypes currently missing.

Elasmus capensis Heqvist, 1960b, p. 419f plus fig. 1f-h on p. 421, valid species (Eulophidae: Eulophinae)

Female holotype and 1 paratype from South Africa in ZMLU, 1 paratype now in BMNH (although the original description gives ZMLU as the depository).

Elasmus circulus Hedqvist, 2004, p. 234f plus fig. 3 on p. 237, valid species (Eulophidae: Eulophinae)

Female holotype from Sri Lanka now in BMNH.

Elasmus ferrieri Heqvist, 1960b (*ferrierei* is a later, unjustified emendation), pp. 420–422, valid species (Eulophidae: Eulophinae)

Female holotype from South Africa in ZMLU.

Elasmus nagombiensis Hedqvist, 2004, p. 235 plus fig. 4 on p. 238, valid species (Eulophidae: Eulophinae)

Female holotype and 3 paratypes from Sri Lanka now in BMNH.

Elasmus narendrani Hedqvist, 2004, p. 234 plus fig. 2 on p. 237, valid species (Eulophidae: Eulophinae)

Female holotype and 7 putative paratypes from Sri Lanka now in BMNH, although only 6 paratypes are mentioned in the original description.

Elasmus homonaeoides Heqvist, 1960b, p. 420 plus fig. 1d-e on p. 421, valid species (Eulophidae: Eulophinae)

Female holotype from South Africa in ZMLU.

Elderia Hedqvist, 1977b, p. 155, type species *Elderia suecica* Hedqvist, 1977, valid genus (Pteromalidae: Pteromalinae)

Elderia suecica Hedqvist, 1977b, p. 155f, valid species (Pteromalidae: Pteromalinae), and type species of *Elderia* Hedqvist, 1977

Female holotype and 2 paratypes from Sweden now in NHRS (NHRS-HE-VA000002206- NHRS-HEVA000002208), 2 paratypes in BMNH.

Entedon stephanopachi Heqvist, 1959e, p. 140 plus figs 1–2 on pp. 141–142, valid species (Eulophidae: Entedoninae)

Female holotype missing and 3 paratypes from Sweden now in BMNH.

Entia Hedqvist, 1974e, p. 253f, type species *Entia leileri* Hedqvist, 1977, junior synonym of *Boucekastichus* Andriescu, 1971 (Eulophidae: Entiinae)

Entia leileri Hedqvist, 1974e, pp. 254–256, valid as *Boucekastichus leileri* (Hedqvist, 1974) (Eulophidae), type species of *Entia* Hedqvist, 1974

Female holotype from Romania now in NHRS (NHRS-HEVA000002174).

Entiidae Hedqvist, 1974e, p. 253, type genus *Entia* Hedqvist, 1974, junior synonym of Euderinae Erdös, 1956, but since that turned out to be a junior homonym (of Euderinae Lacordaire, 1866 in Coleoptera), Hedqvist's name became the oldest potentially valid family-group name and is currently valid as Entiinae (Pteromalidae) (cf Hansson and Straka 2009)

Epistenia burksi Hedqvist, 1968a, p. 3f plus fig. 6c on p. 6, fig. 4c on p. 8 and fig. 5c on p. 9, valid species (Pteromalidae: Cleonyminae)

Female holotype from USA in USNM, 1 paratype now in BMNH, 1 paratype in USNM.

Epistenia media Hedqvist, 1968a, pp. 5–7 plus fig. 4d on p. 8, valid species (Pteromalidae: Cleonyminae)

Female holotype plus 10 paratypes from USA in USNM.

Eubadizon synchitae Heqvist, 1956b, p. 91 plus figs 1–2 on pp. 92–93, junior synonym of *Eubazus macrocephalus* Nees, 1812 (Braconidae: Brachistinae)

Female holotype from Sweden now in BMNH; 8 paratypes in NHRS (should be 2 according to original description), 2 paratypes in ZMLU, 14 paratypes now in BMNH, 7 paratypes deposited in SSFRI according to the original description but currently missing; 55 paratypes should have been in the Hedqvist collection; as there were 6 more paratypes than expected at NHRS, 35 paratype are currently missing or not labelled as paratypes (and were not standing under the name *synchitae*).

Eudecatoma mallorcae Hedqvist, 1962c, p. 212 plus fig. 1 on p. 213, junior synonym of *Sycophila pistacina* (Rondani, 1872) (Eurytomidae: Eurytominae) Female holotype and 4 paratypes from Spain in NHRS.

Eupelmella albohirta Hedqvist, 1970, p. 402f, valid as *Eupelmus albohirtus* (Hedqvist, 1970) (Eupelmidae: Eupelminae)

Female holotype from South Africa in MZLU.

Eupelmella brincki Hedqvist, 1970, p. 403f, valid as *Eupelmus brincki* (Hedqvist, 1970) (Eupelmidae: Eupelminae)

Female holotype from South Africa in MZLU, one paratype now in BMNH.

Eupelmella pedatorioides Hedqvist, 1970, p. 404f, valid as *Eupelmus pedatorioides* (Hedqvist, 1970) (Eupelmidae: Eupelminae)

Female holotype from South Africa in MZLU, two paratypes now in BMNH, only one of which mentioned in original publication.

Eupelmus suecicus Hedqvist, 1963c, p. 137f, junior synonym of *Eupelmus pini* Taylor, 1927 (Eupelmidae: Eupelminae)

Female holotype from Sweden now in BMNH.

Eurytoma acaciacola Hedqvist, 1967f, pp. 137–139, valid as *Aximopsis acaciacola* (Hedqvist, 1967) (Eurytomidae: Eurytominae)

Female holotype and 2 paratypes from Chad in MNHN, 2 paratypes now in BMNH.

- *Eurytoma annilai* Hedqvist, 1974f, p. 28f, valid species (Eurytomidae) Female holotype and 9? paratypes from Finland in coll. Finnish Forest Institute (now missing, not currently present in HZM), 1 paratype now in BMNH and 1 paratype in NHRS (NHRS-HEVA000002187).
- *Eurytoma asphodeli* Hedqvist, 1976a, p. 67f, valid species (Eurytomidae: Eurytominae) Female holotype and 1 paratype from Spain now in NHRS (NHRS-HE-VA000002188-NHRS-HEVA000002189), 3 paratypes in BMNH; 1 paratype currently missing.

Eurytoma blastophagi Hedqvist, 1963c, pp. 38–41 plus fig. 19a on p. 42 and fig. 20b on p. 43, junior synonym of *Eurytoma arctica* Thomson, 1876 (Eurytomidae: Eurytominae) Female holotype and 13 paratypes from Sweden now in BMNH, 3 paratypes missing (depository not stated in publication).

Eurytoma fraxinicola Hedqvist, 1963c (*fraxincola* is a subsequent misspelling), p. 35f plus fig. 18a on p. 40 and fig. 19d on p. 42, junior synonym of *Eurytoma morio* Boheman, 1836 (Eurytomidae: Eurytominae)

Male holotype and 1 paratype from Sweden now in BMNH, 2 paratypes missing (depository not stated in publication).

Eurytoma kangasi Hedqvist, 1966, pp. 194–196, valid species (Eurytomidae: Eurytominae)

Female holotype and one paratype originally deposited in the Institute of Agricultural and Forest Zoology, University of Helsinki, Finland now in HZM. One specimen labelled paratype, not mentioned in the original publication, now in BMNH. *Eurytoma mateui* Hedqvist, 1967f, pp. 139–141, valid as *Aximopsis mateui* (Hedqvist, 1967) (Eurytomidae: Eurytominae)

Female holotype and one paratype in MNHN, 1 paratype now in BMNH.

Eurytoma oliphantis Hedqvist, 1976a, p. 66f, valid species (Eurytomidae: Eurytominae) Female holotype and 2 paratypes from Sudan now in BMNH, 4 paratypes in NHRS (NHRS-HEVA000002190-NHRS-HEVA000002193); 3 paratypes currently missing.

Eurytoma saharensis Hedqvist, 1967f, p. 141f, valid as *Aximopsis saharensis* (Hedqvist, 1967) (Eurytomidae: Eurytominae)

Female holotype and two possible paratypes from Algeria in MNHN, 1 paratype now in BMNH.

Eurytoma tilicola Hedqvist, 1966, p. 196f, valid species (Eurytomidae: Eurytominae) According to the original description, female holotype from Finland deposited in the coll. Institute of Agricultural and Forest Zoology, University of Helsinki, Finland (now missing, not found in HZM). One paratype now in BMNH.

Eutelisca Hedqvist, 1968c, p. 39f, type species *Eutelisca chilensis* Hedqvist, 1968, valid genus (Pteromalidae: Pteromalinae)

Eutelisca chilensis Hedqvist, 1968c, p. 40 plus fig. 3 on p. 41, valid species (Pteromalidae: Pteromalinae), and type species of *Eutelisca* Hedqvist, 1968 Female holotype from Chile now in BMNH.

Foenatopus hoggarensis Hedqvist, 1967a, p. 188f, junior synonym of *Foenatopus mirei* Benoit, 1953 (Stephanidae)

Female holotype and 1 paratype from Algeria in MHNG, 2 paratypes now in BMNH and 6 in EEZA; one more paratype is mentioned in original description but not found.

Gahanisca Hedqvist, 1969a, p. 466 and key p. 450f, type species *Gahanisca gnathocerus* Hedqvist, 1969, valid genus (Pteromalidae: Cerocephalinae)

Gahanisca gnathocerus Hedqvist, 1969a, p. 466 plus fig. 5 on p. 465, valid species (Pteromalidae: Cerocephalinae), and type species of *Gahanisca* Hedqvist, 1969

Female holotype from Brazil now in BMNH.

Gildoria Hedqvist, 1974d, p. 29f, type species *Gildoria elegans* Hedqvist, 1974, valid genus (Braconidae: Doryctinae)

Gildoria elegans Hedqvist, 1974d, p. 30 plus fig. 1 on p. 32, valid species (Braconidae: Doryctinae), and type species of *Gildoria* Hedqvist, 1974

Female holotype and 1 paratype from the Canary Islands now in BMNH, 4 paratypes now in NHRS (NHRS-HEVA000002283-NHRS-HEVA000002286).

Gimlia Hedqvist, 1978a, p. 66, type species *Gimlia fasciata* Hedqvist, 1978, junior synonym of *Allocerastichus* Masi, 1924 (Eulophidae: Entiinae)

Gimlia fasciata Hedqvist, 1978a, p. 66f, valid as *Allocerastichus fasciatus* (Hedqvist, 1978) (Eulophidae: Entiinae), and type species of *Gimlia* Hedqvist, 1978

Female holotype and 4 paratypes from Brazil now in BMNH, 4 paratypes in NHRS (NHRS-HEVA000002175-NHRS-HEVA000002178).

Glyptosticha burmanica Hedqvist, 1968c, p. 50 plus fig. 8a-d on p. 51, valid as *Miscogasteriella burmanica* (Hedqvist, 1968) (Pteromalidae: Pteromalinae)

Female holotype from Burma in NHRS, 1 paratype in coll. Hedqvist according to original description but currently missing.

Glyptosticha perakensis Hedqvist, 1968c, p. 49 plus fig. 8e-f on p. 51, valid as *Miscogasteriella perakensis* (Hedqvist, 1968) (Pteromalidae: Pteromalinae) Female holotype and 1 paratype from Malaysia in BMNH.

Gnathophorisca Hedqvist, 1969a, p. 463 and key p. 450f, type species *Gnathophorisca monstrosus* Hedqvist, 1969, valid genus (Pteromalidae: Cerocephalinae)

Gnathophorisca monstrosus Hedqvist, 1969a, pp. 463–465, valid species (Pteromalidae: Cerocephalinae), and type species of *Gnathophorisca* Hedqvist, 1969 Male holotype from Brazil now in BMNH.

Gollumiella Hedqvist, 1978e, p. 230, type species *Gollumiella longipetiolata* Hedqvist, 1978, valid genus (Eucharitidae)

Gollumiella longipetiolata Hedqvist, 1978e, p. 230f, figs 8–10 on p. 231, valid species (Eucharitidae: Gollumiellinae), and type species of *Gollumiella* Hedqvist, 1978 Female holotype and 1 paratype from the Philippines in ZMUC, 1 paratype now in BMNH, 1 paratype in NHRS (NHRS-HEVA000002149).

Gothbergia Heqvist, 1957, p. 24, type species *Gothbergia elymi* Heqvist, 1957, junior synonym of *Dinarmoides* Masi, 1924 (Pteromalidae: Pteromalinae)

Gothbergia elymi Heqvist, 1957, pp. 23–36, junior synonym of *Dinarmoides spilopterus* Masi, 1924 (Pteromalidae: Pteromalinae), and type species of *Gothbergia* Heqvist, 1957 Male holotype plus 1 paratype from Sweden now in BMNH, 1 paratype in NHRS.

Grahamisia straminea Hedqvist, 1969c, p. 187f plus fig. 10c on p. 189 and fig. 11e & g on p. 190, valid as *Dipara straminea* (Hedqvist, 1969) (Pteromalidae: Diparinae) Female holotype from Democratic Republic of Congo in RMCA.

Grahamisia striata Hedqvist, 1969c, p. 188 plus fig. 12 on p. 191, valid as *Dipara striata* (Hedqvist, 1969) (Pteromalidae: Diparinae) Female holotype from South Africa in BMNH.

Guancheria Hedqvist, 1978d, p. 319, type species *Guancheria compressithorax* Hedqvist, 1978, valid genus (Pteromalidae: Pteromalinae)

Guancheria compressithorax Hedqvist, 1978d, p. 319f, valid species (Pteromalidae: Pteromalinae), and type species of *Guancheria* Hedqvist, 1978

Female holotype and 3 paratypes from the Canary Islands now in BMNH, 4 paratypes now in NHRS (NHRS-HEVA000002209-NHRS-HEVA000002212), 2 paratypes deposited in coll. Leiler according to original description, but currently missing (not found in NHRS where coll Leiler currently is).

Habrocytus actinopterae Hedqvist, 1977d, p. 237 plus figs 1–2 on p. 238, valid as *Pt-eromalus actinopterae* (Hedqvist, 1977) (Pteromalidae: Pteromalinae)

Female holotype and 12 paratypes from Sweden now in NHRS (NHRS-HE-VA000002213- NHRS-HEVA000002224), 13 paratypes in BMNH; 1 paratype appear to be missing.

Halticoptera longipetiolus Hedqvist, 1975a, p. 167f plus fig. 3l on p. 170, fig. 6c on p. 173 and fig. 8e on p. 177, valid species (Pteromalidae: Miscogasterinae)

Female holotype from Sweden now in NHRS (NHRS-HEVA000002225), 1 paratype now in BMNH.

Halticoptera scaptomyzae Hedqvist, 1977e, p. 238f, valid species (Pteromalidae: Miscogasterinae)

Female holotype and 3 paratypes from Chile deposited in CFUA and 3 paratypes in coll. Hedqvist according to original description, but holotype and 4 paratypes present in coll. Hedqvist and 2 in NHRS. Holotype and one paratype will be returned to CFUA, 1 paratype retained in BMNH and 3 in NHRS (NHRS-HE-VA000002227, NHRS-HEVA000004930, NHRS-HEVA000004931); 1 paratype currently unaccounted for.

Helcon heinrichi Hedqvist, 1967e, pp. 141–143 plus fig. 6c-d on p. 140, valid species (Braconidae: Helconinae)

Male holotype and 3 paratypes from Sweden in NHRS, one paratype now in BMNH.

Herulia Hedqvist, 1962b, p. 103, type species *Herulia sundholmi* Hedqvist, 1962, junior synonym of *Macrocamptoptera* Girault, 1910 (Mymaridae)

Herulia sundholmi Hedqvist, 1962b, p. 103f, junior synonym of *Macrocamptoptera metotarsa* (Girault, 1905) (Mymaridae), and type species of *Herulia* Hedqvist, 1962 Female holotype from Sweden now in BMNH.

Heydenini Hedqvist, 1961, p. 94 and key p. 92 (valid as Heydeniini with spelling emended), type genus *Heydenia* Förster, 1856 (currently valid tribe in Pteromalidae: Cleonyminae)

†*Heydeniopsis* Heqvist, 1961, p. 94, type species *Heydeniopsis cleonymoides* Heqvist, 1961, valid genus (fossil) (Pteromalidae: Cleonyminae)

†Heydeniopsis cleonymoides Heqvist, 1961, p. 95f, valid fossil species (Pteromalidae: Cleonyminae), and type species of *Heydeniopsis* Heqvist, 1961

Female holotype in Baltic amber from Russia in NHRS (paleontology collections, not entomology).

Heydenisca Hedqvist, 1967f, p. 142f, type species *Heydenisca mateui* Hedqvist, 1967, junior synonym of *Heydenia* Förster, 1856 (Pteromalidae: Cleonyminae)

Heydenisca mateui Hedqvist, 1967f, p. 144f plus fig. 5 on p. 143, valid as *Heydenia mateui* (Hedqvist, 1967) (Pteromalidae: Cleonyminae), and type species of *Heydenisca* Hedqvist, 1967

Female holotype plus 1 paratype from Chad supposedly in MNHN, but missing, 3 specimens labelled as paratypes now in BMNH (one of them a female, which does not appear to be the missing holotype).

Hormius caboverdensis Hedqvist, 1965, p. 6f plus fig. 2 on p. 4, valid species (Braconidae: Hormiinae)

Female holotype and 8 paratypes from Cape Verde probably originally deposited in coll. Lindberg, now in MZH, 2 paratypes now in BMNH.

Hormius capensis Hedqvist, 1963b, p. 51f plus fig. 10a, b, g on p. 56, valid species (Braconidae: Hormiinae)

Female holotype from South Africa in ZMLU Lund, 2 paratypes now in BMNH (one of which was deposited in ZMLU according to the original description).

Hormius insularis Hedqvist, 1965, p. 7 plus fig. 3a on p. 8, junior synonym of *Hormius moniliatus* (Nees, 1811) (Braconidae: Hormiinae)

Female holotype from Cape Verde originally deposited in coll. Lindberg, now in MZH, 1 paratype now in BMNH.

Hormius micropterus Hedqvist, 1963b, p. 51 plus fig. 8 on p. 50, junior synonym of *Hormius dispar* (Brues, 1907) (Braconidae: Hormiinae)

Female holotype from USA in NHRS.

Hylocurus beckeri Heqvist, 1954a, p. 8f, valid species (Coleoptera: Curculionidae: Scolytinae) Male holotype and 2 paratypes from Guatemala deposited in BMNH.

Iseurini nomen nudum, based on *Iseura* Spinola, 1853, launched as "tribus nov." of Megalyridae in Heqvist 1959a, p. 486, but lacking a description and thus unavailable from that date according to \$13.1 of the code, but if made available by someone else at a later date in any case a junior synonym of the braconid subfamily Cenocoeliinae Szépligeti, 1901 (cf van Achterberg 1994)

Itoplectis lapponicus Hedqvist, 1972, p. 62f, junior synonym of *Itoplectis insignis* Perkins, 1957 (Ichneumonidae: Pimplinae)

Female holotype and five paratypes from Sweden originally deposited in coll. Hedqvist according to original description, holotype and 1 paratype (NHRS-HE-VA000004026-NHRS-HEVA000004027) now in NHRS, 2 paratypes in BMNH. In contrast to the original description, in which 2 female and 3 male specimens are designated as paratypes, 6 specimens were labelled as paratypes in coll. Hedqvist, 1 as a female, 5 as males; 1 female and 2 males are indeed *Itoplectis insignis* and are presumably paratypes but the remaining specimens represent 3 females and 1 male of a *Tycherus* sp. (Ichneumonidae: Ichneumoninae). We suspect that two species were mixed when labelling the type series, as *Tycherus suspicax* (Wesmael) was recorded as a parasitoid of *Epinotia nanana* in the same publication. Unfortunately we have not been able to find any more specimens of *I. lapponicus* in coll. Hedqvist, There are no other *Tycherus* specimens reared from *Epinotia nanana* in coll. Hedqvist so the record of *Tycherus suspicax* as a parasitoid of *Epinotia nanana* should be considered doubtful as these specimens are not *T. suspicax*, although GRB was unable to identify them.

Janssoniella intermedia Hedqvist, 1968c, p. 58, valid species (Pteromalidae: Pteromalinae) Female holotype from Finland now in BMNH, 1 paratype in CNC, 3 paratypes missing.

Karpinskiella townesi Hedqvist, 1983b, p. 213 plus fig. 1 on p. 215, 2c on p. 216, 3b, f on p. 217, valid as *Tomicobia townesi* (Hedqvist, 1983) (Pteromalidae: Eunotinae) Female holotype and one paratype from Brazil now in BMNH, 2 paratypes now in NHRS NHRS-HEVA000002228-NHRS-HEVA000002229).

Kvaseria Hedqvist, 1978c, p. 313, type species *Kvaseria flavipes* Hedqvist, 1978, junior synonym of *Tritneptis* Girault, 1908 (Pteromalidae: Pteromalinae)

Kvaseria flavipes Hedqvist, 1978c, p. 313f, valid as *Tritneptis flavipes* (Hedqvist, 1978) (Pteromalidae: Pteromalinae), and type species of *Kvaseria* Hedqvist, 1978

Female holotype and 5 paratypes from Sweden deposited in coll. Hedqvist according to original description. Holotype is missing, but will be deposited in NHRS if found. Of the 5 paratypes, 3 are now in NHRS (NHRS-HEVA000002230-NHRS-HEVA000002232) and 2 in BMNH.

Labania Hedqvist, 1963b, p. 36 and key p. 33f, type species Labania straminea Hedqvist, 1963, valid genus (Braconidae: Doryctinae)

Labania straminea Hedqvist, 1963b, p. 36 plus fig. 1 on p. 35, valid species (Braconidae: Doryctinae), and type species of *Labania* Hedqvist, 1963 Female holotype from Honduras in USNM.

Lariophagus rufipes Hedqvist, 1978c, p. 314, valid species (Pteromalidae: Pteromalinae) Female holotype from Sweden now in NHRS (NHRS-HEVA000002233), one paratype now in BMNH.

Legolasia Hedqvist, 1974g, p. 177, type species *Legolasia dinotiscoides* Hedqvist, 1974, junior synonym of *Chlorocytus* Graham, 1956 (Pteromalidae: Pteromalinae)

Legolasia dinotiscoides Hedqvist, 1974g, p. 117f plus fig. 2a-f on p. 119, valid as *Chlorocytus dinotiscoides* (Hedqvist, 1974) (Pteromalidae: Pteromalinae), and type species of *Legolasia* Hedqvist, 1974

Female holotype from Sweden deposited in coll. Hedqvist according to original description but missing; will be deposited in NHRS if found; 1 paratype now in NHRS (NHRS-HEVA000002234) and 2 paratypes in BMNH.

- *Lelaps albofasciatus* Hedqvist, 1964, p. 57f, valid species (Pteromalidae: Diparinae) Female holotype from Puerto Rico in ZMHB.
- *Lelaps ferrierei* Hedqvist, 1964, p. 56–57, valid species (Pteromalidae: Diparinae) Female holotype and 1 paratype from Brazil now in BMNH (no mention of paratype in original description).
- *Leucospis buchi* Hedqvist, 1968b, pp. 153–156, valid species (Leucospidae) Female holotype and 3 paratypes from the Bismarck Islands in ZMUC, 2 paratypes now in BMNH.
- *Litus brincki* Heqvist, 1960c, pp. 424–426, valid species (Mymaridae) Female holotype and 9 paratypes from South Africa in ZMLU, 4 paratypes now in BMNH (depository given as ZMLU in original description).

Lodbrokia Hedqvist, 1962a, p. 99, type species *Lodbrokia hirta* Hedqvist, 1962, valid genus (Braconidae: Alysiinae)

Lodbrokia hirta Hedqvist, 1962a, pp. 99–101, valid species (Braconidae: Alysiinae), and type species of *Lodbrokia* Hedqvist, 1962

Female holotype from Sweden now in BMNH.

Losbanus peterseni Hedqvist, 1978e, p. 229, fig. 3 on p. 228, junior synonym of Neolosbanus palgravei (Girault, 1922) (Eucharitidae: Eucharitinae)

Female holotype and 2 paratypes from the Philippines in ZMUC, 1 paratype missing.

Louricini Hedqvist, 1961, p. 108 and key p. 92, type genus *Louricia* Ferrière, 1936, currently valid as subfamily Louriicinae with spelling emended (Pteromalidae)

Lycisca ogloblina Heqvist, 1961, p. 100f, valid species (Pteromalidae: Cleonyminae) Female holotype and 1 paratype from Argentina now in BMNH, 2 paratypes will be deposited in NHRS.

Macromesus americanus Heqvist, 1960d, p. 140f plus fig. 2b, d, e on p. 142, valid species (Pteromalidae: Macromesinae)

Female holotype and 15 paratypes from USA in USNM, 2 paratypes now in BMNH, 2 paratypes in NHRS, 4 paratypes missing.

Macromesus javensis Hedqvist, 1968a, p. 9f, valid species (Pteromalidae: Macromesinae) Female holotype from Indonesia in USNM; according to original description, the series of 7 paratypes is split between USNM and coll. Hedqvist but there are none in USNM and 8 specimens labelled as paratypes in BMNH.

Mediella Hedqvist, 1963b, p. 52 and key p. 33f, type species *Mediella romani* Hedqvist, 1863, junior synonym of *Hormius* Nees, 1819 (Braconidae: Hormiinae)

Mediella affinis Hedqvist, 1963b, p. 55 plus fig. 12d on p. 59, valid as *Hormius affinis* (Hedqvist, 1963) (Braconidae: Hormiinae)

Holotype and 3 specimens labelled as paratypes in NHRS, 1 additional specimen labelled as paratype now in BMNH, making a total of 4 alleged paratypes though the original desription mentions only 2.

Mediella elongata Hedqvist, 1963b, p. 55 plus fig. 12l-m on p. 59, valid as Hormius elongatus (Hedqvist, 1963) (Braconidae: Hormiinae)

Female holotype from Brazil in NHRS.

Mediella ferruginea Hedqvist, 1963b, p. 53, valid as *Hormius ferrugineus* (Hedqvist, 1963) (Braconidae: Hormiinae)

Female holotype plus 3 paratypes from Brazil in NHRS, 1 additional specimen labelled as paratype now in BMNH.

Mediella intermedia Hedqvist, 1963b, p. 53 plus fig. 12k on p. 59, valid as *Hormius intermedius* (Hedqvist, 1963) (Braconidae: Hormiinae)

Female holotype and 1 paratype from Brazil in NHRS, 1 additional specimen labelled as paratype now in BMNH.

Mediella romani Hedqvist, 1963b, p. 52 plus fig. 10c-f on p. 56 and fig. 12g-h on p. 59, valid as *Hormius romani* (Hedqvist, 1963) (Braconidae: Hormiinae), and type species of *Mediella* Hedqvist, 1963

Female holotype plus 1 paratype from Brazil in NHRS, 1 additional specimen labelled as paratype now in BMNH.

Mediella rugosa Hedqvist, 1963b, p. 53f plus fig. 12c on p. 59, valid as *Hormius rugosus* (Hedqvist, 1963) (Braconidae: Hormiinae)

Female holotype and 1 paratype from Brazil in NHRS, 1 additional specimen labelled as paratype now in BMNH.

Mediella teutoniae Hedqvist, 1963b, p. 57 plus fig. 12e-f on p. 59, valid as *Hormius teutoniae* (Hedqvist, 1963) (Braconidae: Hormiinae) Female holotype from Brazil in NHRS.

Megalyridia Heqvist, 1959a, p. 487a, type species *Megalyridia capensis* Heqvist, 1959, valid genus (Megalyridae)

Megalyridia capensis Heqvist, 1959a, p. 489f plus fig. 1 on p. 488, valid species (Megalyridae), and type species of *Megalyridia* Heqvist, 1959

Female holotype from South Africa in ZMLU.

Megalyrini Hedqvist, 1967b, p. 239 & 241, type genus *Megalyra*, cited as "Megalyrini Hedqv." from 1959, where it was launched as "tribus nov." (Hedqvist, 1959a p 486) but lacking a description and thus unavailable from that date according to \$13.1 of the code, made available here through diagnosis in key, in any case invalid as a junior objective synonym and junior homonym of Megalyrinae Schletterer, 1889

Microgaster insularis Hedqvist, 1965, p. 12 plus fig. 8 on p. 11, valid species (Braconidae: Microgastrinae)

Female holotype and one paratype from Cape Verde apparently deposited in coll. Lindberg, now missing (not in MZH).

Mithotynia Hedqvist, 1976c, p. 314, type species *Mithotynia aptera* Hedqvist, 1976, junior synonym of *Histeromerus* Wesmael, 1838 (described in Ichneumonidae, currently in Braconidae: Rhyssalinae)

Mithotynia aptera Hedqvist, 1976c, p. 315 plus fig. 1 on p. 314, junior synonym of *Histeromerus mystacinus* Wesmael, 1838 (Braconidae: Rhyssalinae nec Ichneumonidae: Metopiinae), and type species of *Mithotynia* Hedqvist, 1976

Female holotype from Sweden now in NHRS (NHRS-HEVA000002287).

Monitoriella Hedqvist, 1963b, p. 44–46 and key p. 33f, type species *Monitoriella elongata* Hedqvist, 1963, valid genus (Braconidae: Rhyssalinae)

Monitoriella compressithorax Hedqvist, 1963b, p. 48 plus fig. 7c-d on p. 47, valid species (Braconidae: Rhyssalinae)

Female holotype from Peru in USNM.

Monitoriella elongata Hedqvist, 1963b, p. 46 plus fig. 6 on p. 45, valid species (Braconidae: Rhyssalinae), and type species of *Monitoriella* Hedqvist, 1963

Female holotype plus 3 paratypes from USA in USNM, 2 apparent paratypes now in BMNH (only 4 paratypes mentioned in original publication, all as deposited in USNM).

Monitoriella rufithorax Hedqvist, 1963b, pp. 46–48, valid species (Braconidae: Rhyssalinae)

Female holotype plus 2 paratypes from Mexico in USNM, 2 apparent paratypes now in BMNH (only 3 paratypes mentioned in original publication, all as deposited in USNM).

Monodontomerus canariensis Hedqvist, 1979b, p. 78, fig. 1 on p. 80, valid species (To-rymidae: Toryminae)

Female holotype and 28 paratypes from the Canary Islands split between ULCI and coll Hedqvist according to original description but all were present in coll. Hedqvist. Holotype and 10 paratypes returned to ULCI, 9 paratypes each now in NHRS (NHRS-HEVA000002251- NHRS-HEVA000002259) and BMNH.

Muesebeckisia Hedqvist, 1969a, p. 461f and key p. 450f, type species *Muesebeckisia mandibularis* Hedqvist, 1969, valid genus (Pteromalidae: Cerocephalinae)

Muesebeckisia mandibularis Hedqvist, 1969a, p. 463 plus fig. 3 on p. 462, valid species (Pteromalidae: Cerocephalinae), and type species of *Muesebeckisia* Hedqvist, 1969 Female holotype and 22 paratypes from Brazil now in BMNH, 3 paratypes in CNC.

Myrmicolelaps Hedqvist, 1969c, p. 182 and key pp. 174–176, type species *Myrmicolelaps paradoxus* Hedqvist, 1969, valid genus (Pteromalidae: Diparinae)

Myrmicolelaps paradoxus Hedqvist, 1969c, p. 182f, valid species (Pteromalidae: Diparinae), and type species of *Myrmicolelaps* Hedqvist, 1969

Female holotype and one paratype from South Africa in BMNH, one paratype not mentioned in original publication in NHRS.

Nazgulia Hedqvist, 1973c, pp. 238–240, type species *Nazgulia petiolata* Hedqvist, 1973, valid genus (Pteromalidae: Pteromalinae)

Nazgulia petiolata Hedqvist, 1973c, p. 240 plus fig. 2 on p. 239, valid species (Pteromalidae: Pteromalinae), and type species of *Nazgulia* Hedqvist, 1973

Female holotype from Sweden now in NHRS (NHRS-HEVA000002235), one paratype now in BMNH.

Necremnus norvegicus Hedqvist, 1982, p. 13f plus fig. 3 on p. 13, valid species (Eulophidae: Eulophinae)

Female holotype from Norway deposited in ZMBN.

Neodipara hispanica Hedqvist, 1971a, p. 119 plus fig. 1 on p. 120, valid species (Pteromalidae: Neodiparinae)

Female holotype from Spain and 1 paratype now in NHRS (NHRS-HE-VA000002237-NHRS-HEVA000002238), 2 paratypes now in BMNH.

Neoepistenia Heqvist, 1959c, p. 194–196 and key p. 178f, type species Neoepistenia flavoscapus Heqvist, 1959, valid genus (Pteromalidae: Cleonyminae)

Neoepistenia flavoscapus Heqvist, 1959c, p. 196 and fig. 60-p on p. 195, valid species (Pteromalidae: Cleonyminae), and type species of *Neoepistenia* Heqvist, 1959 Female holotype from Brazil in NHRS.

Neolycisca Heqvist, 1959c, p. 198f and key p. 178f, type species *Neolycisca maculata* Heqvist, 1959, junior synonym of *Proglochin* Philippi, 1871 (Pteromalidae: Cleonyminae)

Neolycisca maculata Heqvist, 1959c, p. 199f, valid as Proglochin maculata (Hedqvist, 1958) (Pteromalidae: Cleonyminae), and type species of Neolycisca Heqvist, 1959
Male holotype from Argentina in USNM.

Netomocera africana Hedqvist, 1971c, pp. 238–241, valid species (Pteromalidae: Diparinae)

Female holotype plus 2 paratypes from South Africa in BMNH, 2 paratypes now in NHRS.

Netomocera alboscapus Hedqvist, 1971c, p. 238 plus fig. 1e on p. 239 and fig. 2c on p. 240, valid species (Pteromalidae: Diparinae)

Male holotype (labelled as a female) from Congo (no further data) now in NHRS (NHRS-HEVA000002236).

Netomocera rufa Hedqvist, 1971c, p. 241 plus fig. 1f on p. 239 and fig. 2b on p. 240, valid species (Pteromalidae: Diparinae)

Female holotype from South Africa in BMNH.

Netomocerini Hedqvist, 1971c, p. 237, type genus *Netomocera* Boucek, 1955, (currently not recognised and thus a junior synonym of Pteromalidae: Diparinae)

Ogloblinisca Hedqvist, 1968c, p. 50–52, type species *Oglobinisca maculata* Hedqvist, 1968, valid genus (Pteromalidae: Pteromalinae)

Ogloblinisca americana Hedqvist, 1968c, pp. 54–56 plus fig. 9e on p. 53, valid species (Pteromalidae: Pteromalinae)

Female holotype plus 1 paratype from USA in USNM, 4 paratypes in CNC, 2 paratypes now in BMNH.

Ogloblinisca flavipes Hedqvist, 1968c, p. 54 plus fig. 9g on p. 53 and fig. 10c on p. 55, valid species (Pteromalidae: Pteromalinae)

Female holotype and 4 paratypes from Brazil now in BMNH.

Ogloblinisca maculata Hedqvist, 1968c, pp. 52–54 plus fig. 10a-b on p. 55, valid species (Pteromalidae: Pteromalinae), and type species of *Oglobinisca* Hedqvist, 1968 Female holotype from Argentina now in BMNH, 5 paratypes now in BMNH.

Oinia Hedqvist, 1978a, p. 65, type species *Oinia cyanea* Hedqvist, 1978, junior synonym of *Acrias* Walker, 1847 (Eulophidae: Entiinae)

Oinia cyanea Hedqvist, 1978a, p. 65, valid as *Acrias cyanea* (Hedqvist, 1978) (Eulophidae: Entiinae), and type species of *Oinia* Hedqvist, 1978

Female holotype from Brazil now in NHRS (NHRS-HEVA000002179), 2 para-types in BMNH.

Oodera hoggarensis Hedqvist, 1967a, p. 186f, valid species (Pteromalidae: Cleonyminae) Female holotype from Algeria in MHNG, 1 paratype now in BMNH and 2 deposited in coll. Mateu (EEZA); the paratypes of *Chalcedectoides saharensis* (above) were misplaced under this name in coll Hedqvist.

Opius caboverdensis Hedqvist, 1965, p. 26 plus fig. 24 on p. 24, valid species (Braconidae: Opiinae)

Female holotype and one paratype from Cape Verde apparently deposited in coll. Lindberg, now missing (not in MZH).

Opius insularis Hedqvist, 1965, p. 26, junior primary homonym (nec *Opius insularis* Ashmead, 1894), replacement name *Opius hedqvisti* Fischer, 1971 (Braconidae: Opiinae) Female holotype and one paratype from Cape Verde apparently deposited in coll. Lindberg, now missing (not in MZH).

Opius lindbergi Hedqvist, 1965, p. 27, junior primary homonym (nec *Opius lindbergi* Fischer, 1963), replacement name *Psyttalia lindbergiana* (Fischer, 1971) (Braconidae: Opiinae)

Female holotype from Cape Verde possibly apparently deposited in coll. Lindberg, now missing (not in MZH).

- *Ormyrus philippinensis* Hedqvist, 1968b, pp. 162–164, valid species (Ormyridae) Female holotype from the Philippines in ZMUC.
- *Orthostigma lokei* Hedqvist, 1973f, pp. 91–93, valid species (Braconidae: Alysiinae) Female holotype from Sweden now in NHRS (NHRS-HEVA000002200).

Ottaria Hedqvist, 1974b, p. 54f, type species *Ottaria perplexa* Hedqvist, 1974, valid genus (Pteromalidae: Pteromalinae)

Ottaria perplexa Hedqvist, 1974b, p. 55f plus fig. 1e on p. 54, valid species (Pteromalidae: Pteromalinae), and type species of *Ottaria* Hedqvist, 1974

Female holotype from Sweden in coll. Hedqvist according to original description but missing; will be deposited in NHRS if found.

Pachyceras janssoni Heqvist, 1955a, p. 84f, junior synonym of *Roptrocerus mirus* (Walker, 1834) (Pteromalidae: Pteromalinae)

Female holotype and 5 paratypes, all from Sweden; according to original description deposited in coll. Hedqvist but currently missing.

Parablastothrix nepticulae Hedqvist, 1976b, p. 50 plus fig. 1 p. 51, valid species (Encyrtidae: Encyrtinae)

Female holotype from Sri Lanka now in NHRS (NHRS-HEVA000002148).

Paracedria Heqvist, 1956d, p. 219, type species *Paracedria suecica* Heqvist, 1956, junior synonym of *Lysitermus* Förster, 1862 (Braconidae: Lysiterminae)

Paracedria suecica Heqvist, 1956d, p. 219f, valid as Lysitermus suecicus (Heqvist, 1956)
(Braconidae: Lysiterminae), and type species of Paracedria Heqvist, 1956
Female holotype from Sweden now in NHRS (NHRS-HEVA000004170) (Figures 4A and 6A), 1 male paratype from Sweden now in BMNH, 1 paratype missing (depository not stated in publication).

Paracerocephala Hedqvist, 1969a, p. 458 and key p. 450f, type species *Paracerocephala hirta* Hedqvist, 1969, valid genus (Pteromalidae: Cerocephalinae)

Paracerocephala hirta Hedqvist, 1969a, p. 458 plus fig. 1b on p. 453 (*Paracephala hirta* in original description is obviously a misprint, since both identification key p. 451 and genus description p. 458 gives genus as *Paracerocephala*), valid species (Pteromalidae: Cerocephalinae), and type species of *Paracerocephala* Hedqvist, 1969

Female holotype from Democratic Republic of Congo in RMCA.

Paraheydenia madagascariensis Heqvist, 1961, p. 96 plus fig. 1 on p. 97, valid as Heydenia madagascariensis (Hedqvist, 1961) (Pteromalidae: Cleonyminae) Female holotype from Madagascar in BMNH.

Parahormius areolaris Hedqvist, 1965, p. 5f, valid species (Braconidae: Hormiinae) Male holotype form Cape Verde deposited in MZH.

Paralycisca Heqvist, 1959c, p. 192 and key p. 178f, type species *Paralycisca cristata* Heqvist, 1959, valid genus (Pteromalidae: Cleonyminae)

Paralycisca cristata Heqvist, 1959c, p. 192f and fig. 6t on p. 195, valid species (Pteromalidae: Cleonyminae), and type species of *Paralycisca* Heqvist, 1959

Female holotype and 2 paratypes from Brazil in NHRS according to original description, but holotype is missing.

Pentatermus Hedqvist, 1963b, p. 40 and key p. 33f, type species *Pentatermus carinatus* Hedqvist, 1963, valid genus (Braconidae: Lysiterminae)

Pentatermus carinatus Hedqvist, 1963b, pp. 40–42, junior synonym of *Pentatermus striatus* (Szépligeti, 1908) (Braconidae: Lysiterminae), type species of *Pentatermus* Hedqvist, 1963

Female holotype from Nigeria in USNM.

Perilampus dalawanensis Hedqvist, 1968b, p. 161f plus figs 17–18 on p. 163, valid species (Perilampidae: Perilampinae)

Female holotype from the Philippines in ZMUC.

Perilampus peterseni Hedqvist, 1968b, p. 160f, valid species (Perilampidae: Perilampinae)

Female holotype from the Philippines in ZMUC.

Perilitus areolaris Gerdin & Hedqvist, 1985, pp. 363–365 plus fig. 3b on p. 366, valid species (Braconidae: Euphorinae)

Female holotype and 494 paratypes from Sweden not accounted for in detail, but holotype and at least 56 paratypes are in UUZM; 7 paratypes now in BMNH.

Phanerotoma caboverdensis Hedqvist, 1965, p. 9f, junior synonym of *Phanerotoma leu-cobasis* Kriechbaumer, 1894 (Braconidae: Cheloninae)

Female holotype and 49 paratypes from Cape Verde apparently deposited in coll. Lindberg, now missing (not in MZH), 4 paratypes now in BMNH.

Platygerrhus americanus Hedqvist, 1968c, p. 38, valid species (Pteromalidae: Pteromalinae) Female holotype plus 1 paratype from USA in USNM, 2 paratypes published as deposited in USNM currently missing.

Plutothrix canariensis Hedqvist, 1974c, p. 26f plus fig. 1 on p. 28, valid species (Pteromalidae: Pteromalinae)

Female holotype from the Canary Islands now in BMNH.

Plutothrix cisae Hedqvist, 1966, p. 197f, junior synonym of *Plutothrix acuminata* (Thomson, 1878) (Pteromalidae: Pteromalinae)

According to the original description, female holotype and 37 paratypes from Sweden deposited in coll. Hedqvist and two paratypes in the coll. Institute of Agricultural and Forest Zoology, University of Helsinki, Finland (now missing, not found in HZM); 33 paratypes now in BMNH, holotype and four paratypes missing.

Polymoria affinis Hedqvist, 1970, p. 426 plus fig. 17a-b on p. 427, valid as *Eusandalum affine* (Hedqvist, 1970) (Eupelmidae: Calosotinae)

Female holotype and 1 paratype from South Africa in BMNH, 2 paratypes missing.

Polymoria cyanea Hedqvist, 1970, p. 425f, a junior secondary homonym in *Eusanda-lum*, replaced by *Eusandalum africanum* Özdikmen, 2011 (Eupelmidae: Calosotinae) Female holotype from South Africa in BMNH.

Polymoria elongata Hedqvist, 1970, p. 427f, a junior secondary homonym in *Eusanda-lum*, replaced by *Eusandalum hedqvisti* Bouček, 1976 (Eupelmidae: Calosotinae) Female holotype and 7 paratypes from South Africa in BMNH (2 paratypes ex coll. Hedqvist).

Polymoria excavata Hedqvist, 1970, p. 426f, valid as *Eusandalum excavatum* (Hedqvist, 1970) (Eupelmidae: Calosotinae)

Female holotype from South Africa in BMNH.

Polymoria latifrons Hedqvist, 1970, p. 423f, valid as *Eusandalum latifrons* (Hedqvist, 1970) (Eupelmidae: Calosotinae)

Female holotype from South Africa in BMNH.

Polymoria stylata Hedqvist, 1970, p. 424f, a junior secondary homonym in *Eusandalum*, replaced by *Eusandalum namibiaense* Özdikmen, 2011 (Eupelmidae: Calosotinae) Female holotype and 1 paratype from South Africa in BMNH (paratype ex coll.

Hedqvist).

Pondia Hedqvist, 1969c, p. 197 and key pp 174–176, type species *Pondia punctulata* Hedqvist, 1969, preoccupied name (nec *Pondia* Oder, 1932 in Mollusca), replaced with *Africesa* Koçak, Hüseyinoglu & Kemal 2008, junior synonym of *Dipara* Walker, 1833 (Pteromalidae: Diparinae)

Pondia pallida Hedqvist, 1969c, p. 198f, valid as *Dipara pallida* (Hedqvist, 1969) (Pteromalidae: Diparinae)

Female holotype and 12 paratypes from South Africa in BMNH.

Pondia punctulata Hedqvist, 1969c, p. 197f plus fig. 18e on p. 199, valid as *Dipara punctulata* (Hedqvist, 1969) (Pteromalidae: Diparinae), and type species of *Pondia* Hedqvist, 1969

Female holotype and 4 paratypes from South Africa in BMNH.

Pseudocleonymus Hedqvist, 1967a, p. 184, type species *Pseudocleonymus spinifer* Hedqvist, 1967, junior synonym of *Zolotarewskya* Risbec, 1955 (Pteromalidae: Cleonyminae)

Pseudocleonymus spinifer Hedqvist, 1967a, pp. 184–186, valid as *Zolotarewskya spinifera* (Hedqvist, 1967) (Pteromalidae: Cleonyminae), and type species of *Pseudocleonymus* Hedqvist, 1967

Female holotype from Algeria in MHNG, 1 paratype in coll. Mateu (EEZA).

Pseudrileya Hedqvist, 1980, p. 160f, type species *Pseudrileya brasiliensis* Hedqvist, 1980, junior synonym of *Rileya* Ashmead, 1888 (Eurytomidae: Rileyinae)

Pseudrileya brasiliensis Hedqvist, 1980, p. 160 plus fig. 1 on p. 159, junior synonym of *Rileya haumani* (Brèthes, 1918) (Eurytomidae: Rileyinae), and type species of *Pseudrileya* Hedqvist, 1980

Female holotype from Brazil currently missing (will be deposited in NHRS if found), one paratype now in BMNH.

Pteromalus osmiae Hedqvist, 1979a, p. 157 plus fig. 1c-e on p. 155 and fig. 2a on p. 156, valid species (Pteromalidae: Pteromalinae)

Female holotype and 9 paratypes from Sweden now in NHRS, 10 paratypes now in BMNH. According to original description there were 28 female and 13 male paratypes, thus 22 paratypes are missing.

Pteromalus sylveni Hedqvist, 1979a, p. 155f, valid species (Pteromalidae: Pteromalinae) Female holotype and 4 paratypes from Sweden now in NHRS (NHRS-HE-VA000002239- NHRS-HEVA000002243), 6 paratypes now in BMNH.

Pyramidophoriella Hedqvist, 1969c, p. 178f and key pp. 174–176, type species *Pyra-midophoriella albiclava* Hedqvist, 1969, valid genus (Pteromalidae: Diparinae)

Pyramidophoriella albiclava Hedqvist, 1969c, p. 179 plus fig. 2c on p. 176 and fig. 3e-g on p. 178, valid species (Pteromalidae: Diparinae), and type species of *Pyramidophoriella* Hedqvist, 1969

Female holotype and 18 paratypes from South Africa in BMNH.

Pyramidophoriella brunnea Hedqvist, 1969c, p. 179f plus fig. 3c-d on p. 178, valid species (Pteromalidae: Diparinae)

Female holotype from South Africa in BMNH.

Rhaconotinus Hedqvist, 1965, p. 8, type species *Rhaconotinus caboverdensis* Hedqvist, 1965, junior synonym of *Rhaconotus* Ruthe, 1854 (Braconidae: Doryctinae)

Rhaconotinus caboverdensis Hedqvist, 1965, p. 8f, junior synonym of *Rhaconotus concinnus* (Enderlein, 1912) (Braconidae: Doryctinae), and type species of *Rhaconotinus* Hedqvist, 1965

Female holotype from Cape Verde originally deposited in coll. Lindberg, now in MZH.

Rhipipallus peterseni Hedqvist, 1978e, p. 244, figs 53–55 on p. 245, valid as *Chalcura peterseni* (Hedqvist, 1978) (Eucharitidae: Eucharitinae)

Female holotype and 1 paratype from the Bismarck Islands in ZMUC.

Rhogas caboverdensis Hedqvist, 1965, p. 11f, valid as *Aleiodes caboverdensis* (Hedqvist, 1965) (Braconidae: Rogadinae)

Female holotype and 36 paratypes from Cape Verde apparently deposited in coll. Lindberg, now missing (not in MZH), 1 paratype now in BMNH.

Risbecisca Heqvist, 1960a, p. 418, type species *Lycisca burgeoni* Risbec, 1955, junior synonym of *Heydenia* Förster, 1856 (Pteromalidae: Cleonyminae)

Romanisca Heqvist, 1959c, p. 194 and key p. 178f, type species *Romanisca annulicornis* Heqvist, 1959, valid genus (Pteromalidae: Cleonyminae)

Romanisca annulicornis Heqvist, 1959c, p. 194 and fig. 6r and 6v on p. 195, valid species (Pteromalidae: Cleonyminae), and type species of *Romanisca* Heqvist, 1959 Female holotype from Brazil in USNM. *Ropronia malaisei* Heqvist, 1959d, p. 137f, plus fig. 3 on p. 139, valid species (Roproniidae) Male holotype from Burma in NHRS. There was one specimen with the same collection data ("same locality") as the holotype in the Hedqvist collection, but this is not a paratype because the species is monotypic according to the original description (ICZN (1999) §73.1.2). This specimen may have come to Hedqvist's attention after the original description, or it may have been implicitly excluded from the type series.

Sarasvatia Hedqvist, 1976b, p. 50f, type species Sarasvatia srilankiensis Hedqvist, 1976, valid genus (Eulophidae: Entedoninae)

Sarasvatia srilankiensis Hedqvist, 1976b (*srilankensis* is a later, unjustified emendment), p. 51 plus fig. 2 on p. 52, valid species (Eulophidae: Entedoninae), and type species of *Sarasvatia* Hedqvist, 1976

Female holotype and 1 paratype from Sri Lanka now in NHRS (NHRS-HE-VA000002180-NHRS-HEVA000002181), 2 paratypes now in BMNH.

Schizaspidia batuensis Hedqvist, 1978e, p. 232, fig. 19 on p. 233, valid species (Eucharitidae: Eucharitinae)

Male holotype from the Philippines in ZMUC.

Schizaspidia palawanensis Hedqvist, 1978e, p. 233f, fig. 26 on p. 233, valid species (Eucharitidae: Eucharitinae)

Male holotype from the Philippines in ZMUC.

Schizaspidia peterseni Hedqvist, 1978e, p. 234, fig. 30 on p. 234, valid species (Eucharitidae: Eucharitinae)

Male holotype from the Philippines in ZMUC.

Schizaspidia tawiensis Hedqvist, 1978e, p. 235, fig. 36 on p. 235, valid species (Eucharitidae: Eucharitinae)

Female holotype and 16 paratypes from the Philippines in ZMUC, 2 paratypes in BMNH, 1 paratype in NHRS (NHRS-HEVA000002150) (Figure 4D).

Sigynia Hedqvist, 1974b, p. 53, type species *Sigynia ernobii* Hedqvist, 1974, valid genus (Pteromalidae: Pteromalinae)

Sigynia ernobii Hedqvist, 1974b, p. 53f plus fig. 2a on p. 55 and fig. 3b on p. 56, valid species (Pteromalidae: Pteromalinae), and type species of *Sigynia* Hedqvist, 1974 Female holotype from Sweden now in NHRS (NHRS-HEVA000002244).

Smeagolia Hedqvist, 1973c, p. 237, type species *Smeagolia perplexa* Hedqvist, 1973, junior synonym of *Muscidifurax* Girault & Sanders, 1910 (Pteromalidae: Pteromalinae)

Smeagolia perplexa Hedqvist, 1973c, p. 237f, junior synonym of *Muscidifurax raptor* Girault & Sanders, 1910 (Pteromalidae: Pteromalinae), and type species of *Smeagolia* Hedqvist, 1973

Female holotype from Sweden now in NHRS, one paratype now in BMNH.

Snappania Hedqvist, 1975c, p. 130 and key p. 128, type species *Snappania ahusiensis* Hedqvist, 1975, junior synonym of *Plastanoxus* Kieffer, 1905 (Bethylidae)

Snappania ahusiensis Hedqvist, 1975c (*ahuiensis* is a subsequent misspelling), p. 130 plus fig. 6d on p. 126, valid as *Plastanoxus ahusiensis* (Hedqvist, 1975) (Bethylidae: Epyrinae), and type species of *Snappania* Hedqvist, 1975

Male holotype from Sweden now in NHRS (NHRS-HEVA000002274), 1 para-type in BMNH.

Spathius canariensis Hedqvist, 1976d, p. 51f plus fig. 1b on p. 53, valid species (Braconidae: Doryctinae)

Female holotype (Figures 4C and 6B) and 3 paratypes from the Canary Islands now in NHRS (NHRS-HEVA000002288-NHRS-HEVA000002291), 4 paratypes in BMNH.

Spathius depressus Hedqvist, 1976d, pp. 52–54 plus fig. 2a on p. 55, fig. 3f on p. 58 and fig. 5c on p. 61, junior synonym of *Spathius rubidus* (Rossi, 1794) (Braconidae: Doryctinae)

Female holotype from Sweden now in NHRS (NHRS-HEVA000002292), one paratype now in BMNH.

Spathius hirtus Hedqvist, 1976d, p. 52 plus fig. 1c on p. 53, junior synonym of *Spathius maderi* Fahringer, 1930 (Braconidae: Doryctinae)

Female holotype from Spain now in NHRS (NHRS-HEVA000002293).

Stilbula palawanensis Hedqvist, 1978e, p. 246, figs 56, 58 on p. 245, valid species (Eucharitidae: Eucharitinae)

Male holotype from the Philippines in ZMUC.

Sundholmiella Hedqvist, 1975b, p. 51, type species *Prosynacra giraudi* Kieffer, 1910, junior synonym of *Synacra* Förster, 1856 (Diapriidae)

Syntomopus agromyzae Hedqvist, 1973a, p. 215 plus fig. 4 on p. 214, valid species (Pteromalidae: Pteromalinae)

Female holotype and 3 paratypes from Sweden now in NHRS (NHRS-HE-VA000002245- NHRS-HEVA000002248), 3 paratypes now in BMNH.

Tanycoryphus saharensis Hedqvist, 1967f, pp. 135–137, valid species (Chalcididae: Haltichellinae)

Female holotype from Chad deposited in MNHN according to original description, but currently missing.

Telenomus guancheri Hedqvist, 1979b (in several subsequent sources mistakenly ascribed to Huggert, 1979) (Scelionidae: Telenominae)

Holotype (presumably female but sex not stated in description) from the Canary Islands deposited in ULCI according to original description but missing. The series of 13 paratypes mentioned in the original description as split between ULCI and coll. Hedqvist was found present in its entirety but unlabelled in coll. Hedqvist. Eight paratypes now in NHRS (NHRS-HEVA000003597-NHRS-HEVA000003604) and 5 in BMNH.

Telepsogina Heqvist, 1958b, p. 58f, type species *Telepsogina adelognathi* Heqvist, 1958, valid genus (Pteromalidae: Miscogasterinae)

Telepsogina adelognathi Heqvist, 1958b, p. 59f, valid species (Pteromalidae: Miscogastrinae), and type species of *Telepsogina* Heqvist, 1958

Female holotype from Sweden now in BMNH.

Tetrastichus galerucivorus Heqvist, 1959e, p. 141f plus figs 3–4 on pp. 143–14, valid as *Oomyzus galerucivorus* (Heqvist, 1959) (Eulophidae: Tetrastichinae) Female holotype and 2 paratypes from Sweden now in BMNH, 2 paratypes will be deposited in NHRS, 46 paratypes missing.

Theocolaxia bifasciata Hedqvist, 1969a, p. 454f, valid as *Neocalosoter bifasciatus* (Hedqvist, 1969) (Pteromalidae: Cerocephalinae)

Female holotype plus 10 paratypes from Brazil in BMNH.

Theocolaxia ferrugineus Hedvist, 1969a, p. 456, valid as *Neocalosoter ferrugineus* (Hedqvist, 1969) (Pteromalidae: Cerocephalinae)

Female holotype from South Africa plus 1 paratype in BMNH, one paratype in RMCA.

Theocolaxia muesebecki Hedqvist, 1969a, p. 456, valid as *Neocalosoter muesebecki* (Hedqvist, 1969) (Pteromalidae: Cerocephalinae)

Female holotype from the Philippines now in BMNH.

Theocolaxia turneri Hedqvist, 1969a, p. 457, valid as *Neocalosoter turneri* (Hedqvist, 1969) (Pteromalidae: Cerocephalinae)

Female holotype and 1 paratype from South Africa in BMNH.

Thomsonisca chinaspidis Heqvist, 1958a (*chionaspidis* is a later, unjustified emendation), p. 55f, junior synonym of *Thomsonisca amathus* (Walker, 1838) (Encyrtidae: Encyrtinae)

Female holotype and 1 paratype from Sweden now in BMNH; according to the original descripton, 6 more paratypes were deposited in the author's collection but are now missing from coll. Hedqvist in BMNH.

Tomicobia acuminati Heqvist, 1959b, p. 179f plus fig. 1 on p. 178, valid species (Pteromalidae: Pteromalinae)

Female holotype and 9 paratypes from Sweden now in BMNH, 9 paratypes in NHRS (NHRS-HEVA000002199 and further), 5 paratypes missing.

Tomicobia ferrierei Heqvist, 1959b, p. 178f, valid as *Dirhicnus ferrierei* (Heqvist, 1959) (Pteromalidae: Pteromalinae)

Female holotype and one paratype from France in BMNH, one paratype will be deposited in NHRS.

Torymus canariensis Hedqvist, 1977c, p. 235f, valid species (Torymidae: Toryminae) Female holotype (Figure 4B) and 12 paratypes from the Canary Islands now in BMNH, 12 paratypes in NHRS (NHRS-HEVA000002260- NHRS-HE-VA000002271).

Trichomalus norvegicus Hedqvist, 1982, p. 10f plus fig. 2 on p. 10, valid species (Pteromalidae: Pteromalinae)

Female holotype from Norway deposited in ZMBN.

Trigonoderus malaisei Hedqvist, 1968c, p. 46 plus fig. 6b & f on p. 47, valid species (Pteromalidae: Pteromalinae)

Female holotype from Burma in NHRS, 1 paratype now in BMNH.

Trychnosoma ernobii Hedqvist, 1974g, p. 118 plus fig. 4b on p. 121, valid species (Pt-eromalidae: Pteromalinae)

Female holotype from Sweden now in NHRS (NHRS-HEVA000002250).

Turneria Hedqvist, 1969c, p. 177 and key pp. 174–176, type species *Turneria scutel-lata* Hedqvist, 1969, preoccupied (nec *Turneria* Forel, 1895 in Formicidae), now *Conodipara* Hedqvist, 1971 (Pteromalidae: Diparinae)

Turneria scutellata Hedqvist, 1969c, p. 177f plus fig. 2b on p. 176, valid as *Conodipara scutellata* (Hedqvist, 1969) (Pteromalidae: Diparinae), and type species of *Turneria* Hedqvist, 1969 and *Conodipara* Hedqvist, 1971

Female holotype and 45 paratypes from South Africa in BMNH.

Vanhornia leileri Hedqvist, 1976e, p. 315f, valid species (Vanhorniidae) Female holotype from Sweden now in NHRS (NHRS-HEVA000002533), 1 paratype (published as a male, but actually a female lacking the ovipositor) in BMNH.

Visnuella Hedqvist, 1976b, p. 51f, type species *Visnuella nepticulae* Hedqvist, 1976, junior synonym of *Zaommomentedon* Girault, 1915 (Eulophidae: Entedoninae)

Visnuella nepticulae Hedqvist, 1976b, pp. 52–54, valid as Zaommomentedon nepticulae (Hedqvist, 1976) (Eulophidae: Entedoninae), and type species of Visnuella Hedqvist, 1976, junior synonym of Zaommomentedon Girault, 1915

Female holotype and 1 paratype from Sri Lanka now in NHRS (NHRS-HE-VA000002185-NHRS-HEVA000002186), 2 paratypes in BMNH.

Wroughtonia mikagei Hedqvist & Togashi, 1979c, p. 95f, figs 1-11 on p. 97, valid species (Braconidae: Helconinae)

Holotype female from Japan in KUEC, 2 paratypes were deposited in NHRS, 9 paratypes in Laboratory of Science, Ishikawa Prefecture College of Agriculture; one paratype now in BMNH.

Discussion

The decision by Hedqvist to sell his collection to a major museum outside Sweden came as a surprise to many Swedish entomologists. When the sale was finalised after his death, this attracted much criticism, including articles in the popular press. We would not want this sort of event to recur so we are using this opportunity to (a) explore some of the differences in opinion regarding the legal depository of the Hedqvist collection; (b) document our rationale behind the process of specimen restitution; and (c) propose some basic recommendations to institutions with large collections of natural history specimens, that would go some way to prevent conflicts of interest arising between employees with personal collections and the institutions they are employed by.

a) Some perspectives on the legal depositories of the Hedqvist collection

Hedqvist deposited many of his type specimens in his personal collection (indicated as 'coll. mea' in his publications). For this reason, the Hedqvist collection is very rich in name-bearing types, unusually so for a private collection. This made it obviously desirable that it be housed in a major international museum, which was the clear intention of Hedqvist.

The perspective from BMNH was that they had bought the collection legitimately, and through the major part of the process were not aware of any objections. NHRS, on the other hand, considered that Hedqvist had been employed by the state of Sweden,

at the Swedish Forest Research Institute and the NHRS, for most of his career as a taxonomist. Thus it was considered that the collection belonged in a larger museum in Sweden, and that claims could be made by the NHRS on material that Hedqvist worked on and published under the museum address. We have no intention to give a full resumé of the numerous arguments that were raised on the two sides of the disagreement. More importantly, we were happy to reach an agreement between the two museums, where BMNH did agree to the restitution of some of the material to NHRS (see list in type catalogue section). For BMNH there were at least three important considerations in making these decisions: (1) the majority of the collection was considered legally Hedqvist's and many descriptions of new taxa listed the type depository as being the Hedqvist collection; however (2), BMNH would want certain principles to be upheld regarding the acquisition and disposal of natural history collections held by employees of BMNH and other major collections; (3) it is generally a good principle, for increased accessibility, that paratypes should be deposited in more than one collection.

An agreement of exchange of material was established between the two museums which extends beyond the allocation of parts of the Hedqvist material to NHRS. This will hopefully lead to enrichment of the entomological collections in both countries as well as continued open communication and collaboration.

b) Redistribution of specimens from the Hedqvist collection

An overview of the types from the Hedqvist collection transferred to NHRS during 2011 is given in the type calalogue section of this paper. As a general principle, types of species described by Hedqvist during the periods when he was employed at NHRS (1959–1963 and 1971–1984) have been divided, whenever possible, between NHRS and BMNH. For a number of specimens, it could be demonstrated that they were obviously part of the collection at NHRS, and seemed like undocumented loans into the Hedqvist collection, or material received from individual entomologists for identification, either to be returned to the collector or deposited at the NHRS. Return of such specimens is normal curation procedure. As a part of the exchange agreement between the two museums, NHRS received unique voucher specimens for Swedish Chalcidoidea records where numbers of specimens allowed and BMNH will receive material from the Swedish Malaise Trap Project as well as material from other collecting events and expeditions in the near future.

A few types that were deposited in the Hedqvist collection were published as being elsewhere and a fair amount of other material was on loan from individuals and institutions; these specimens were indisputably the property of others and are being returned to these institutions. In numerous cases, the number of specimens labelled as types did not match the number of types stated in the original descriptions. A smaller number of types in the collection than stated in the original publication probably reflects the practice of sharing or trading specimens after publication, and the missing types will hopefully resurface sooner or later. On the other hand, where the number of specimens labelled as types exceeds the number specified in the original publication, it will be necessary to ascertain which specimens belong to the type series. For taxa published before 2000, all specimens of a species known to the author at the time of description are part of the type series (unless explicitly excluded from it in the original publication, regardless of whether they are labelled as such and of whether they were listed as such in the original publication (§72.4).

c) Recommendations to prevent future disputes

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Problematic cases similar to this are known to the staff of most major museums, although not many have received as much attention, mainly because the collections concerned have not been sold but have instead 'found their way' into private and other collections. The Hedqvist case highlights a number of critical issues facing entomological taxonomy today, concerning the deposition of type specimens and the information published regarding type depositories, and concerning general practices revolving around private insect collections of amateur as well as professional entomologists.

Many museums have policies that staff should not keep private collections, at least not in groups they are working on professionally, but very often these policies are enforced only informally and not implemented in employment contracts. We recommend that institutions that house collections and the funding bodies that employ people to work at these institutions should give more thought to stipulations in employment contracts and staff handbooks, that specimens cannot be retained in employees' private collections when there is a possibility of a conflict of interest arising. Normally this would mean that a person curating or researching a particular group of organisms should not continue to add to a personal collection of that group. We recognise that many curators and collections-based researchers have assembled collections prior to their employment in collections-based institutions and it cannot reasonably be expected that these collections should be relinquished (although such specimens will generally be gratefully received). It should be stressed that this applies not just to the collections of taxonomists/systematists but also to other fields of research carried out in museums and other institutes with large collections; 'research' collections are frequently neglected, poorly curated and sometimes disposed of, despite the obvious importance of these specimens as vouchers, and often their importance as specimens for taxonomic and faunistic work.

From both the viewpoint of scientists and of the public who largely fund science through taxation, science belongs to everybody, and it is a very reasonable line of argument that collections gathered and worked on by publicly funded scientists should belong either to the state funding the research or to the scientific community, and in both cases be deposited in public museum collections. It is of fundamental importance that scientific material is retained and curated in a way that ensures its availability to the scientific community, and ideally to reasonable public access. There are few reasons why such collections should be made available to private buyers. In the case of professionals, the practice of keeping large personal collections at home and offering them for sale rather than donating them to a scientific institution appears, in the light of these arguments and of widespread current trends, to be an outdated and hopefully soon obsolete practice.

Some concerns raised focused on the sale of Hedqvist's collection outside Sweden (perhaps a reminder of the sale of the Linnaeus collection to England). Indeed many Swedish species of Hymenoptera are represented only by Hedqvist's specimens and thus they are crucial to Swedish faunistics and conservation concerns. This is an area for which it is difficult to devise practical guidelines. All major museum collections hold material from a large number of countries, and of course, the crucial thing is that specimens and the information they represent are made available to the international community and available for various uses, including taxonomic and ecological research and national as well as global faunistics and conservation.

The International Code of Zoological Nomenclature (ICZN, 1999) codifies a minimum praxis needed to be agreed on by all workers. It provides an ethical discussion and many examples promoting good practice, but no mandatory rules other than those governing the validity of names. It states that for taxa described after 1999, type specimens must be distinguished in the published descriptions (§72.3) but it remains only a recommendation and not a strict rule that name-bearing types should be properly labelled (72D), all relevant information given in the publication (72E), and type specimens safely preserved and accessible for study (72F). It would not be unreasonable for all these recommendations to be treated as rules, and to adopt as strong recommendations the best parts of current practice, such as the deposition of type specimens and all other scientifically interesting specimens in natural history museums or other public collections. Today, this practice is standard also among many amateur entomologists with no formal association with a scientific institution.

We advise systematists to be careful when designating type specimens, publishing the relevant data about them, ensure they are properly labelled, and from the moment of publication available in named public collections. Even though museum collections are supposed to last forever, they are not immobile, and the statement of repositories in the description of a taxon does not mean that all the type specimens must remain in the specified collections forever. Sometimes public collections are fused, donated or divided; many museums encourage a practice of exchanging scientifically important material; dividing long type series over many museums is a highly beneficial way of increasing access to types and reducing risk of loss of crucial information by accidents or poor maintenance. The general good for research, education and advancement of knowledge must be more important than the arbitrary will of individuals in the end.

Acknowledgements

David Notton provided much assistance throughout this project, through the process of incorporating Hedqvist material in the BMNH collections. KA Johanson (NHRS), Andrew Polaszek (BMNH) and Fredrik Ronquist (NHRS) provided substantial help; for help with chalcids we thank Dick Askew, Bruno Cancian, Lucian Fusu, Gary Gibson, Christer Hansson, John Huber, Serguei Triapitsyn, and Csaba Thuróczy, who either responded with specialist knowledge on our enquiries or helped identifying or curating Hedqvist specimens in the collection, as did Hannes Baur and John Noyes who also provided comments that significantly improved the manuscript; concerning braconids we benefitted from help given by Kees van Achterberg, Bob Wharton and Julia Stigenberg. For help with establishing provenances of Swedish material and the identities of collectors and relevant curators, we are grateful especially to Roy Danielsson, Bert Viklund[†], Lars-Åke Janzon, Bert Gustafsson and Göran Nordlander. Curators who responded to enquiries include Olof Biström (Helsinki), Paulo Borges (Azores), Lars-Ove Hansen (Oslo), Christer Hansson (Lund), James Hogan (Oxford), Bernhard Landry (Geneva), Pekka Malinen (Helsinki), Pedro Oromi (La Laguna), Jesús Benzal Pérez (Almeria), Viola Richter (Berlin), Agnièle Touret-Alby (Paris), Didier Van den Speigel (Tervuren), Lars Vilhelmsen (Copenhagen). Tin Sjöberg provided some last minute help with images.

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