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Ant type specimens (Hymenoptera, Formicidae) in the collection of Volodymyr Opanasovych Karawajew. Communication 1. Dorylinae, Poneromorpha and Pseudomyrmecinae

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Abstract

The collection of Volodymyr Opanasovych Karawajew, stored at the Schmalhausen Institute of Zoology of the National Academy of Sciences of Ukraine (SIZK, Kiev), is one of the richest ant collections of the world. It contains more than 20,000 dry mounted specimens, collected mostly in Southeast Asia and the Palaearctic, as well as in the Afrotropics, Australia, and North and South America. Among them, we found type specimens of 509 taxa, described by Karawajew and other myrmecologists. The compiled Catalogue includes data on types of 80 taxa belonging to the subfamilies Dorylinae, Amblyoponinae, Ectatomminae, Ponerinae, Proceratiinae and Pseudomyrmecinae.

Key words: ants, Karawajew's collection, Kiev, Ukraine, type specimens, catalogue, Dorylinae, Amblyoponinae, Ectatomminae, Ponerinae, Proceratiinae, Pseudomyrmecinae

Introduction

Volodymyr Opanasovych Karawajew (also spelled as Karawaiew, Karavaiev or Karavajev) was an outstanding myrmecologist of the early twentieth century (Fig. 1). He was born on March 9, 1864 in Kiev, Russian Empire, to a family of doctors. His grandfather (1811–1892) was a famous surgeon and professor, and one of the founders of the Faculty of Medicine of the Imperial University of St. Vladimir (now Taras Shevchenko National University of Kiev).

Karawajew graduated from the Nature Department at the Faculty of Physics and Mathematics of Kiev Imperial University of St. Vladimir in 1890, and started his scientific career as an assistant in the Cathedra of Zoology at that University. Although Karawajew is well known now as a myrmecologist, his first publication was devoted to the study of the embryogenesis of the red firebug, *Pyrrhocoris apterus* (Linnaeus, 1758) (Hemiptera: Pyrrhocoridae). In 1892–1895 he worked at the Villafranca marine biological station near Nice (France) and from 1898–1899 was a Director of the marine biological station in Sevastopol (Crimea), where he studied Radiolaria, copepods, and other marine invertebrates.

From the late 1890s to the early 1900s, Karawajew published his first papers on ants, studying their anatomy, embryogenesis, and behavior. His first expedition to Turkestan (1898), and especially a trip to Java and other Indonesian Islands in 1898–1899, sponsored by the Kiev Society of Naturalists, played an important role in his life. After these trips, his scientific interests turned to the study of ant taxonomy.

From 1912–1913 Karawajew made a second expedition to Indonesia, where he collected not only ants, but also rich material on various groups of invertebrate and vertebrate animals. From 1899 to the 1920s he made many additional scientific trips to areas including the Caucasus, West Europe, Egypt, Sudan, Tunisia and Algeria, not to mention all parts of what is now Ukraine.

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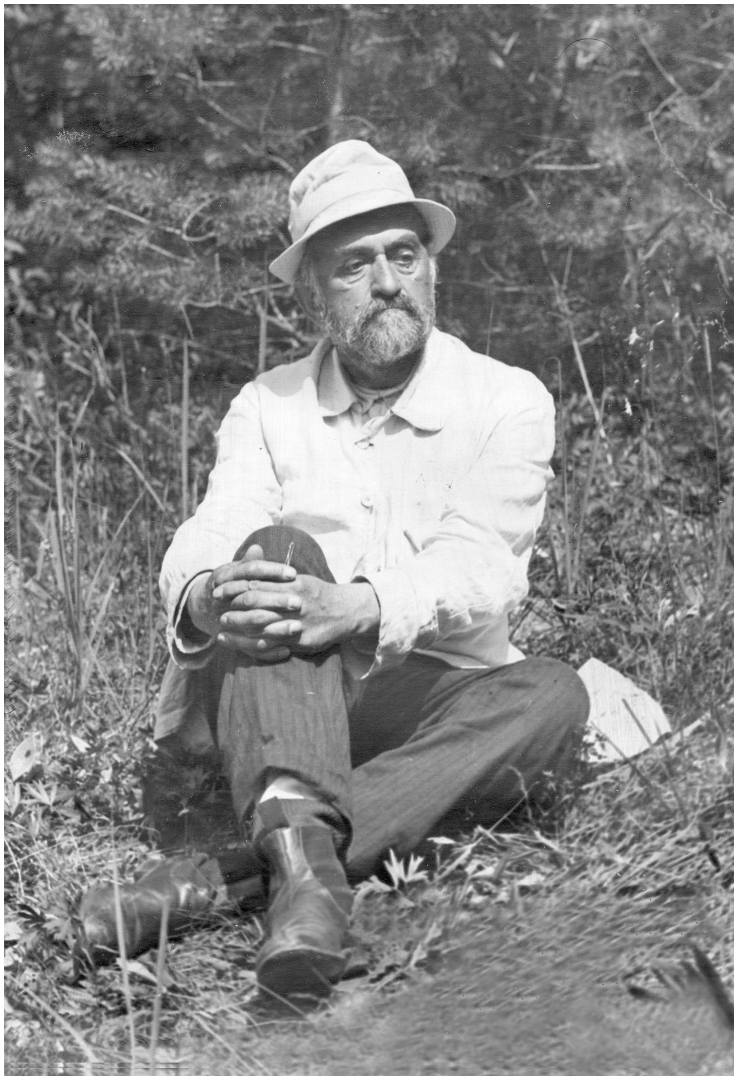

FIGURE 1. Photo of W. A. Karawajew (1930th).

Karawajew was one of the founders of the Zoological Museum of the Ukrainian Academy of Sciences (now the Zoological Department of the National Museum of Natural History of the National Academy of Science of Ukraine, Kiev), which opened on May 1, 1919. On June 3, Karawajew became its first custodian. He donated his huge collections, mainly from Java, to the museum. These consisted of 25 boxes of butterflies and 40 boxes of other insects, plus stuffed birds and mammals, reptiles, mollusk shells, and corals. He served as director of the museum from 1927 until his retirement in 1934, and from 1934 to his death in 1939 was its senior researcher.

Among other things, Karawajew was a good painter and a master of various technical matters. He restored fossil skeletons for the museum, made taxidermied animals, took photographs etc.

Karawajew married Nadezhda Nikolaevna Volkova in 1894. Little is known about his personal life, but they likely did not have children. He died January 7, 1939, aged 74, and was buried at Solomenskoye cemetery in Kiev (Paramonov 1941; Korman 2008).

In total, Karawajew published about 100 scientific papers, 47 of which are devoted to the taxonomy of ants. He established three new genera and four subgenera, and described 258 new species and infraspecific taxa from various parts of the Palaearctic, Oriental Region and Afrotropics. Currently, 96 species and 41 subspecies are valid, but 103 names are considered junior synonyms (96 specific and 7 generic and subgeneric rank names), 24 names are unavailable (quadrinomena) (Tables 1–5); one name, *Polyrhachis monacha* Karawajew, 1926f, is a nomen nudum, and *Formica* (*Formica*) *rufa* var. *constricta* Karawajew, 1929b is considered now as a hybrid form between *F. aquilonia* Yarrow, 1955 and *F. polyctena* Foerster, 1850 (Seifert 2021). Unfortunately, type specimens of 41 taxa he described are missing from the collection (Table 6).

TABLE 1. Currently valid species, described by W. A. Karawajew*

No	Original generic affiliations and spelling	Current status**
1	*Acantholepis aurea* Karawajew, 1933a	*Lepisiota aurea*
2	*Acantholepis frauenfeldi* var. *nigrescens* Karawajew, 1912b	*Lepisiota nigrescens*
3	*Acropyga* (*Rhizomyrma*) *dubia* Karawajew, 1933a	*Acropyga dubia*
4	*Anochetus gracilis* Karawajew, 1925c	*Anochetus gracilis*
5	*Aphaenogaster schmidti* Karawajew, 1912a	*Aphaenogaster schmidti*
6	*Camponotus* (*Myrmambys*) *annulatus* Karawajew, 1929c	*Camponotus annulatus*
7	*Camponotus* (*Colobopsis*) *aruensis* Karawajew, 1933a	*Colobopsis aruensis*
8	*Camponotus* (*Colobopsis*) *auratus* Karawajew, 1935a	*Colobopsis auratus*
9	*Camponotus herculeanus japonicus* var. *cruentata* Karawajew, 1912a	*Camponotus atrox* Emery, 1925b
10	*Camponotus* (*Myrmamblys*) *gibbosus* Karawajew, 1929c	*Camponotus gibbosus*
11	*Camponotus* (*Tanaemyrmex*) *indefinitus* Karawajew, 1929c	*Camponotus indefinitus*
12	*Camponotus* (*Myrmamblys?*) *picto-striatus* Karawajew, 1933b	*Camponotus pictostriatus*
13	*Camponotus lateralis sicheli* var. *rubra* Karawajew, 1912b	*Camponotus ruber*
14	*Camponotus* (*Tanaemyrmex*) *terricola* Karawajew, 1929c	*Camponotus terricola*
15	*Cardiocondyla nigrocerea* Karawajew, 1935a	*Cardiocondyla nigrocerea*
16	*Cardiocondyla tjibodana* Karawajew, 1935a	*Cardiocondyla tjibodana*
17	*Cerapachys salimani* Karawajew, 1925a	*Cerapachys salimani*
18	*Conothorax bilobum* Karawajew, 1935a	*Pheidole biloba*
19	*Crematogaster* (*Acrocoelia*) *agniae* Karawajew, 1935a	*Crematogaster agniae*
20	*Crematogaster* (*Physocrema*) *aurita* Karawajew, 1935a	*Crematogaster aurita*
21	*Crematogaster* (*Paracrema*) *dubia* Karawajew, 1935a	*Crematogaster dubia*
22	*Eciton* (*Aenictus*) *impressus levior* Karawajew, 1926e	*Aenictus levior*
23	*Eciton* (*Aenictus*) *ceylonicus orientalis* Karawajew, 1926e	*Aenictus orientalis*
24	*Euponera* (*Brachyponera*) *luteipes arcuata* Karawajew, 1925b	*Brachyponera arcuata*
25	*Euponera* (*Brachyponera*) *atrata* Karawajew, 1925b	*Brachyponera atrata*
26	*Formica* (*Serviformica*) *cinerea* var. *cinereofusca* Karawajew, 1929b	*Formica cinereofusca*
27	*Iridomyrmex latifrons* Karawajew, 1933a	*Tapinoma latifrons*
28	*Lasius fuliginosus* var. *orientalis* Karawajew, 1912a	*Lasius orientalis*
29	*Leptogenys* (*Lobopelta*) *davydovi* Karawajew, 1935a	*Leptogenys davydovi*
30	*Leptogenys* (*Lobopelta*) *rugosopunctata* Karawajew, 1925c	*Leptogenys rugosopunctata*
31	*Leptothorax nylanderi* var. *crassispina* Karawajew, 1926d	*Temothorax crassispinus*
32	*Leptothorax tuberum knipovitshi* Karawajew, 1916	*Temothorax knipovitshi*
33	*Leptothorax shelkovnikovi* Karawajew, 1926b	*Temothorax shelkovnikovi*
34	*Liometopum microcephalum* var. *orientalis* Karawajew, 1927d	*Liometopum orientalis*
35	*Messor structor striaticeps* var. *melancholica* Karawajew, 1926a	*Messor melancholicus*
36	*Messor barbarus reticuliventris* Karawajew, 1911b	*Messor reticuliventris*
37	*Messor barbarus meridionalis* var. *rufa* Karawajew, 1910	*Messor rufus*
38	*Monomorium* (*Monomorium*) *longiceps* Karawajew, 1935a	*Monomorium annamense* Donisthorpe, 1941
39	*Myrmecocystus albicans lividus* var. *auratus* Karawajew, 1911a	*Cataglyphis auratus*
40	*Myrmecocystus* (*Cataglyphis*) *bicolor bellicosus* Karawajew, 1924	*Cataglyphis bellicosus*
41	*Myrmecocystus albicans cinnamomeus* Karawajew, 1910	*Cataglyphis cinnamomea*
42	*Myrmecocystus* (*Cataglyphis*) *albicans ruber* var. *cuneinodis* Karawajew, 1924	*Cataglyphis cuneinodis*

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TABLE 1. (Continued)

No	Original generic affiliations and spelling	Current status**
43	*Myrmecocystus emeryi* Karawajew, 1911b	*Cataglyphis emeryi*
44	*Myrmica bergi* var. *divergens* Karawajew, 1931c	*Myrmica divergens*
45	*Myrmica rubra laevinodis* var. *ferganensis* Karawajew, 1916	*Myrmica ferganensis*
46	*Myrmica forcipata* Karawajew, 1931c	*Myrmica forcipata*
47	*Myrmica rugulosa* var. *minuta* Karawajew, 1929b	*Myrmica constricta* Karawajew, 1934
48	*Oligomyrmex (Oligomyrmex) satanus* Karawajew, 1935a	*Carebara satana*
49	*Opisthopsis halmaherae* Karawajew, 1930a	*Opisthopsis halmaherae*
50	*Pachycondyla* (*Ectomomyrmex*) *punctata* Karawajew, 1935a	*Ectomomyrmex punctatus*
51	*Pachycondyla* (*Ectomomyrmex*) *striata* Karawajew, 1927a	*Ectomomyrmex striatulus* Karawajew, 1935a
52	*Paratrechina* (*Nylanderia*) *dichroa* Karawajew, 1933b	*Paraparatrechina dichroa*
53	*Paratrechina* (*Nylanderia*) *koningsbergeri* Karawajew, 1933b	*Paraparatrechina koningsbergeri*
54	*Paratrechina* (*Nylanderia*) *tjibodana* Karawajew, 1929c	*Nylanderia tjibodana*
55	*Pheidole* (*Elasmopheidole*) *ambonensis* Karawajew, 1930a	*Pheidole ambonensis*
56	*Pheidolegeton rugosus* Karawajew, 1935a	*Carebara rugoflabella* Fischer G., Azorsa et Fisher B., 2014
57	*Plagiolepis* (*Plagiolepis*) *nitida* Karawajew, 1935a	*Plagiolepis nitida*
58	*Plagiolepis (Acantholepis) flava* Karawajew, 1935a	*Plagiolepis adynata* Bolton, 1995
59	*Plagiolepis* (*Plagiolepis*) *regis* Karawajew, 1931	*Plagiolepis regis*
60	*Podomyrma tristis* Karawajew, 1935a	*Podomyrma tristis*
61	*Polyrhachis* (*Myrma*) *conops* var. *bismarckensis* Karawajew, 1927a	*Polyrhachis bismarckensis*
62	*Polyrhachis* (*Myrmhopla*) *davydovi* Karawajew, 1935a	*Polyrhachis davydovi*
63	*Polyrhachis* (*Hagiomyrma*) *denticulata* Karawajew, 1927a	*Polyrhachis denticulata*
64	*Polyrhachis* (*Myrmhopla*) *acantha dichroa* Karawajew, 1927a	*Polyrhachis romanovi* Santschi, 1928
65	*Polyrhachis* (*Myrmhopla*) *flavoflagellata* Karawajew, 1927a	*Polyrhachis flavoflagellata*
66	*Polyrhachis* (*Cyrtomyrma*) *jurii* Karawajew, 1935a	*Polyrhachis jurii*
67	*Polyrhachis* (*Myrmhopla*) *keratifera* Karawajew, 1927a	*Polyrhachis keratifera*
68	*Polyrhachis* (*Myrmatropa*) *menozzii* Karawajew, 1927a	*Polyrhachis menozzii*
69	*Polyrhachis* (*Chariomyrma*) *nigrescens* Karawajew, 1927a	*Polyrhachis nigrescens*
70	*Polyrhachis* (*Myrmhopla*) *ochracea* Karawajew, 1927a	*Polyrhachis ochracea*
71	*Polyrhachis* (*Myrma*) *conops simplex* Karawajew, 1927a	*Polyrhachis simpla* Santschi, 1928
72	*Polyrhachis* (*Cephalomyrma*) *stylifera* Karawajew, 1935a	*Polyrhachis stylifera*
73	*Polyrhachis* (*Myrmhopla*) *subfossoides* Karawajew, 1927a	*Polyrhachis subfossoides*
74	*Polyrhachis* (*Myrmhopla*) *tubifex* Karawajew, 1926f	*Polyrhachis tubifex*
75	*Ponera typhlos* Karawajew, 1935a	*Cryptopone typhlos*
76	*Pristomyrmex africanus* Karawajew, 1931d	*Pristomyrmex africanus*
77	*Proceratium longigaster* Karawajew, 1935a	*Proceratium longigaster*
78	*Pseudolasius carinatus* Karawajew, 1929a	*Pseudolasius carinatus*
79	*Pseudolasius sunda* Karawajew, 1929a	*Pseudolasius sunda*
80	*Pseudolasius trimorphus* Karawajew, 1929a	*Pseudolasius trimorphus*
81	*Solenomyrma acanthina* Karawajew, 1935a	*Gauromyrmex acanthinus*
82	*Solenopsis orbula* var. *oculata* Karawajew, 1926b	*Solenopsis ilinei* Santschi, 1936
83	*Solenopsis* (*Solenops*) *weyeri* Karawajew, 1930a	*Carebara weyeri*
84	*Stigmatomma amblyops* Karawajew, 1935a	*Stigmatomma amblyops*

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TABLE 1. (Continued)

No	Original generic affiliations and spelling	Current status**
85	*Stigmatomma quadratum* Karawajew, 1935a	*Stigmatomma quadratum*
86	*Strumigenys* (*Cephaloxys*) *emeryi* Karawajew, 1935a	*Strumigenys karawajewi* Brown, 1948
87	*Tapinoma epinotalis* Karawajew, 1935a	*Tapinoma epinotale*
88	*Tapinoma kinburni* Karawajew, 1937	*Tapinoma kinburni*
89	*Tapinoma muelleri* Karawajew, 1926e	*Tapinoma muelleri*
90	*Technomyrmex albomaculatus* Karawajew, 1926e	*Technomyrmex albomaculatus*
91	*Technomyrmex convexifrons* Karawajew, 1926e	*Technomyrmex convexifrons*
92	*Technomyrmex albipes rotundiceps* Karawajew, 1926e	*Technomyrmex rotundiceps*
93	*Tetramorium dogieli* Karawajew, 1931d	*Tetramorium dogieli*
94	*Tetramorium infraspinosum* Karawajew, 1935a	*Tetramorium infraspinosum*
95	*Tetramorium caespitum ferox* var. *levigata* Karawajew, 1926b	*Tetramorium aegeum* Radchenko, 1992
96	*Typhloteras hamulatum* Karawajew, 1925b	*Centromyrmex hamulatum*

* in all tabeles taxa are ordered alphabetically: first by the genus name, and then by the last name of taxon;
** in the column "Current status" only the authors of the the replacement names are given

TABLE 2. Currently valid subspecies, described by W. A. Karawajew

No	Original generic affiliations and spelling	Current status*
1	*Anoplolepis* (*Anoplolepis*) *simulans* var. *biskrensis* Karawajew, 1931b	*Tapinolepis simulans biskrensis*
2	*Aphaenogaster splendida* var. *transcaucasica* Karawajew, 1926a	*Aphaenogaster splendida transcaucasica*
3	*Camponotus* (*Tanaemyrmex*) *variegatus* var. *ambonensis* Karawajew, 1930a	*Camponotus variegatus ambonensis*
4	*Camponotus* (*Colobopsis*) *leonardi* var. *grisea* Karawajew, 1929c	*Colobopsis leonardi grisea*
5	*Camponotus lateralis sicheli* var. *nigra* Karawajew, 1912b	*Camponotus sicheli niger*
6	*Camponotus* (*Colobopsis*) *vitreus* var. *praelutea* Karawajew, 1929c	*Colobopsis vitrea praelutea*
7	*Crematogaster* (*Acrocoelia*) *brunnea latipetiolata* Karawajew, 1935a	*Crematogaster brunnea latipetiolata*
8	*Diacamma rugosum arcuata* Karawajew, 1925b	*Diacamma rugosum arcuatum*
9	*Diacamma rugosum balinensis* Karawajew, 1925b	*Diacamma rugosum balinense*
10	*Diacamma rugosum gibbosum* Karawajew, 1935a	*Diacamma rugosum gibbosum*
11	*Diacamma rugosum latispina* Karawajew, 1925b	*Diacamma rugosum latispinum*
12	*Diacamma rugosum rugosum* var. *ovalis* Karawajew, 1935a	*Diacamma rugosum ovale*
13	*Echinopla striata gibbosa* Karawajew, 1927a	*Echinopla striata gibbosa*
14	*Euponera* (*Brachyponera*) *luteipes continentalis* Karawajew, 1925b	*Brachyponera luteipes continentalis*
15	*Dolichoderus* (*Hypoclinea*) *bituberculatus* var. *levior* Karawajew, 1926e	*Dolichoderus thoracicus levior*
16	*Dolichoderus* (*Hypoclinea*) *bituberculatus* var. *nasuta* Karawajew, 1935a	*Dolichoderus thoracicus nasutus*
17	*Leptogenys* (*Lobopelta*) *diminuta nong-nongi* Karawajew, 1925c	*Leptogenys diminuta nongnongi*
18	*Leptogenys* (*Lobopelta*) *diminuta tjibodana* Karawajew, 1926e	*Leptogenys diminuta tjibodana*
19	*Messor barbarus* var. *polita* Karawajew, 1912b	*Messor barbarus politus*
20	*Myrmecocystus bicolor* var. *sudanica* Karawajew, 1912a	*Cataglyphis bicolor sudanica*

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TABLE 2. (Continued)

No	Original generic affiliations and spelling	Current status*
21	*Oecophylla smaragdina* var. *fuscoides* Karawajew, 1933a	*Oecophylla smaragdina fuscoides*
22	*Opistopsis manni* var. *aruana* Karawajew, 1933a	*Opistopsis manni aruana*
23	*Pachycondyla* (*Ectomomyrmex*) *astuta obscura* Karawajew, 1935a	*Ectomomyrmex astutus obscurus*
24	*Pachycondyla* (*Ectomomyrmex*) *sculpturata* Karawajew, 1926b	*Ectomomyrmex sumatranus* Özdikmen, 2010
25	*Paratrechina* (*Nylanderia*) *obscura celebensis* Karawajew, 1933	*Nylanderia obscura celebensis*
26	*Paratrechina* (*Nylanderia*) *obscura minor* Karawajew, 1933b	*Nylanderia obscura minor*
27	*Plagiolepis* (*Plagiolepis*) *pallescens* var. *el-guerrhae* Karawajew, 1931b	*Plagiolepis pallescens elguerrhae*
28	*Podomyrma basalis reyi* Karawajew, 1935a	*Podomyrma basalis reyi*
29	*Polyrhachis* (*Myrmatropa*) *frughstorferi* var. *arcuata* Karawajew, 1927a	*Polyrhachis frughstorferi torta* Santschi, 1928
30	*Polyrhachis* (*Myrmhopla*) *bicolor* var. *atrocastanea* Karawajew, 1927a	*Polyrhachis bicolor atrocastanea*
31	*Polyrhachis* (*Myrmhopla*) *bicolor* var. *aurata* Karawajew, 1935a	*Polyrhachis bicolor aurata*
32	*Polyrhachis* (*Myrmhopla*) *bicolor* var. *brachyacantha* Karawajew, 1935a	*Polyrhachis bicolor brachyacantha*
33	*Polyrhachis* (*Myrmhopla*) *bicolor* var. *erecta* Karawajew, 1935a	*Polyrhachis bicolor erecta*
34	*Polyrhachis* (*Myrma*) *orsyllus* var. *javana* Karawajew, 1927a	*Polyrhachis orsyllus javanensis* Santschi, 1928
35	*Polyrhachis* (*Myrma*) *sericata* var. *nitidissima* Karawajew, 1927a	*Polyrhachis sericata nitidissima*
36	*Polyrhachis* (*Myrmhopla*) *tibialis* var. *orientalis* Karawajew, 1927a	*Polyrhachis tibialis orientalis*
37	*Polyrhachis* (*Myrmhopla*) *dives* var. *rectispina* Karawajew, 1927a	*Polyrhachis dives rectispina*
38	*Polyrhachis* (*Myrmhopla*) *tibialis* var. *robustior* Karawajew, 1927a	*Polyrhachis tibialis robustior*
39	*Polyrhachis* (*Myrmhopla*) *bicolor* var. *weyeri* Karawajew, 1930a	*Polyrhachis bicolor weyeri*
40	*Sima* (*Sima*) *mocquerysi* var. *biozellata* Karawajew, 1931d	*Tetraponera mocquerysi biozellata*
41	*Tapinoma luridum sokolovi* Karawajew, 1931d	*Tapinoma luridum sokolovi*

* in the column "Current status" only the authors of the the replacement names are given

TABLE 3. Current synonyms of the species rank names, described by W. A. Karawajew

No	Original generic affiliations and spelling	Senior synonyms
1	*Acantholepis frauenfeldi azerbeidzhanica* Karawajew, 1932	*Lepisiota frauenfeldi* (Mayr, 1855)
2	*Acantholepis frauenfeldi* var. *splendens* Karawajew, 1912a	*Lepisiota nigra* (Dalla Torre, 1893)
3	*Acropyga* (*Acropyga*) *acutiventris* var. *carinata* Karawajew, 1933a	*Acropyga acutiventris* Roger, 1862
4	*Acropyga* (*Atopodon*) *distinguenda* Karawajew, 1935a	*Acropyga butteli* Forel, 1912a
5	*Acropyga* (*Acropyga*) *acutiventris* var. *javana* Karawajew, 1933a	*Acropyga acutiventris* Roger, 1862
6	*Aneleus punctatus* Karawajew, 1931d	*Carebara silvestrii* (Santschi, 1914)
7	*Anochetus amati* Karawajew, 1925c	*Anochetus graeffei* Mayr, 1870
8	*Anochetus minutus* Karawajew, 1925c	*Anochetus graeffei* Mayr, 1870
9	*Anochetus splendens* Karawajew, 1925c	*Anochetus isolatus* Mann, 1919
10	*Camponotus herculeanus* var. *jacutica* Karawajew, 1929b	*Camponotus herculeanus sachalinensis* Forel, 1904a
11	*Camponotus japonicus* var. *sanguinea* Karawajew, 1929b	*Camponotus japonicus* Mayr, 1866

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TABLE 3. (Continued)

No	Original generic affiliations and spelling	Senior synonyms
12	*Cardiocondyla longispina* Karawajew, 1935a	*Cardiocondyla wroughtonii* (Forel, 1890)
13	*Cardiocondyla emeryi mahdii* Karawajew, 1911a	*Cardiocondyla emeryi* Forel, 1881
14	*Cardiocondyla stambuloffi taurica* Karawajew, 1927b	*Cardiocondyla stambuloffi* Forel, 1892
15	*Diacamma rugosum buruensis* Karawajew, 1925b	*Diacamma bispinosum* (Le Guillou, 1842)
16	*Dolichoderus* (*Diabolus*) *bifurcatus* Karawajew, 1926e	*Dolichoderus cuspidatus* (Smith F., 1857)
17	*Eciton* (*Aenictus*) *fergussoni elongatus* Karawajew, 1926e	*Aenictus gracilis* Emery, 1893
18	*Eciton* (*Aenictus*) *fergussoni* var. *sundaica* Karawajew, 1927a	*Aenictus laeviceps* (Smith F., 1857)
19	*Formica cinerea* var. *bipilosa* Karawajew, 1926c	*Formica subpilosa* Ruzsky, 1902
20	*Formica cinerea* var. *brevisetosa* Karawajew, 1927b	*Formica cinerea* Mayr, 1853
21	*Formica sanguinea* var. *clara* Karawajew, 1927d	*Formica sanguinea* Latreille, 1798
22	*Formica rufa* var. *nuda* Karawajew, 1930b	*Formica polyctena* Foerster, 1850
23	*Formica cinerea* var. *ochracea* Karawajew, 1937	*Formica cinerea* Mayr, 1853
24	*Formica gagates* var. *piceo-gagates* Karawajew, 1926c	*Formica picea* Nylander, 1846
25	*Formica* (*Serviformica*) *cinerea* var. *sabulosa* Karawajew, 1931b	*Formica cinerea* Mayr, 1853
26	*Formica* (*Raptiformica*) *sanguinea* var. *tristis* Karawajew, 1929b	*Formica sanguinea* Latreille, 1798
27	*Lasius* (*Chthonolasius*) *carniolicus* var. *kusnezovi* Karawajew, 1929b	*Lasius carniolicus* Mayr, 1861
28	*Lasius flavus* var. *olivacea* Karawajew, 1926c	*Lasius flavus* (Fabricius, 1782)
29	*Leptothorax tuberum* var. *brauneri* Karawajew, 1937	*Temnothorax unifasciatus* (Latreille, 1798)
30	*Leptothorax nevodovskii* Karawajew, 1926b	*Myrmica specioides* Bondroit, 1918
31	*Leptothorax tuberum* var. *nigricephala* Karawajew, 1930b	*Temnothorax tuberum* (Fabricius, 1775)
32	*Leptothorax tuberum* var. *salina* Karawajew, 1937	*Temnothorax unifasciatus* (Latreille, 1798)
33	*Leptothorax svartshevskii* Karawajew, 1916	*Myrmica dshungarica* Ruzsky, 1905
34	*Lophomyrmex quadrispinosus* var. *javana* Karawajew, 1933c	*Lophomyrmex opaciceps* Viehmeyer, 1922
35	*Messor lobicornis* var. *rugosa* Karawajew, 1912b	*Messor lobicornis submuticus* Emery, 1908
36	*Meranoplus bellii javanus* Karawajew, 1935a	*Meranoplus castaneus* Smith F., 1857
37	*Meranoplus nanus similis* Karawajew, 1931d	*Meranoplus inermis* Emery, 1895a
38	*Metapone johni* Karawajew, 1933b	*Metapone greeni* Forel, 1911c
39	*Messor barbarus hamulifera* Karawajew, 1926a	*Messor incorruptus* Ruzsky, 1923
40	*Myrmecina graminicola gotlandica* Karawajew, 1930b	*Myrmecina graminicola* (Latreille, 1802)
41	*Myrmecina graminicola oelandica* Karawajew, 1930b	*Myrmecina graminicola* (Latreille, 1802)
42	*Myrmecocystus cursor aenescens* var. *aterrima* Karawajew, 1916	*Cataglyphis aenescens* (Nylander, 1849)
43	*Myrmecocystus albicans rotundinodis* Karawajew, 1912b	*Cataglyphis bicolor* (Fabricius, 1793)
44	*Myrmica scabrinodis* var. *ahngeri* Karawajew, 1926d	*Myrmica salina* Ruzsky, 1905
45	*Myrmica scabrinodis saposhnikovi* var. *baikalensis* Karawajew, 1931a	*Myrmica angulinodis* Ruzsky, 1905
46	*Myrmica schencki* var. *brunescens* Karawajew, 1929b	*Myrmica schencki* Viereck, 1903
47	*Myrmica schencki* var. *burtshak-abramovitschi* Karawajew, 1929b	*Myrmica lobicornis* Nylander, 1846
48	*Myrmica lobicornis* var. *kieviensis* Karawajew, 1934	*Myrmica lobicornis* Nylander, 1846
49	*Myrmica ruginodis orientalis* Karawajew, 1926d	*Myrmica kotokui* Forel, 1911b
50	*Myrmica lobicormis* var. *plana* Karawajew, 1927b	*Myrmica deplanata* Emery, 1921
51	*Myrmica rugulosa* var. *ruginodiformis* Karawajew, 1929b	*Myrmica dshungarica* Ruzsky, 1905
52	*Myrmica rugulosa* var. *ruguloso-scabrinodis* Karawajew, 1929b	*Myrmica hellenica* Finzi, 1926
53	*Myrmica scabrinodis* var. *sancta* Karawajew, 1926d	*Myrmica specioides* Bondroit, 1918

.....continued on the next page

TABLE 3. (Continued)

No	Original generic affiliations and spelling	Senior synonyms
54	*Myrmica schencki* var. *starki* Karawajew, 1929b	*Myrmica lobicornis* Nylander, 1846
55	*Mystrium camillae javana* Karawajew, 1925a	*Mystrium camillae* Emery, 1889a
56	*Odontomachus ruficeps aruanus* Karawajew, 1925c	*Odontomachus cephalotes* Smith F., 1863
57	*Oxyopomyrmex santschii* var. *siciliana* Karawajew, 1912b	*Oxyopomyrmex saulcyi* Emery, 1889b
58	*Plagiolepis* (*Plagiolepis*) *satunini* Karawajew, 1931b	*Plagiolepis pallescens* (?) Forel, 1889
59	*Platythyrea melancholica aruana* Karawajew, 1925a	*Platythyrea parallela* (Smith F., 1859)
60	*Polyrhachis alexandri* Karawajew, 1906	*Polyrhachis solmsi* Emery, 1887
61	*Polyrhachis (Chariomyrma) arcuata* var. *aruana* Karawajew, 1927a	*Polyrhachis obtusa* Emery, 1897c
62	*Polyrhachis* (*Hedomyrma*) *bicolor* Karawajew, 1927a	*Polyrhachis fervens* Smith F., 1860
63	*Polyrhachis* (*Myrmhopla*) *capra* Karawajew, 1927a	*Polyrhachis calypso* Forel, 1911a
64	*Polyrhachis* (*Chariomyrma*) *convexa* Karawajew, 1927a	*Polyrhachis radicicola* Dahl, 1901
65	*Polyrhachis* (*Myrmhopla*) *distincta* Karawajew, 1927a	*Polyrhachis batesi* Forel, 1911b
66	*Polyrhachis* (*Campomyrma*) *creusa distinguenda* Karawajew, 1927a	*Polyrhachis creusa* Emery, 1897c
67	*Polyrhachis* (*Hedomyrma*) *eucharis* Karawajew, 1927a	*Polyrhachis atropos* Smith F., 1860
68	*Polyrhachis* (*Myrmatropa*) *schang* var. *gracilior* Karawajew, 1927	*Polyrhachis dolomedes* Smith F., 1863
69	*Polyrhachis* (*Polyrhachis*) *bihamata* var. *minor* Karawajew, 1927a	*Polyrhachis bihamata* Drury, 1773
70	*Polyrhachis* (*Aulacomyrma*) *mystica* Karawajew, 1927a	*Polyrhachis cryptoceroides* Emery, 1887
71	*Polyrhachis* (*Cyrtomyrma*) *obsidiana* Karawajew, 1927a	*Polyrhachis goramensis* Emery, 1887
72	*Polyrhachis* (*Myrmhopla*) *punctata* Karawajew, 1927a	*Polyrhachis caeciliae* Forel, 1912b
73	*Polyrhachis* (*Chariomyrma*) *rotundiceps* Karawajew, 1927a	*Polyrhachis marginata* Smith F., 1859
74	*Polyrhachis* (*Johnia*) *schizospina* Karawajew, 1927a	*Polyrhachis numeria* Smith F., 1861
75	*Polyrhachis* (*Myrmhopla*) *sexspinosa* var. *sericea* Karawajew, 1927a	*Polyrhachis sexspinosa* (Latreille, 1802)
76	*Polyrhachis* (*Myrmothrinax*) *ternatae* Karawajew, 1933b	*Polyrhachis tricuspis* André, 1887
77	*Pristomyrmex quadridens* var. *aruensis* Karawajew, 1933c	*Pristomyrmex quadridens* Emery, 1897b
78	*Rhytidoponera subcyanea* var. *aruana* Karawajew, 1925a	*Rhytidoponera subcyanea* Emery, 1897c
79	*Sima* (*Tetraponera*) *bidentata* var. *angusticeps* Karawajew, 1933	*Tetraponera nitida* (Smith F., 1860)
80	*Sima* (*Tetraponera*) *bidentata* Karawajew, 1933c	*Tetraponera nitida* (Smith F., 1860)
81	*Sima* (*Tetraponera*) *dentifera* Karawajew, 1933c	*Tetraponera laeviceps* (Smith F., 1859)
82	*Sima* (*Tetraponera*) *dilatata* Karawajew, 1933c	*Tetraponera difficilis* (Emery, 1900)
83	*Sima* (*Tetraponera*) *platynota* Karawajew, 1933c	*Tetraponera laeviceps* (Smith F., 1859)
84	*Solenopsis latro* var. *aurata* Karawajew, 1912b	*Solenopsis lou* Forel, 1902a
85	*Solenopsis orbula* var. *oblongior* Karawajew, 1926b	*Solenopsis deserticola* Ruzsky, 1905
86	*Stenamma golosejevi* Karawajew, 1926d	*Stenamma debile* (Foerster, 1850)
87	*Stictoponera spiralis* Karawajew, 1925a	*Gnamptogenys crassicornis* (Forel, 1912b)
88	*Tapinoma simrothi azerbeidzhanica* Karawajew, 1932	*Tapinoma karavaievi* Emery, 1925a
89	*Tapinoma simrothi karavaeivi* var. *transcaucasica* Karawajew, 1926c	*Tapinoma erraticum* (Latreille, 1798)
90	*Technomyrmex albipes congolensis* Karawajew, 1926e	*Technomyrmex moerens* Santschi, 1913
91	*Tetramorium caespitum annauensis* Karawajew, 1931b	*Tetramorium armatum* Santschi, 1927
92	*Tetramorium caespitum* var. *brevinodis* Karawajew, 1927c	*Tetramorium armatum* Santschi, 1927
93	*Tetramorium caespitum* var. *oxyomma* Karawajew, 1912b	*Tetramorium biskrense* Forel, 1904b
94	*Tetramorium caespitum* var. *picta* Karawajew, 1912a	*Tetramorium inerme* Mayr, 1877
95	*Tetramorium caespitum* var. *plana* Karawajew, 1927c	*Tetramorium inerme* Mayr, 1877
96	*Xiphomyrmex aruensis* Karawajew, 1935a	*Tetramorium carinatum* (Smith F., 1859)

TABLE 4. Current synonyms of the genus-group names, described by W. A. Karawajew

No	Original affiliations	Senior synonyms
1	*Polyrhachis* subgen. *Cephalomyrma* Karawajew, 1935a	*Polyrhachis* subgen. *Myrmhopla* Forel, 1915
2	*Conothorax* Karawajew, 1935a	*Pheidole* Westwood, 1839
3	*Dolichoderus* subgen. *Diabolus* Karawajew, 1926	*Dolichoderus* Lund, 1831
4	*Polyrhachis* subgen. *Johnia* Karawajew, 1927a	*Polyrhachis* subgen. *Aulacomyrma* Emery, 1921
5	*Solenomyrma* Karawajew, 1935a	*Gauromyrmex* Menozzi, 1933
6	*Solenopsis* subgen. *Solenops* Karawajew, 1930a	*Carebara* Westwood, 1840
7	*Typhloteras* Karawajew, 1925b	*Centromyrmex* Mayr, 1866

TABLE 5. Unavailable names (quadrinomens) of the taxa, described by W. A. Karawajew

No	Original generic affiliations and spelling
1	*Camponotus maculatus aethiops* var. *clara* Karawajew, 1926c
2	*Camponotus* (*Myrmambys*) *reticulatus bedoti* var. *punctulata* Karawajew, 1929c
3	*Cataglyphis* (*Monocombus*) *cursor aenescens* var. *maeotica* Karawajew, 1935b
4	*Crematogaster auberti laestrigon* var. *cretica* Karawajew, 1927c
5	*Diacamma rugosum geometricum* var. *concentrica* Karawajew, 1935a
6	*Diacamma rugosum hortensis* var. *debilior* Karawajew, 1927a
7	*Diacamma rugosum geometricum* var. *horizontalis* Karawajew, 1935a
8	*Diacamma rugosum sculpturatum* var. *papuana* Karawajew, 1935a
9	*Diacamma rugosum geometricum* var. *paralleliruga* Karawajew, 1935a
10	*Iridomyrmex rufoniger pallidus* var. *flava* Karawajew, 1926e
11	*Leptogenys* (*Lobopelta*) *diminuta fruhstorferi* ver. *amboinensis* Karawajew, 1925c
12	*Leptogenys* (*Lobopelta*) *diminuta fruhstorferi* ver. *huruensis* Karawajew, 1925c
13	*Leptogenys* (*Lobopelta*) *diminuta fruhstorferi* ver. *longinoda* Karawajew, 1925c
14	*Leptogenys* (*Lobopelta*) *diminuta fruhstorferi* var. *nitida* Karawajew, 1927a
15	*Messor barbarus striaticeps* var. *curvispina* Karawajew, 1912b
16	*Messor barbarus capitatus* var. *obscuriventris* Karawajew, 1912b
17	*Messor structor striaticeps* var. *salina* Karawajew, 1937
18	*Messor barbarus instabilis* var. *semirubra* Karawajew, 1926a
19	*Messor structor striaticeps* var. *sevani* Karawajew, 1926a
20	*Messor barbarus capitatus* var. *splendens* Karawajew, 1912b
21	*Myrmecocystus* (*Cataglyphis*) *cursor aenescens* var. *flavigastra* Karawajew, 1924
22	*Polyrhachis* (*Myrma*) *sericata pruinosula* var. *harmsi* Karawajew, 1930a
23	*Tapinoma erratium ambiguum* var. *revolutionis* Karawajew, 1927e
24	*Tetramorium striativnetre schneideri* var. *longispina* Karawajew, 1912a

One of the most important legacies of Karawajew is a large collection of ants, which he left in excellent condition to future generations of entomologists. All specimens in the collection are superbly mounted, labelled, identified and ordered. As a rule, on the first pin with material from the ant nest series (at least for the samples he collected), Karawajew initially placed several labels: a locality label, a label with a collection code number, and an identification label. Subsequent pins from the same nest series usually only have a label with the collection code number (Fig. 5). These code numbers were usually published for type material in Karawajew's published papers. There are also additional (red) labels for many type specimens in the collection which were added later, mainly by Kostyuk (1976), but sometimes by Dlussky and Radchenko. We recently posted small labels with the AntWeb CASENT numbers for the specimens imaged.

Karawajew's ant collection consists of two main parts: the mounted dry material is stored at the Schmalhausen Institute of Zoology of the National Academy of Sciences of Ukraine (Figs. 2–5), and the material in alcohol vials is kept in the National Museum of Natural History of the National Academy of Science of Ukraine (Martynov & Radchenko 2016).

TABLE 6. Type specimens of the taxa described by W. A. Karawajew missing in the collection

No	Original generic affiliations and spelling	Notes
1	*Acropyga* (*Acropyga*) *acutiventris* var. *carinata*	
2	*Acropyga* (*Atopodon*) *distinguenda*	
3	*Acropyga* (*Rhizomyrma*) *dubia*	
4	*Anoplolepis* (*Anoplolepis*) *simulans* var. *biskrensis*	
5	*Aphaenogaster schmidti*	
6	*Camponotus* (*Myrmamblys*) *gibbosus*	
7	*Cataglyphis* (*Monocombus*) *cursor aenescens* var. *maeotica*	
8	*Conothorax bilobum*	
9	*Crematogaster* (*Physocrema*) *aurita*	
10	*Diacamma rugosum hortensis* var. *debilior*	
11	*Diacamma rugosum geometricum* var. *concentrica*	
12	*Formica cinerea* var. *brevisetosa*	
13	*Formica sanguinea* var. *clara*	
14	*Formica* (*Raptiformica*) *sanguinea* var. *tristis*	
15	*Iridomyrmex latifrons*	
16	*Lasius flavus* var. *olivacea*	
17	*Lasius fuliginosus* var. *orientalis*	Neotype in Karawajew's collection (Radchenko 2005)
18	*Messor barbarus striaticeps* var. *curvispina*	
19	*Messor barbarus hamulifera*	
20	*Messor barbarus* var. *polita*	
21	*Messor structor striaticeps* var. *salina*	
22	Myrmecocystus albicans rotundinodis	
23	*Myrmecocystus bicolor* var. *sudanica*	
24	*Oecophylla smaragdina* var. *fuscoides*	
25	*Opistopsis manni* var. *aruana*	
26	*Opisthopsis halmaherae*	
27	*Plagiolepis* (*Plagiolepis*) *nitida*	
28	*Plagiolepis* (*Plagiolepis*) *satunini*	
29	Polyrhachis alexandri	
30	*Polyrhachis* (*Myrma*) *conops* var. *bismarckensis*	Holotype in MNHUB* (Karawajew 1927a)
31	*Polyrhachis* (*Myrmhopla*) *bicolor* var. *brachyacantha*	
32	*Polyrhachis* (*Myrmhopla*) *capra*	
33	*Polyrhachis* (*Chariomyrma*) *convexa*	
34	*Polyrhachis* (*Myrmhopla*) *davydovi*	
35	*Polyrhachis* (*Campomyrma*) *creusa distinguenda*	
36	*Polyrhachis* (*Cyrtomyrma*) *jurii*	
37	*Polyrhachis* (*Polyrhachis*) *bihamata* var. *minor*	
38	*Polyrhachis* (*Chariomyrma*) *nigrescens*	
39	*Polyrhachis* (*Cephalomyrma*) *stylifera*	
40	*Solenomyrma acanthina*	
41	*Tapinoma kinburni*	Neotype in SIZK (Radchenko 1983)

MNHUB—Museum für Naturkunde der Humboldt-Universitat, Berlin, Germany (collection of H. Stitz)

FIGURES 2–5. Photos of Karawajew's collection: 2—cupboard with the collection, outside view; 3—cupboard with the collection, inside view; 4—one of the boxes; 5—example of mounted ants with Karawajew's original labels.

In total, the mounted collection consists of more than 20,000 ant specimens, mainly from Southeast Asia and the Palaearctic, but there is also some material from the Afrotropics, Australia, and North and South America.

The first catalogue of the type specimens of this collection was published by Kostyuk (1976) and included a list of 178 taxa. After careful investigation of the collection we found the type specimens of 218 taxa described by Karawajew and of 286 taxa described by other myrmecologists and donated to Karawajew, namely: A. Forel (107), F. Santschi (96), C. Emery (21), H. Viehmeyer (14), K. V. Arnoldi (14), N. N. Kuznetzov-Ugamsky (10), C. Menozzi (7), M. D. Ruzsky (4), H. Stitz (4), Š. Soudek (2), B. Pisarski (2). G. Mayr (1), B. Finzi (1), W. M. Wheeler (1), E. André (1) and T. Borgmeier (1). Since Karawajew collaborated closely with these entomologists and exchanged materials with them, his type specimens are also stored in many European and American Museums. These include the Museo Civico di Storia Naturale "Giacomo Doria", Genoa, Italy (collection of Emery), Naturhistorisches Museum, Basle, Switzerland (collections of Santschi and partly of Forel), Museum d'Histoire Naturelle, Geneva, Switzerland (collection of Forel), Museum of Comparative Zoology of Harvard University, USA and even in the Museu de Zoologia da Universidade de São Paulo, Brazil (Esteves *et al.* 2011; MCZ 2023; our unpublished data). Santschi, Emery, Forel, and others described many new species based on samples collected and sent to them by Karawajew.

Material and methods

This paper is the first in a planned series of publications on the type specimens of Karawajew collection and includes taxa of the subfamily Dorylinae Leach, 1815, Poneromorph subfamilies (e.g. Amblyoponinae Forel, 1893, Ectatomminae Emery, 1895b, Ponerinae Lepeletier de Saint-Fargeau, 1835 and Proceratiinae Emery, 1895b) and Pseudomyrmecinae Smith M., 1952 according to current classification (Bolton 2023 and references herein).

This paper is organized as follows: first we give generic names, listed alphabetically (subgeneric names are ignored when sorting) using Karawajew's original generic affiliation and spelling, followed by the author's name, year, page of description, numbers of figures (if any) and caste(-s) described. The species and infraspecific taxa within a genus are also ordered alphabetically (by the names of species / subspecies / variety). We then indicate the current status of the taxon with its affiliation to subfamily according to modern taxonomic designations in brackets; if the taxonomic status has ever changed, we add supplementary information. This is followed by the data of the type locality(-ties) as a direct citation from the original papers using their language, the number of the type specimens with their original Karawajew labels, the number of the AntWeb CASENT images, and number of the box in the collection. We decided to include data on invalid names (quadrinomens), since the validity of the name is formally a requirement of the International Code of Zoological Nomenclature, but described specimens are real and could belong to species other than their bi- or trinominal taxon. If necessary, we add notes to concrete taxa.

Images were taken with Leica Z16 APO stereomicroscope equipped with Leica DFC 450 camera and processed by LAS Core software. The corresponding images can be accessed using AntWeb CASENT code numbers (see below).

The slash character (" / ") is used to indicate line separation on labels.
The caste abbreviations used are: w—worker, s—soldier, q—queen (gyne), m—male.

Catalogue of the type specimens

Acanthostichus quadratus Emery, 1895b: 750, Taf. 16, Fig. 5, 6; Taf. 17, Fig. 12, w, q.

Current status: ***Acanthostichus quadratus*** (s/f Dorylinae).

Type locality(-ies): "Aus Bolivian und Amazonas".

Original Karawajew labels: 1 w, "Bolivia", "*Acanthostichus* / (*Acanthostichus*) / *quadratus* Em. / Det. Emery".

Material: PARALECTOTYPE, 1 w (CASENT0916794) (Box 1).

Notes. Mackay (1996) designated lectotype (worker) of *A. quadratus* from "Amazonas" (probably Brazil).

Aenictus bengalensis r. ***impressus*** Forel, in Karawajew, 1927a: 7, w.

Current status: **junior synonym** of ***Aenictus aratus*** Forel, 1900a: 74 (s/f Dorylinae).

Synonymy: Shattuck 2008: 4.

Type locality(-ies): exact location not given, but the original labels indicate Australia (see also Shattuck 2008; Bolton 2023).

Original Karawajew labels: 1 w, "Queensland / Mackay, / Turner", "*Eciton* (*Aenictus*) / *pachycerus* Sm. sb. / *impressus* For. / typus", "Paratypus w / *Eciton pachycerus* / *imprenus* [*sic*] Forel".

Material: PARALECTOTYPE, 1 w (CASENT0916861) (Box 5).

Notes. Shattuck (2008) designated lectotype (worker) of *A. pachycerus impressus* from Mackay, Queensland.

Aenictus eugenii Em. subsp. ***caroli*** Forel, 1910: 248, w.

Current status: ***Aenictus eugenii caroli*** (s/f Dorylinae).

Type locality(-ies): "Nefassit".

Original Karawajew labels: 3 w, "Nefassit, / Erythreia / Escherich", "5190. Coll. / Karavaievi", "*Eciton* (*Aenictus*) / *eugenii* Em. sb. / *caroli* For. typ.", "Paratypus ww / *Eciton eugenii* / *caroli* Forel"; 10 w on 5 pins, "5190. Coll. / Karavaievi", "Paratypus ww / *Eciton eugenii* / *caroli* Forel".

Material: SYNTYPES, 13 w (CASENT0916857) (Box 5).

Aenictus fergusoni Forel, 1901: 473, w.

Current status: ***Aenictus fergusoni*** (s/f Dorylinae).

Type locality(-ies): "Travancore (Ferguson, Rothney)"

Original Karawajew labels: 2 w, "Travancore", "*Eciton* (*Aenictus*) / *fergusoni* For. / Dr. Forel", "Syntypus".

Material: SYNTYPES, 2 w (CASENT0917746) (Box 5).

Aenictus punensis Forel, 1901: 476, w.

Current status: ***Aenictus punensis*** (s/f Dorylinae).

Type locality(-ies): "Poona (Wroughton)".

Original Karawajew labels: 2 w, "Poona XI. 6. / (Wroughton)", "*Eciton* (*Aenictus*) / *punensis* For. / Det. Karawajew, 1924"

Material: SYNTYPES, 2 w (CASENT0916863) (Box 5).

Aenictus wroughtonii Forel, 1890: cii, w, m.

Current status: ***Aenictus wroughtonii*** (s/f Dorylinae).

Type locality(-ies): "Thana près Poona (Inde anglaise), 31 mars 1890; w et m récoltés ensemble".

Original Karawajew labels: 1 m, "Poona", "*Eciton* (*Aenictus*) / *wroughtonii* For. / Det. Forel", "m".

Material: PARALECTOTYPE, 1 m (CASENT0916864) (Box 5).

Notes. Jaitrong *et al.* (2010) designated lectotype (worker) of *A. wroughtonii* from Thana, near Poona, India.

Alfaria simulans Emery, 1896: 177, w (footnote).

Current status: ***Gnamptogenys simulans*.** Combination in *Gnamptogenys*: Brown 1958: 229 (s/f Ectatomminae).

Type locality(-ies): "Costa Rica".

Original Karawajew labels: 1 w, "Costa Rica", "*Alfaria / simulans* Em. / Det. Emery".

Material: SYNTYPE, 1 w (CASENT0916804) (Box 2).

Anochetus amati Karawajew, 1925c: 285, Fig. 8, q.

Current status: **junior synonym** of ***Anochetus graeffei*** Mayr, 1870: 961. Synonymy: Wilson 1959: 507 (s/f Ponerinae).

Type locality(-ies): "Wammar (Aroe), Nr. 2560, 1 entflügeltes q, einzeln gefangen".

Original Karawajew labels: 1 q, "Wammar, Aroe, / V. Karavaiev, / 2560", "*Anochetus / amati* Kar. / Typus. 1914 q", "Holotypus q / *Anochetus / amati* Karaw.".

Material: HOLOTYPE, q (CASENT0916845) (Box 4).

Anochetus gracilis Karawajew 1925c: 286, Fig. 9, w, q.

Current status: ***Anochetus gracilis*** (s/f Ponerinae).

Junior synonym of *Anochetus risii* Forel, 1900b: 60: Brown 1978: 558. Restored from synonymy: Chen *et al.*, 2019: 70.

Type locality(-ies): "Buitenzorg, Botan. Garten, Nr. 2416, Nest in der Erde, ww, mehrere geflügelte qq und Kokons (von geblicher Farbe 5,2 mm lang)".

Original Karawajew labels: 2 w, "Java, / Buitenzorg / Karavaiev, / 2416", "*Anochetus / gracilis* Kar. / Typus, 1923", "Syntypus ww *Anochetus / gracilis* Karaw."; 13 w on 7 pins with the same labels; 3 w, "Java, / Buitenzorg" , "2416. Coll. / Karavaievi", "*Anochetus / gracilis* Kar. / Typus", "Syntypus ww / *Anochetus / gracilis* Karaw."; 2 w, "Java, / Buitenzorg / Karavaiev, / 2416", "*Anochetus / gracilis* Kar. / Typus, 1923"; 6 w on 2 pins, "Java, / Buitenzorg", "2416. Coll. / Karavaievi", "Syntypus ww / *Anochetus / gracilis* Karaw."; 1 q, 1 m, "Java, / Buitenzorg / Karavaiev, / 2416", "*Anochetus / gracilis* Kar. / Typus, 1923"; "Syntypus q m / *Anochetus / gracilis* Karaw."; 7 q on 3 pins, "Java, / Buitenzorg", "2416. Coll. / Karavaievi"; "Syntypus / *Anochetus / gracilis* Karaw."; 1 q, "Java, / Buitenzorg / Karavaiev, / 2416", "*Anochetus / gracilis* Kar. / Typus, 1923"; "Syntypus q / *Anochetus / gracilis* Karaw.".

Material: SYNTYPES, 26 w (CASENT0916847), 9 q (Box 4).

Notes. There is also one male with the labels "Java, / Buitenzorg, Karavaiev, / 2416", "*Anochetus / gracilis* Kar. / Typus, 1923", "Syntypus m / *Anochetus / gracilis* Karaw.", but it cannot formally belong to the type series, since *A. gracilis* was described only from workers and gynes.

Anochetus minutus Karawajew 1925c: 288, Fig. 10, w, q.

Current status: **junior synonym** of ***Anochetus graeffei*** Mayr, 1870: 961. Synonymy: Wilson 1959: 507 (s/f Ponerinae).

Type locality(-ies): "Segamat, Johore (Malacca). O. John (Nr. 395 y), meine Nr. 2757. Aus einem Termitennnest (387, 9–393, 5). Eine verhältnismässing grosse Anzahl ww, Kokons (gelblich, 3,2 mm lang) und 1 q (Königin)".

Original Karawajew labels: 4 w on 2 pins, "Segamat, Johore / Malacca. / O. John. 2757", "*Anochetus / minutus* Kar. / Typus. 1914", "Syntypus ww /*Anochetus / minutus* Karaw.".

Material: SYNTYPES, 4 w (CASENT0916846) (Box 4).

Anochetus splendens Karawajew 1925c: 289, Fig. 11, q.

Current status: **junior synonym** of ***Anochetus isolatus*** Mann, 1919: 302. Synonymy:

Brown 1978: 557 (s/f Ponerinae).

Type locality(-ies): "Wammar, Nr. 2673, 1 q, am Licht gefangen".

Original Karawajew labels: 1 q, "Wammar, Aroe, / V. Karavaiev, / 2673", "*Anochetus / splendens* / Karavaiev, 1914 / Typus", "Holotypus q / *Anochetus / splendens* Karaw."

Material: HOLOTYPE, q (CASENT0916848) (Box 4).

Cerapachys (subgen. *Cerapachys*) ***salimani*** Karawajew, 1925a: 72, w.

Current status: ***Parasyscia salimani.*** Combination in *Parasyscia*: Borowiec 2016: 205 (s/f Dorylinae).

Type locality(-ies): "Tjibodas (Java), Nr. 2751, mehrere ww".

Original Karawajew labels: 2 w, "Java, / Tjibodas / Karavaiev", "2751. Coll. / Karavaievi", "*Cerapachys* / (*Cerapachys*) / *salimani* typ. / W. Karawajew. 1914", "Syntypus ww *Cerapachys / salimani* Karaw."; 11 w on 4 pins, 2751. Coll. / Karavaievi", "Syntypus ww *Cerapachys / salimani* Karaw.".

Material: SYNTYPES, 13 w (CASENT0916792) (Box 1).

Cylindromyrmex brasiliensis Emery, 1901: 53, w, m.

Current status: ***Cylindromyrmex brasiliensis*** (s/f Dorylinae).

Type locality(-ies): "Santa-Catharina".

Original Karawajew labels: 1 w, "St. Catharina", "*Cylindromyrmex / brasiliensis* Em. / Det. Emery", "Syntypus".

Material: SYNTYPE, 1 w (CASENT0917744) (Box 1).

Notes to *Diacamma* Mayr, 1862

One day in the early 1960s, some of the old boxes with the Karawajew's ant collection (including box with *Diacamma* species) were flooded by water that dripped from the roof when snow melted. As a result, some of the labels were blurred and some of the ants peeled away and fell off the cardboard triangles. In the 1970s G. M. Dlussky tried to restore this material based on data from Karawajew's publications; he stuck ants back to triangles, pinned original labels back on, and added an additional label reading "Dlussky restaur.". In some cases Dlussky may have attached some specimens or labels incorrectly, making it impossible to be absolutely certain that specimens are types of a particular species (particularly, restored by Dlussky).

Diacamma rugosum Le Guill. subsp. ***arcuata*** Karawajew, 1925b: 118, w.

Current status: ***Diacamma rugosum arcuatum*** (s/f Ponerinae).

Type locality(-ies): "Manguinang (Sumatra), 25.XI.1913, O. John, Einzelläufer".

Original Karawajew labels: 1 w (def.), "Sumatra. / Manguinang, / O. John. 1913", "*Diacamma / rugosum / arcuatum* Kar. / Karawajew det.", "Dlussky / restaur.".

Material: HOLOTYPE, w (CASENT0916821) (Box 2).

Diacamma rugosum La Guill. subsp. ***balinensis*** Karawajew, 1925b: 116, w.

Current status: ***Diacamma rugosum balinense*** (s/f Ponerinae).

Type locality(-ies): "Boeleleng (Singaradja), Bali, Nr. 2681, einige ww".

Original Karawajew labels: 1 w, "Boeleleng, / Bali. Karav.", "2681. Coll. / Karavaievi", "*Diacamma vagans bali- / nense* Kar. typ.", "Syntypus w / *Diacamma rugosum / balinense* Karaw."; 1 w, "2681. Coll. / Karavaievi", "Syntypus / *Diacamma rugosum / balinensis* Karaw."; 2 w, "2681. Coll. / Karavaievi", "Syntypus / *Diacamma rugosum / balinense* Karaw.", "Dlussky / restaur.".

Material: SYNTYPES, 4 w (CASENT0916818) (Box 2).

Diacamma rugosum La Guill. subsp. ***buruensis*** Karawajew, 1925b: 117, w.

Current status: **junior synonym** of ***Diacamma bispinosum*** (Le Guillou, 1842: 317). Synonymy: Wilson 1958b: 367 (s/f Ponerinae).

Type locality(-ies): "Tifoe (Boeroe), Nr. 2734, einige ww".

Original Karawajew labels: 2 w, "Boeroe / Tifoe / Karawaiew", "2734. Coll. / Karavaievi", "Syntypus w / *Diacamma rugosum / buruensis* Karaw." "Dlussky / restaur.".

Material: SYNTYPES, 2 w (CASENT0916819) (Box 2).

Notes. Above labels are not originals written by Karawajew, but rather by G. M. Dlussky.

Diacamma rugosum subsp. ***geometricum*** F. Sm. var. ***anceps*** Emery, 1897a: 155, w (unavailable name; first available use of name: Matsumura & Uchida 1926: 51).

Current status: ***Diacamma rugosum anceps*** (s/f Ponerinae).

Junior synonym of *Diacamma rugosum*: Lin & Wu 2003: 67. Subspecies of *Diacamma rugosum*: Chapman & Capco 1951: 55; Bolton 1995: 169; Terayama 2009: 103; Zhou & Ran 2010: 104; Guénard & Dunn 2012: 58.

Type locality(-ies): "Hong Kong (essemplari racc. da Ris e mandatimi dal Forel), Engano (racc. dal Modigliani), Birmania, Carin (racc. dal Fea)".

Original Karawajew labels: 1 w, "Engano / Bua-Bua V.VI. / Modigllani 1891", "*Diacamma / rugosum geometr. /* v. *anceps* Emery / typus", "Paratypus".

Material: SYNTYPE, 1 w (CASENT0916816) (Box 2).

Diacamma rugosum geometricum Sm. var. ***horizontalis*** Karawajew, 1935a: 63, w.

Current status: **unavailable (infrasubspecific) name.** (s/f Ponerinae)

Type locality(-ies): "Lien-Chieu bei Tourane an der Basis von Col de Nuage, Zentralannam, K. Davydov, Nr. 5636, 1 w".

Original Karawajew labels: 1 w, "Tourana / Lien-Chieu An- / nam Davydov", "*Diacamma / rugos. geometr. /* v. *horizontalis* / nova Kar. typ.", "5636. / Coll. Karavaievi", "*rugos. geometr.* v. */ horizontalis*", "Homotypus [*sic*] *Diacamma / rugosum geometrica /* v. *horizontalis* Kar.".

Material: HOLOTYPE, w (CASENT0916817) (Box 2).

Diacamma rugosum geometricum Sm. var. ***paralleliruga*** Karawajew, 1935a: 64, w.

Current status: **unavailable (infrasubspecific) name** (s/f Ponerinae).

Type locality(-ies): "Dalat, Lang Biang, 1500 m, Südannam, K. Davydov, 2.II.1931, Nr. 5636, 1 w".

Original Karawajew labels: 1 w, "*rugos. geom. /* v. *paralleliruga*", "Lang Biang / Annam, / Davydov", "5760. Coll. / Karavaievi", "*Diacamma / rugosum geo- / metr.* v. *paralleli- / ruga* Karaw. typus", "Holotypus *Diacamma / rugosum geometrica /* v. *paralleliruga* Kar."

Material: HOLOTYPE, w (CASENT0916815) (Box 2).

Notes. The number of the holotype specimen in the original description is 5636, but 5760 in the collection. The number 5760 in the original description was assigned to *D. rugosum gibbosum*, and 5636 to both var. *paralleliruga* and var. *horizontalis* (above). This discrepancy may be the result of mistakes made by Dlussky, Karawajew, or both.

Diacamma rugosum gibbosum Karawajew, 1935a: 68, Fig. 4, w.

Current status: ***Diacamma rugosum gibbosum*** (s/f Ponerinae).

Type locality(-ies): "Dalat, Land Biang, 1500 m, Südannam, K. Davydov, Nr. 5760, 1 w".

Original Karawajew labels: 1 w, "Lang Biang, / Annam, / K. Davydov", "5761. Coll. / Karavaievi", "Holotypus / *Diacamma rugosum / gibbosum* Kar.", "Dlussky / restaur.".

Material: HOLOTYPE, w (CASENT0916811) (Box 2).

Notes. The number of the holotype specimen in the original description is 5760, but 5761 in the collection. We do not know whether Karawajew or Dlussky made the mistake.

Diacamma rugosum La Guill. subsp. ***latispina*** Karawajew, 1925b: 119, w.

Current status: ***Diacamma rugosum latispinun*** (s/f Ponerinae).

Type locality(-ies): "Tjiapus auf dem Salak bei Buitenzorg, Einzelläufer".

Original Karawajew labels: 1 w, "Java, Salak, / Tjiapus, 2900. / V. Karavaiev", "*Diacamma / rugosum / latispinum* / Karaw. typ.", "Holotypus w / *Diacamma rugosum / latispinum* Karaw.".

Material: HOLOTYPE, w (def.) (Box 2).

Diacamma rugosum rugosum Sm. var. ***ovalis*** Karawajew, 1935a: 62, w (unavailable name; first available use of name: Chapman & Capco 1951: 56).

Current status: ***Diacamma rugosum ovale*** (s/f Ponerinae).

Type locality(-ies): "Ba-Me-Thuot, 700 m, Prov. Danlac, Südannam, an der Grenze von Cambodge, K. Davydov, Nr. 5920, 1 w".

Original Karawajew labels: 1 w, "Ba Me Thuot / Annam. 30.VI. / 30 K. Davydov", "5720. Coll. Karavaievi", "*Diacamma / rugosum* var. */ ovalis* Karav. / typus", "Holotypus */ Diacamma rugosum* / v. *ovalis* Karaw.", "Dlussky / restaur.", "not a type! / 1994 / W. L. Brown".

Material: HOLOTYPE, w (CASENT0916813) (Box 2).

Notes. In the early 1990s, we sent a sample of *Diacamma* type material to Prof. W. L. Brown (USA) for study, but he was unable to complete a revision of the genus before his death. However, there is an additional Brown label on the pin with this subspecies "not a type! / 1994 / W. L. Brown". Moreover, the number of the holotype specimen in the original description is 5920, but 5720 in the collection. The situation may be similar to that involving *D. rugosum gibbosum* (above).

Discothyrea oculata Emery, 1901: 52, w, q, m.

Current status: ***Discothyrea oculata*** (s/f Proceratiinae).

Type locality(-ies): "Cameroun (L. Conradt)".

Original Karawajew labels: 1 w, "Kamerun", "*Discothyrea oculata* Em. Det. C. Emery".

Material: PARALECTOTYPE, 1 w (CASENT0916810).

Notes. Hita Garcia *et al.* (2019) designated lectotype (worker) of *D. oculata* from Cameroon.

Dorylus brevipennis Em. st. ***Zimmermanni*** Santschi, 1910c: 738, Figs. 1, 2, s, w, m.

Current status: ***Dorylus brevipennis zimmermanni*** (s/f Dorylinae).

Type locality(-ies): "Madingou. Congo français. Nombreux m et w captures ensemble. (Rev. P. Zimmermann)".

Original Karawajew labels: 3 w, "Madingou, / Congo", "5166. Coll. / Karavaievi", "*Dorylus* (*Dory- / lus*) *brevipennis* / Em. ssp. *Zimmerman- / ni* Santschi / Santschi det."; 1 m, "Madingou, / Congo. / Zimmermann", "5166. / Coll. Karavaievi". "m".

Material: SYNTYPES, 4 w (CASENT0916852), 1 m (CASENT0916853) (Box 5).

Dorylus* (*Anomma*) *kohli Wasm. var. ***congolensis*** Santschi, 1910a: 352, Fig. 1, s, w.

Current status: ***Dorylus congolensis***. Raised to species: Boven van & Lévieux 1970: 356 (s/f Dorylinae).

Type locality(-ies): "Brazzaville, N'Duona".

Original Karawajew labels: 1 s, "Congo fr.", "1958. Coll. / Karavaievi", "*Dorylus* (*Anomma*) */ kohli* v. *congolensis* / Sant. typus"; 28 w on 10 pins, "1958. Coll. / Karavaievi".

Material: SYNTYPES, 29 w (CASENT0916855) (Box 5).

Dorylus (s. str.) ***spininodis*** Em. subsp. n. ***longiceps*** Viehmeyer, 1914: 26, Fig. 1, w.

Current status: ***Dorylus spininodis longiceps*** (s/f Dorylinae).

Type locality(-ies): "Manow, Bez. Langenburg, D.-O.-Afrika".

Original Karawajew labels: 1 w, "Manow / D.-O. Afrika", "*Dorylus* (*Dorylus*) */ spininodis* Em. sb. */ longiceps* Viehm. / Typus".

Material: SYNTYPE, 1 w (CASENT0916854) (Box 5).

Eciton* (*Aenictus*) *ceylonicus Mayr subsp. ***orientalis*** Karawajew, 1926e: 423, Fig. 2, w.

Current status: ***Aenictus orientalis***. Raised to species: Shattuck 2008: 18 (s/f Dorylinae).

Type locality(-ies): "Ins. Wammar (Aru-Archipel), 19.III.1913 (No. 2611)".

Original Karawajew labels: 5 w on 2 pins, "Wammar, / Aru. W. / Karawajew", "2611. Coll. / Karavaievi", "*Eciton (Aenic- / tus) ceylonicus /* ssp. *orientalis* / Karav. typus", "Syntypus w / *Eciton ceylonicus / orientalis* Karaw."; 38 w on 11 pins, "2611. Coll. / Karavaievi", "Syntypus w / *Eciton ceylonicus / orientalis* Karaw.".

Material: SYNTYPES, 43 w (CASENT0916856) (Box 5).

Eciton* (*Aenictus*) *fergussoni Forel subsp. ***elongatus*** Karawajew, 1926e: 424, Fig. 3, w.

Current status: **junior synonym** of ***Aenictus gracilis*** Emery, 1893: 187. Synonymy: Wilson 1964: 463 (s/f Dorylinae).

Type locality(-ies): "Ramboda (Ceylon). 3500 Fuss, 8.XII.1912, O. John, einige ww".

Original Karawajew labels: 2 w, "Ramboda, / Ceylon, 8.XII. / 1912. O. John", "5191. Coll. / Karavaievi", "*Eciton* (*Aenictus*) */ fergussoni* For. / sb. *elongatus* / Karavaiev, Typus", "Syntypus ww / *Eciton fergussoni* / *elongatus* Karaw."; 2 w, "5191. Coll. / Karavaievi", "Syntypus ww / *Eciton fergussoni* / *elongatus* Karaw.".

Material: SYNTYPES, 4 w (CASENT0916860) (Box 5).

Eciton* (*Aenictus*) *fergussoni For. var. ***sundaica*** Karawajew, 1927a: 7, w.

Current status: **junior synonym** of ***Aenictus laeviceps*** (Smith F., 1857: 79), Borneo. Synonymy: Wilson 1964: 467 (s/f Dorylinae).

Type locality(-ies): "Prinsen-Eiland in der Sundastrasse, 5.1.1913 (nr. 2398)".

Original Karawajew labels: 2 w, "Princen-Eiland, / Karavaiev", "2398. Coll. / Karavaievi", "*Eciton* (*Aenictus*) */ fergussoni* For. / var. *sundaica* Kar. / Typus", "Syntypus *Aenictus / fergussoni* v. *sun- / daica* Kar."; 15 w on 5 pins, "2398. Coll. / Karavaievi", "Syntypus *Aenictus / fergussoni* v. *sun- / daica* Kar.".

Material: SYNTYPES, 17 w (CASENT0916859) (Box 5).

Eciton* (*Aenictus*) *impressus For. var. ***levior*** Karawajew, 1926e: 424, w.

Current status: ***Aenictus levior***. Raised to species: Shattuck 2008: 17 (s/f Dorylinae).

Type locality(-ies): "Tifu auf der Ins. Buru (No. 2741), einige ww".

Original Karawajew labels: 2 w, "Tifu (Buru) / Karavaiev, / 2741", "2741. Coll. / Karavaievi", "*Eciton* (*Aenictus*) / *pachycerus* Sm. sb. / *impressus* For. var. */ levior* Karavaiev, / Typus", "Syntypus *Eciton(Ae- / nictus) impressus* v. */ levior* Kar."; 2 w with the same labels.

Material: SYNTYPES, 4 w (CASENT0916862) (Box 5).

Euponera (subgen. ***Brachyponera*** Em.) ***atrata*** Karawajew, 1925b: 126, w

Current status: ***Brachyponera atrata***. Combination in *Brachyponera*: Wilson 1958b: 347; Schmidt & Shattuck 2014: 80 (s/f Ponerinae).

Type locality(-ies): "Amboina, Nr. 2762, einige ww (Länge 6 mm).—Boeton, Nr. 2764, emhrere ww (Länge 4,5 mm)."

Original Karawajew labels: 3 w, "Amboina, / Karavaiew, / 2762.", "*Euponera /* (*Brachyponera*) / *atrata* Karav. / Typus. 1923.", "Syntypus 2 w / *Euponera / atrata* Karaw."; 2 w, "Boeton, / Karavaiev, / 2764", "*Euponera /* (*Brachyponera*) */ atrata* Karav. / Typus. 1923.", "Syntypus 2 w / *Euponera / atrata* Karaw."; 2 w, "Boeton, / Karavaiev, / 2764", "*Euponera (Brachy- / ponera) luteipes /* v. *atrata* . Typus. / Karavaiev".

Material: SYNTYPES, 7 w (Box 3).

Euponera (subgen. ***Brachyponera*** Em.) ***luteipes*** var. ***arcuata*** Karawajew, 1925b: 125, Fig. 3 c, w, q, m.

Current status: ***Brachyponera arcuata***. Raised to species: Wilson 1958b: 347. Combination in *Brachyponera*: Wilson 1958b: 347; Schmidt & Shattuck 2014: 80 (s/f Ponerinae).

Type locality(-ies): "Tjibodas, Nr. 2702 und 2761. Eine grosse Anzalh ww, einige flügellose qq und einige mm".

Original Karawajew labels: 2 w, "Tjibodas, Java. / Karavaiev, / 2702, 2761", "*Euponera /* (*Brachyponera*) / *luteipes* v. *arcuata* / Karavaiev, 1923. T.", "Cotypus *Euponera / luteipes* v. *arcuata* / Karaw."; 6 w on 2 pins, with the same labels; 2 w, "Tjibodas, Java. / Karavaiev / 2702", "*Euponera / (Brachyponera) / luteipes* v. *rotundata* [*sic*]

/ Karav. Typus", "Cotypus *Euponera / luteipes* v. *arcuata* / Karaw."; 2 q, "Tjibodas, Java. / Karavaiev, / 2702, 2761", "*Euponera / (Brachyponera)* q / *luteipes* v. *arcuata* / Karav. Typus. 1923", "Cotypus *Euponera / luteipes* v. *arcu- / ata* Karaw."; 1 m, "Tjibodas, Java. / Karavaiev, / 2702, 2761", "*Euponera / (Brachyponera)* m / *luteipes* v. *arcuata* / Karav. Typus. 1923, "Cotypus *Euponera / luteipes* v. *arcuata* / Karaw.".

Material: SYNTYPES, 10 w (CASENT0916828), 2 q (CASENT0916829), 1 m (CASENT0916830) (Box 3).

Notes. There are also 51 w with the labels "Tjibodas, Java. / Karavaiev", "5533. Coll. Karavaievi", "*Euponera / (Brachyponera) / luteipes* v. *arcuata* / Karav. Typus", "Cotypus *Euponera / luteipes* v. *arcuata* / Karaw.". These probably belong to the type series of this species, but the collection number differs from the original description.

Euponera (subgen. ***Brachyponera*** Em.) ***luteipes*** var. ***continentalis*** Karawajew, 1925b: 125, Fig. 3 d, w.

Current status: ***Brachyponera luteipes continentalis.*** Combination in *Brachyponera*: Schmidt & Shattuck 2014: 80 (s/f Ponerinae).

Type locality(-ies): "Kanara (Vorderinder), 2 w, von Forel erhalten".

Original Karawajew labels: 2 w, "Kanara. / India. v. / Forel", "*Euponera / (Brachyponera) / luteipes* v. *conti- / nentalis* Karav. / Typus. 1923", "Cotypus *Euponera / luteipes* v. *continen- / talis* Karav."

Material: SYNTYPES, 2 w (1 def.) (Box 3).

Leptogenys* (*Lobopelta*) *breviceps Viehmeyer, 1914: 30, Fig. 4, w.

Current status: ***Leptogenys breviceps*** (s/f Ponerinae).

Type locality(-ies): "Wareo D.-Neuguinea".

Original Karawajew labels: 1 w, "Wareo / D. Neuguinea", "*Leptogenys* / (*Lobopelta*) / *breviceps* Typus / Viehmeier", "Paratypus w / *Leptogenys breviceps* / Viehmeier".

Material: SYNTYPE, 1 w (CASENT0916833) (Box 4).

Leptogenys* (*Lobopelta*) *davydovi Karawajew, 1935a: 74, Fig. 7, w.

Current status: ***Leptogenys davydovi*** (s/f Ponerinae).

Type locality(-ies): "Bana bei Tourane, 1400 m, Zentralannam, 1.X.1931, K. Davydov, Nr. 5660, 1 w" (s/f Ponerinae).

Original Karawajew labels: 1 w, "Bana, Z. Annam / K. Davydov", "5660. Coll. / Karavaievi", "*Leptogenys* / (*Lobopelta*) / *davydovi* / Karav. typus", "Holotypus w / *Leptogenys (Lobopelta) / davydovi* Karawajew".

Material: HOLOTYPE, w (CASENT0916834) (Box 4).

Leptogenys (***Lobopelta*** Mayr) ***diminuta*** Sm. subsp. ***fruhstorferi*** Em. var**. *amboinensis*** Karawajew, 1925c: 277, w.

Current status: **unavailable (infrasubspecific) name.** Material referred to *Leptogenys diminuta* (Smith F., 1857: 69) by Wilson 1958: 118 (s/f Ponerinae).

Type locality(-ies): "Amboina, Nr. 2478, ww".

Original Karawajew labels: 12 w on 6 pins, "Amboina, / Karavaiev, / 2478", "*L.* (*Lobopelta*) / *diminuta fruhst.* / v. *amboinensis* / Karav. Typ. 1923", "Cotypus *Leptogenys / diminuta fruhstorf.* / v. *amboinensis* Kar.".

Material: SYNTYPES, 12 w (CASENT0916837) (Box 4).

Leptogenys (***Lobopelta***) ***diminuta*** Sm. subsp. ***fruhstorferi*** Em. var. ***huruensis*** Karavaiev, 1925c: 278, w.

Current status: **unavailable (infrasubspecific) name.** Material referred to *Leptogenys diminuta diminuta* (Smith F., 1857: 69) by Wilson, 1958: 118 (s/f Ponerinae).

Type locality(-ies): "Tifoe (Boeroe), Nr. 2437, ww".

Original Karawajew labels: 2 w, "Tifoe, Boeroe, / Karavaiev, / 2437.", "*L.* (*Lobopelta*) / *diminuta fruhst.* / v. *buruensis* Ka- / rav. Typus. 1923.", "Cotypus *Leptogenys / diminuta fruhstorf.* / v. *buruensis* Kar."; 4 w on 2 pins with the same labels; 2 w, "Tifu, Buru / Karavaiev.", "2437. Coll. / Karavaievi", "*L. (Lobopelta) / diminuta* v./ *buruensis* Kar. / typus", "Cotypus *Leptogenys / diminuta fruhstorf. / buruensis* Karav."; 9 w on 3 pins, "2437. Coll. / Karavaievi", "Cotypus *Leptogenys / diminuta fruhstorf. / buruensis* Kar.".

Material: SYNTYPES, 16 w (CASENT0916838) (Box 4).

Notes. This name was originally misspelled as var. *huruensis*, but Chapman & Capco (1951: 34) correctly emended the spelling to *buruensis*. The latter name is correct since this taxon was named after the type locality, Buru Island, which is supported by Karawajew's original labels (see also Bolton 1995, 2023).

Leptogenys (***Lobopelta*** Mayr) ***diminuta*** Sm. subsp**.** ***fruhstorferi*** Em. var**.** ***longinoda*** Karawajew, 1925c: 278, w.

Current status: **unavailable (infrasubspecific) name** (s/f Ponerinae).

Type locality(-ies): "Batu Caves, Selangor (Sumatra), 25.I.1913, O. John, ww".

Original Karawajew labels: 15 w on 8 pins, "Batu Caves, Se- / langor, Sumatra. / O. John. 1913", "*L.* (*Lobopelta*) / *diminuta fruhst.* / v. *longinoda* Ka- / rav. Typus. 1914.", "Cotypus *Leptogenys / diminuta* v. *longi- / noda* Karav.".

Material: SYNTYPES, 15 w (CASENT0916836) (Box 4).

Leptogenys (***Lobopelta***) ***diminuta*** Sm. subsp. ***fruhstorferi*** Em. var. ***nitidula*** Santschi, 1928: 139 (replacement name for *Leptogenys* (*Lobopelta*) *diminuta* Sm. subsp. *fruhstorferi* Em. var. *nitida* Karawajew, 1927a: 6, w, junior primary homonym of *Leptogenys nitida* (Smith F., 1858: 92) (see also Bolton 1995, 2023).

Current status: **unavailable (infrasubspecific) name** (s/f Ponerinae).

Type locality(-ies): "Prinsen-Eiland in der Sundastrasse, 5.1.1913 (nr. 3013), ww".

Original Karawajew labels: 2 w, "Prinsen-Eiland, / V. Karavaiev, / 3013".

Material: SYNTYPES, 2 w (Box 4).

Notes. There are also three workers with the labels "Prinsen-Eiland, / V. Karavaiev, / 2400", "*Leptogenys* / (*Lobopelta*) / *diminuta* Sm. / *fruhstorferi* v. / *nitidula* Sant. / n. nom. typus", "Cotypus / *Leptogenys / diminuta fruhstorf. / nitidula* Sant.". The collection number of this sample does not correspond with that of the original description, but these workers are without a doubt conspecific with those of the sample number 3013; CASENT number of the latter workers is 0916839.

Leptogenys (subg. ***Lobopelta*** Mayr) ***diminuta*** Sm. subsp. ***nong-nongi*** Karawajew, 1925c: 278, w.

Current status: ***Leptogenys diminuta nongnongi*** (s/f Ponerinae).

Type locality(-ies): "Tjapus auf dem Salak (Java), an dem Bach. Sehr volkreiches Nest in einem faulen Baumstrunk, teilweise in Erde, ww, Kokons und Larven".

Original Karawajew labels: 2 w, "Tjiapus, Java. / Karavaiev, / 2363", "*L.* (*Lobopelta*) / *diminuta* sbsp. / *nong-nongi* Kara- /vaiev / typus.", "Syntypus 2 w / *Leptogenys diminuta / nong-nongi* Karaw."; 3 w, "Tjiapus, Java. / Karavaiev, / 2363.", "*L.* (*Lobopelta*) / *dimin. nong- / nongi* Karav. / Typus. 1914.", "Syntypus 2 w / *Leptogenys diminuta / nong-nongi* Karaw."; 7 w on 4 pins with the same labels; 3 w, "Tjiapus / bei Buiten- / zorg. Java", "2363. Coll. / Karavaievi", "*Leptogenys / (Lobopelta) / diminuta nong- / nongi* Karav. typ.", "Syntypus / *Leptogenys diminuta / nong-nongi* Karaw."; 3 w, "2363. / Coll. Karavaievi", "Syntypus ww / *Leptogenys diminuta / nong-nongi* Karaw."; 33 w on 11 pins with the same labels.

Material: SYNTYPES, 51 w (CASENT0916841) (Box 4).

Leptogenys (***Lobopelta***) ***diminuta*** Sm. v. ***tjibodana*** Karawajew, 1926e: 421, w.

Current status: ***Leptogenys diminuta tjibodana*** (s/f Ponerinae).

Type locality(-ies): "Tjibodas (Java), No, 2951, ww".

Original Karawajew labels: 2 w, "Tjibodas, / Java. 2951. / Karavaiev", "*Leptogenys* / (*Lobopelta*) / *diminuta* Sm. / *tjibodana* Ka / ravaiev, typus", "Holotypus *Leptogenys* /*diminuta* v. *tjiboda / na* Karaw.".

Material: SYNTYPES, 2 w (CASENT0916840) (Box 4).

Leptogenys (subg. ***Lobopelta*** Mayr) ***rugosopunctata*** Karawajew, 1925c: 283, w, ergatoid q.

Current status: ***Leptogenys rugosopunctata*** (s/f Ponerinae).

Type locality(-ies): "Buitenzorg, Botan. Garten, Nr. 2420, ww, 1 q, Kokons und Larven".

Original Karawajew labels: 3 w, "Buitenzorg, Java / V. Karavaiev, / 2420", "*Leptogenys* / (*Lobopelta*) / *rugosopunctata* / Karav. Typus. 1923", "Syntypus ww / *Leptogenys / rugosopunctata* / Karaw."; 1 q with the same labels.

Material: SYNTYPES, 3 w (CASENT0916842), 1 q (def.) (CASENT0916843) (Box 4).

Leptogenys tenuis Stitz, 1911: 376, Fig. 1, w.

Current status: **junior synonym** of ***Leptogenys intermedia*** Emery, 1902: 32. Synonymy: Forel 1912b: 52 (see also Bolton 2023) (s/f Ponerinae).

Type locality(-ies): "Eine Anzahl ww.—Kiwu-See"

Original Karawajew labels: 1 w, "Kivusee, / От Stitz'a.", "*L.* (*Lobopelta*) / *tenius* Stitz / Typus", "Paratypus w *Leptogenys / tenius* Stitz".

Material: SYNTYPE, 1 w (CASENT0916844) (Box 4).

Lioponera noctambula Santschi, 1910b: 70, m.

Current status: ***Lioponera noctambula*** (s/f Dorylinae).

Type locality(-ies): "Kairouan".

Original Karawajew labels: 1 m, "Kairouan. / No 2000", "*Lioponera / noctambula* Sant. / Typus.", "Paratypus w [*sic*] / *Lioponera / noctambula* Santschi".

Material: SYNTYPE, 1 m (CASENT0916793) (Box 1).

Lobopelta fallax Mayr, 1876: 88, m.

Current status: ***Leptogenys fallax***. Combination in *Leptogenys*: Forel, 1900a: 64 (s/f Ponerinae).

Type locality(-ies): "Kap York (Coll. Mayr), Rockhampton, Gayndah, Peak Downs (Mus. Godeffroy)".

Original Karawajew labels: 2 w, "Neuholland", "Cotypus *Lobopelta / fallax* Mayr".

Material: SYNTYPES, 2 w (CASENT0916835) (Box 4).

Mystrium camillae Em. subsp. ***javana*** Karawajew, 1925a: 73, Fig. 1, w.

Current status: **junior synonym** of ***Mystrium camillae*** Emery, 1889a: 491. Synonymy: Brown 1960: 170 (s/f Amblyoponinae).

Type locality(-ies): "Kalkberg bei Tjampea (Java), Nr. 2389. Zwei w auf dem Boden, unter Laub".

Original Karawajew labels: 2 w, "Java, / Tjampea", "2389. Coll. / Karavaievi", "V. Karavaiev / 2389", "*Mystrium / camillae* Em. / sbp. *javana* typ. / W. Karawajew. 1924", "Syntypus w / *Mystrium camillae* / *javana* Karaw.".

Material: SYNTYPES, 2 w (CASENT0916795) (Box 1).

Odontomachus imperator subsp. ***opaculus*** Viehmeyer, 1912: 6, Fig. 6, w.

Current status: ***Odontomachus opaculus***. Raised to species: Wilson 1959: 496 (s/f Ponerinae).

Type locality(-ies): exact location not given, but based on the title of the paper (Viehmeyer 1912) and label data (see below), is New Guinea.

Original Karawajew labels: 1 w, "Kais Wilhelmsland / Toricelli Gebirge / Dr. Schlaginhaufen", "5150. Coll. / Karavaievi", "*Odontomachus / imperator* ssp. */ opaculus* Viehm. / typus", "Paratypus w / *Odontomachus imperator opacu- / lus* Viehmeyer", 2 w, "5150. Coll. / Karavaievi", "Paratypus w / *Odontomachus imperator opacu- / lus* Viehmeyer".

Material: SYNTYPES, 3 w (CASENT0916849) (Box 4).

Odontomachus ruficeps F. Sm. subsp. ***aruanus*** Karawajew, 1925c: 295, Fig. 14, w, m.

Current status: **junior synonym** of ***Odontomachus cephalotes*** Smith F., 1863: 19. Synonymy: Wilson 1959: 491 (s/f Ponerinae).

Type locality(-ies): "Wammar (Aroe-Archip.), Nr. 2566 und 2575. Nest in der Erde.—Ebenda, Nr. 2675. Nest in der Erde zwischen den Wurzeln eines grossen Baumes. ww und mehrere mm".

Original Karawajew labels: 1 w, "Wammar, / Aru. Karavaiev", "2566. / Coll. Karavaievi", "*Odontomachus / ruficeps* Sm. ssp. */ aruanus* Kar. / typus", "Syntypus ww / *Odontomachus ruficeps* / *aruanus* Karaw."; 2 w, "Wammar, / Aru. Karavaiev", "2566. / Coll. Karavaievi", "*Odontomachus / ruficeps* Sm. ssp. */ aruanus* Kar. / typus"; 14 w on 7 pins, "2566. / Coll. Karavaievi", "Syntypus ww / *Odontomachus ruficeps* / *aruanus* Karaw."; 1 m, "2566. / Coll. Karavaievi", "Syntypus m / *Odontomachus ruficeps* / *aruanus* Karaw.".

Material: SYNTYPES, 17 w (CASENT0916850), 1 m (Box 4).

Notes. There are also 10 w with the labels "Wammar, / Karawajew", "2623. Coll. / Karavaievi", "*Odontomachus / ruficeps* Sm. ssp. / *aruanus* Kar. / typus", but the collection number does not correspond with the numbers given in the original description. Nevertheless, these 10 workers undoubtedly are conspecific with the syntype workers.

Pachycondyla* (*Ectomomyrmex*) *astuta obscura Karawajew, 1935a: 71, w.

Current status: ***Ectomomyrmex astutus obscurus***. Combination in *Ectomomyrmex*: Schmidt & Shattuck 2014: 193 (s/f Ponerinae).

Type locality(-ies): "Tonkin, Phu-ho, K. Davydov, Nr. 5719, 1 w".

Original Karawajew labels: 1 w, "Tonkin, / Phu-Ho, / K. Davydov", "5719. Coll. / Karavaievi", "*Pachycondyla* (*Ectomomyrmex*) / *astuta* Sm. *obscura* / Karavaiev typus", "Holotypus w / *Pachycondyla astuta* / *obscura* Karaw.".

Material: HOLOTYPE, w (CASENT0916823) (Box 3).

Pachycondyla* (*Ectomomyrmex*) *punctata Karawajew, 1935a: 71, Fig. 5, w, q.

Current status: ***Ectomomyrmex punctatus***. Combination in *Ectomomyrmex***:** Schmidt & Shattuck 2014: 193 (s/f Ponerinae).

Type locality(-ies): "Bana bei Tourane, 500-800 m, Zentralannam, 27.IX.1931, K. Davydov, Nr. 5718, 3 w und 3 geflüg. q".

Original Karawajew labels: 2 w, "Bana, / Annam, / K. Davydov", "5718. Coll. / Karavaievi", "*Pachycondyla* / (*Ectomomyrmex*) / *punctata* Kara / vaiev typus", "Syntypus ww *Pachycondyla / punctata* Karaw."; 3 q, "5718. Coll. / Karavaievi", "Syntypus qq / *Pachycondyla / punctata* Karaw."

Material: SYNTYPES, 2 w (CASENT0916824), 3 q (CASENT0916825) (Box 3).

Pachycondyla (subgen ***Ectomomyrmex*** Mayr) ***sculpturata*** Karawajew, 1925b: 122, w (junior primary homonym of *Pachycondyla* (*Bothroponera*) *sculpturata* Santschi, 1912a: 151; replacement name: *Pachycondyla sumatrana*, Özdikmen, 2010: 997).

Current status: ***Ectomomyrmex sumatranus*** (s/f Ponerinae).

Type locality(-ies): "Loeboe-Bangkoeng (Sumatra), 18.III.1913, O. John (dessen Nr. 290), bei *Capritermes*. 2 w".

Original Karawajew labels: 2 w, "Loeboe-Bang / koeng, Sumatra. / O. John. (290).", "*Pachycondyla* / (*Ectomomyrmex*) / *sculpturata* Karav. / Typus. 1914", "Syntypus ww / *Pachycondyla / sculpturata* Karaw.".

Material: SYNTYPES, 2 w (CASENT0916826) (Box 3).

Pachycondyla* (*Ectomomyrmex*) *striata Karawajew, 1927a: 5, w (junior primary homonym of *Pachycondyla striata* Smith F., 1858: 106; replacement name: *Pachycondyla* (*Ectomomyrmex*) *striatula* Karavaiev, 1935a: 70).

Current status: ***Ectomomyrmex striatulus*** (s/f Ponerinae).

Type locality(-ies): "Ambon, 10.II.1913, Nr. 3019 (2445). 1 w".

Original Karawajew labels: 1 w, "Amboina / Karavaiev", "3019. Coll. / Karavaievi", "*Pachycondyla* / (*Ectomomyrmex*) / *striatula* n. nov. / Karawajew, 1933", "Holotypus w / *Pachycondyla / striatula* Karaw.".

Material: HOLOTYPE, w (CASENT0916827) (Box 3).

Parasyscia peringueyi Emery, 1886: 360, w.

Current status: ***Parasyscia peringueyi*** (s/f Dorylinae).

Type locality(-ies): exact location not given, but based on the original description and labels, is South Africa ("Capo di Bouna Speranza", = Cape of Good Hope).

Original Karawajew labels: 1 w, "Capland", "*Cerapachys* / (*Cerapachys*) / *peringueyi* Em. / Det. Emery", "Syntypus".

Material: SYNTYPE, 1 w (CASENT0917743) (Box 1).

Platythyrea conradti Emery, 1899: 464, w, m.

Current status: ***Platythyrea conradti*** (s/f Ponerinae).

Type locality(-ies): "Kamerun (Conradt)".

Original Karawajew labels: 1 w, "KAMERUN / IX-XI 1895 / L. Conradt.", "*Platythyrea / conradti* Em. / Det. C. Emery.", "Syntypus".

Material: SYNTYPE, 1 w (def.) (CASENT0917745) (Box 1).

Platythyrea melancholica F. Sm. var. ***aruana*** Karawajew, 1925a: 75, w.

Current status: **junior synonym** of ***Platythyrea parallela*** (Smith F., 1859: 143). Synonymy: Wilson 1958: 151 (s/f Ponerinae).

Type locality(-ies): "Wammar (Aroe), Nr. 2646. 20 ww".

Original Karawajew labels: 6 w on 3 pins, "Aroe, Wammar / V. Karavaiev, / 2646", "*Platythyrea / melancholica* Sm. / Det. V. Karawajew, 1923".

Material: SYNTYPES, 6 w (CASENT0916798) (Box 1).

Platythyrea modesta Emery, 1899: 467, w.

Current status: ***Platythyrea modesta*** (s/f Ponerinae).

Type locality(-ies): "Kamerun".

Original Karawajew labels: 1 w, "Kamerun / 1895 / L. Conradt", "*Platythyrea / modesta* Em. / Det. C. Emery".

Material: SYNTYPE, 1 w (CASENT0916799) (Box 1).

Ponera typhlos Karawajew, 1935a: 73, Fig. 6, w.

Current status: ***Cryptopone typhlos***. Combination in *Cryptopone*: Brown 1963: 6 (s/f Ponerinae).

Type locality(-ies): "Cay-Dua, Ins. Phuquoc im Golf von Siam, 26.XI.1931, K. Davydov, Nr. 5664, 1 w.— Caûda, Cochinchine, Derslebe, Nr. 5680, 1 w".

Original Karawajew labels: 1 w, "Arbre Broyè / S. Annam / К. Давыдов", "5680. Coll. / Karavaievi", "*Ponera / typhlos* Kar. / Karavaiev dt.", "Syntypus w / *Ponera / tiphlos* [*sic*] Karaw."; 1 w, "Cay-Dua, остр. / Phuquoc. Golf / di Siam. К. Да- / выдов", "5664. Coll. / Karavaievi", "*Ponera / typhlos* Kara- / vaiev typus", "Syntypus 1 w / *Ponera tiphlos* [*sic*] Karaw.".

Material: SYNTYPES, 2 w (CASENT0916832) (Box 3).

Prionopelta opaca Emery, 1897b: 596, Tab. XV, Fig. 44-45, w, q, m.

Current status: ***Prionopelta opaca*** (s/f Amblyoponinae).

Type locality(-ies): exact location not given, but based on the title of the paper (Emery, 1897b) and label data (see below), is New Guinea.

Original Karawajew labels: 1 w, "N. Guinea", "*Prionopelta / opaca* Em. / Det. C. Emery".

Material: SYNTYPE, 1 w (CASENT0916800) (Box 1).

Proceratium longigaster Karawajew, 1935a: 59, Fig. 2, w.

Current status: ***Proceratium longigaster*** (s/f Proceratiinae).

Type locality(-ies): "Bana, 1400 m, bei Tourane, Zentralannam, 30.IX.1931, K. Davydov, Nr. 5663, 1 w."

Original Karawajew labels: 1 w, "Annam. Ba- / nalhoon. / K. Davydov", "5663. Coll. / Karavaievi", "*Proceratium longigaster* Ka- / rav. typus", "Holotypus w / *Proceratium longigaster* / Karaw.".

Material: HOLOTYPE, w (CASENT0916806) (Box 2).

Proceratium normandi Santschi, 1929: 138, w, q.

Current status: **junior synonym** of ***Proceratium numidicum*** Santschi, 1912b: 172. Synonymy: Brown 1974: 82 (s/f Proceratiinae).

Type locality(-ies): "La Gaille, 1 q, 6 w (types). Aïn Draham, 1 w (Dr. Normand coll.)".

Original Karawajew labels: 1 w, "Tunisie. / Ain Draham. / Normand", "4141. Coll. / Karavaievi", "*Proceratium / normandi* Sant. / Santschi det. 1929".

Material: SYNTYPES, 1 w (CASENT0916807) (Box 2).

Proceratium numidicum Santschi, 1912b: 172, Figs. 1, 2, w, q.

Current status: ***Proceratium numidicum*** (s/f Proceratiinae).

Type locality(-ies): "Tunisie, Aïn-Draham: (Dr. Normand) 1 femelle, 20 ouvriéres".

Original Karawajew labels: 1 w, "Tunisie, / Ain Draham, / Normand", "4140. Coll. / Karavaievi", "*Proceratium / numidicum* Sant. / Santschi det.".

Material: SYNTYPE, 1 w (CASENT0916808) (Box 2).

Pseudomyrma kuenckeli var. ***dichroa*** Forel, 1904b: 41, w.

Current status: **junior synonym** of ***Pseudomyrmex kuenckeli*** (Emery, 1890: 62). Synonymy: Kempf 1961: 402 (s/f Pseudomyrmecinae).

Type locality(-ies): 2 w, "Dibulla, pied de la Sieraa Navada de Santa Marta, Colombie".

Original Karawajew labels: "Dibulla. / Columbia", "4330. Coll. / Karavaievi", "*Pseudomyrma* / *künckeli* Em. v./ *dichroa* For. / Typus".

Material: SYNTYPES, 2 w (CASENT0916876) (Box 6).

Pseudomyrma belti var. ***obnubila*** Menozzi, 1927: 273, w, q.

Current status: **junior synonym** of ***Pseudomyrmex flavicornis*** (Smith F., 1877: 67). Synonymy: Ward 1989: 438 (s/f Pseudomyrmecinae).

Type locality(-ies): precise locality not given, but based on the original paper, is San Jose, Costa Rica.

Original Karawajew labels: 3 w, "San José (C. R.) / Heinr. Schmidt", "3420. Coll. / Karavaievi", "*Pseudomyrma* / *belti* / v. *obinubila* Menoz. / Menozzi deter. / Cotypus" .

Material: SYNTYPES, 2 w (CASENT0916874) (Box 6).

Pseudomyrma pazosi Santschi, 1909: 309, w, q.

Current status: ***Pseudomyrmex pazosi*** (s/f Pseudomyrmecinae).

Type locality(-ies): "San Antonio de los Baños, Cuba (Dr. Pazos)".

Original Karawajew labels: 1w , "Cuba", "4351. Coll. Karavaievi", "*Pseudomyrma flavidula* Sm. v. *pazosi* Sant. Santschi det.".

Material: SYNTYPES, 1 w (CASENT0916875) (Box 6).

Pseudomyrma peltata Menozzi, 1927: 273, Fig. 2, w, m.

Current status: **junior synonym** of ***Pseudomyrmex nigrocinctus*** (Emery, 1890: 64). Synonymy: Ward 1993: 145.

Type locality(-ies): precise locality not given, but based on the original paper, is San Jose, Costa Rica.

Original Karawajew labels: "San José / (C. R.) / Heinr. Schmidt", "3421. Coll. / Karavaievi", "*Pseudomyrma* / *peltata* / Cotypus Menoz. / Menozzi deter.", Paratypus ww / *Pseudomyrma* / *peltata* Menozzi".

Material: SYNTYPES, 1 w (CASENT0916877) (Box 6).

Pseudomyrma arboris-sanctae r. ***symbiotica*** Forel, 1904b: 38, w, m.

Current status: **junior synonym** of ***Pseudomyrmex mordax*** (Warming, 1894: 173). Synonymy: Ward 1999: 497 (s/f Pseudomyrmecinae).

Type locality(-ies): "J'ai découverte cette race en mars 1896 à Dibulla, au pied de la Sierra Navada de Sta-Marts en Colombie, comme suit".

Original Karawajew labels: 2 w, "Dibulla, / Columbia", "4325. Coll. / Karavaievi", "*Pseudomyrma / arbor.-sanctae /* ssp. *symbiotica* / Forel. Typus", "Paratypus *Pseudomyrma / arboris—sanctae / symbiotica* Forel ww".

Material: SYNTYPES, 2 w (CASENT0916873) (Box 6).

Rhytidoponera croesus Emery, 1901: 50, w.

Current status: ***Rhytidoponera croesus*** (s/f Ectatomminae).

Type locality(-ies): "N. S. Wales".

Original Karawajew labels: 1 w, "N.S. Wales", "*Rh.* (*Chalcoponera*) / *croesus* Em. / Staudinger & Bang-Haas.".

Material: SYNTYPE, 1 w (CASENT0916803) (Box 2).

Rhytidoponera laciniosa Viehmeyer, 1912: 5, Fig. 3, w.

Current status: ***Rhytidoponera laciniosa*** (s/f Ectatomminae).

Type locality(-ies): exact location not given, but based on the title of the paper (Viehmeyer 1912) and label data (see below), is New Guinea.

Original Karawajew labels: 1 w, "Kais. Wilhelmsland / Toricelli Gebirge / Dr. Schlaginhaufen", "*Rhytidoponera* / (*Rhytidoponera*) / *laciniosa* Viehmeyer / Typus", "Paratypus w / *Rhytidoponera / laciniova* Viehmeyer".

Material: SYNTYPE, 1 w (CASENT0916801) (Box 2).

Rhytidoponera (subg. ***Rhytidoponera*** Mayr) ***subcyanea*** Em. var. ***aruana*** Karawajew, 1925a: 78, w.

Current status: **junior synonym** of ***Rhytidoponera aspera*** (Roger, 1860: 308). Synonymy: Wilson 1958b: 319 (s/f Ectatomminae).

Type locality(-ies): "Ins. Kobror (Aroe-Archip.), Nr. 2542. Einige ww auf dem Waldboden gesammelt".

Original Karawajew labels: 2 w, "Aroe, Kobror / V. Karavaiev, / 2542", "*Rhytidoponera* / (*Rhytidopo- / nera*) / *subcyanea* Em. / v. *aruana* Ka- / ravaiev, Typus / 1923", "Syntypus w *Rhytidoponera subcyanea var. / aruana* Kar.".

Material: SYNTYPES, 2 w (CASENT0916802) (Box 2).

Sima (***Tetraponera***) ***bidentata*** var. ***angusticeps*** Karawajew, 1933c: 266, w.

Current status: **junior synonym** of ***Tetraponera nitida*** (Smith F., 1860: 106). Synonymy: Ward 2001: 636 (s/f Pseudomyrmecinae).

Type locality(-ies): "Buitenzorg, Java, Botan. Garten (Nr. 5327), 1 w."

Original Karawajew labels: 1 w, "Java, / Buitenzorg", "5327 Coll. / Karavaievi", "*Sima* / (*Tetraponera*) / *bidentata* Kar. / var. *breviscapa* / Karav. Typus", "Syntypus *Sima* (*Tet-* / *raponera*) *bidenta- / ta* v. *breviscapa* Kar.".

Material: HOLOTYPE, w (CASENT0916868) (Box 6).

Notes. The name of this variety on the original labels of Karawaiew is "*breviscapa*", but the location label and the collection number correspond to var. *angusticeps* in the original description. This specimen is the holotype because this variety was described from a single specimen (worker).

Sima (***Tetraponera***) ***bidentata*** Karawajew, 1933c: 264, Fig. 13, w.

Current status: **junior synonym** of ***Tetraponera nitida*** (Smith F., 1860: 106). Synonymy: Ward 2001: 636 (s/f Pseudomyrmecinae).

Type locality(-ies): "Buitenzorg, Java, Botan. Garten, 16.XII.1912 (Nr. 2890), ww. Auf Gebüsch gesammelt.—Geser, 10.IV.1913 (Nr. 5318), einige w. An der Küste auf Gebüsch, zusammen mit *Sima allaborans* sunsp. *sumatrensis* gesammelt.—Küste von Bantam, Westspitze von Java an der Sundastrasse gegenüber der Insel Mieuven-Eiland, 7.I.1913 (Nr. 2396), 3 w. Der Fühlerschaft ist bei diesen Exemplaren etwas kürzer als bei denselben aus Buitenzorg und Geser.—Banda-Neira (Nr. 5325), ww. Grösser als die vorhergehenden Exemplare, nämlich 5 mm lang.—Sumbawa-Besaar (Nr. 5326), einige ww von dersleben Grösse wie die vorhergehenden".

Original Karawajew labels: 7 ww on 3 pins, "Java, / Buitenzorg", "2890. Coll. / Karavaievi Original Karawajew labels:", "*Sima (Tetrapo- / nera) bidentata* / Karaw. Typus", "Syntypus ww / *Sima (Tetraponera)* / *bidentata* Karaw."; 3 w, "Bantam, / Java. Karaw.", "2396. Coll. / Karavaievi", "*Sima (Tetrapo- / nera) bidentata* Kar. / Karawajew det."; 2 w, "Geser, / Karawajew", "5318. Coll. / Karavaievi", "*Sima (Tetrapo- / nera) bidentata* Kar. / Karawajew det."; 3 w, "5318. Coll. / Karavaievi"; 1 w, "Sumbawa—Besaar. / Karawajew", "5326. Coll. / Karavaievi", "*Sima (Tetrapo- / nera) bidentata* Kar. / Karawajew det."; 6 w, "5326. Coll. / Karavaievi"; 2 w, "Banda—Neira / Karawajew", "5325. Coll. / Karavaievi", "*Sima (Tetrapo- / nera) bidentata* Kar. / Karawajew det.".

Material: SYNTYPES, 24 w (CASENT0916867) (Box 6).

Sima binghami Forel, 1902b: 243, w, q, m.

Current status: ***Tetraponera binghami*** (s/f Pseudomyrmecinae). Combination in *Tetraponera*: Wheeler 1921: 531.

Type locality(-ies): "Ye Valley, Birmanie (Bingham); Moulmain, Birmanie (Hodgson); Assam (Smythies); Delbrugarh (Oscar Lindgreen)m Nord Konkan (Wroughton)" .

Original Karawajew labels: 1 w, "N. Konkan, Ye / Valley / (Bingham)", "4323. Coll. / Karavaievi", "*Sima* / *(Tetraponera) / binghami* For. / Forel det.".

Material: SYNTYPE, 1 w (CASENT0916869) (Box 6).

Sima (***Sima***) ***mocquerysi*** And. var. ***biozellata*** Karawajew, 1931d: 42, Fig. 1, w, q.

Current status: ***Tetraponera mocquerysi biozellata*** (s/f Pseudomyrmecinae). Combination in *Tetraponera*: Ward 1990: 488.

Type locality(-ies): "Naivasha (Nr. 5298), 1 w.—Mabira (Nr. 5319), 1 w und 1 geflügeltes q".

Original Karawajew labels: 1 w, "Naivasha / Engl. O. Afrika / Dogiel", "5298. Coll. / Karavaievi", "*Sima (Sima)*

/ *mocquerysi* And. / v. *biozellata* Kar. / Typus"; 1 w, "Mabira / Brit. E. Afr. / Dogiel", "5319. Coll. / Karavaievi", "*Sima (Sima)* / *mocquerysi* And. / v. *biozellata* Kar."; 1 q, "5319. Coll. / Karavaievi".

Material: SYNTYPES, 2 w, 1 q (CASENT0916865, 0916866) (Box 6).

Sima (***Tetraponera***) ***dentifera*** Karawajew, 1933c: 266, Fig. 14, q.

Current status: **junior synonym** of ***Tetraponera laeviceps*** (Smith F., 1859: 145). Synonymy: Ward 2001: 630 (s/f Pseudomyrmecinae).

Type locality(-ies): "Dobo auf Wammar, Aruarchipel, 9.III.1913 (Nr. 2569), auf neidrigem Gewächs, 1 flügelloses q".

Original Karawajew labels: 1 q, "Wammar, / Aru. Karaw.", "2569. Coll. / Karavaievi", "*Sima* / *(Tetraponera)* / *dentifera* Kar. / Typus", "Holotypus / *Sima (Tetraponera)* / *dentifera* Karaw."

Material: HOLOTYPE, q (CASENT0916870) (Box 6).

Sima (***Tetraponera***) ***dilatata*** Karawajew, 1933c: 267, Fig. 15, w.

Current status: **junior synonym** of ***Tetraponera difficilis*** (Emery, 1900: 677). Synonymy: Ward 2001: 628 (s/f Pseudomyrmecinae).

Type locality(-ies): "Prinsen-Eiland in der Sundastrasse, 6.I.1913 (Nr. 2401), 1 w".

Original Karawajew labels: 1 w, "Prinsen—/ Eiland. / Karawajew", "2401. Coll. / Karavaievi", "*Sima* / *(Tetraponera)* / *dilatata* Kar. / Typus", "Holotypus w / *Sima (Tetraponera)* / *dilatata* Karaw."

Material: HOLOTYPE, q (CASENT0916871) (Box 6).

Sima (***Tetraponera***) ***platynota*** Karawajew, 1933c: 269, Fig. 16, w.

Current status: **junior synonym** of ***Tetraponera laeviceps*** (Smith F., 1859: 145). Synonymy: Ward 2001: 630 (s/f Pseudomyrmecinae).

Type locality(-ies): "Wammar, Aruarchipel, 18.III.1913 (Nr. 5365), 3 w auf *Rhizophora mucronata* gesammelt".

Original Karawajew labels: 1 w, "Wammar, / Aru. Karaw.", "5365. Coll. / Karavaievi", "*Sima (Tetrapo- / nera) platynota* / Karaw. Typus", "Syntypus w / *Sima (Tetraponera)* / *platynota* Karaw."; 1 w, "5365. Coll. / Karavaievi", "Syntypus w / *Sima (Tetraponera)* / *platynota* Karaw."; 1 w, "Wammar, / Aru. Karaw.", "5365. Coll. / Karavaievi", "*Sima (Tetrapo-* / *nera) platynota* / Karaw. Typus".

Material: SYNTYPES,3 w (CASENT0916872) (Box 6).

Stictoponera spiralis Karawajew, 1925a: 79, w.

Current status: **junior synonym** of ***Gnamptogenys crassicornis*** (Forel, 1912b: 51). Synonymy: Lattke 2004: 106 (s/f Ectatomminae).

Type locality(-ies): "Buitenzorg, Botan. Garten, Einzelläufer".

Original Karawajew labels: 1 w, "Java, / Buitenzorg / 1912 г.", "*Stictoponera / spiralis* Kara / vaiev, 1914, Typus", "Holotypus w / *Stictoponera / spiralis* Karaw.", "*Gnamptogenys* / *crassinodis* (Forel) / det. Lattke '99".

Material: HOLOTYPE, w (CASENT0916805) (Box 2).

Stigmatomma amblyops Karawajew, 1935a: 57, Fig. 1, w.

Current status: ***Stigmatomma amblyops*** (s/f Amblyoponinae).

Type locality(-ies): "Caûda, Cochinchine, K. Davydov, Nr. 5675, 2 w".

Original Karawajew labels: 2 w, "Caûda pres / Nhatrang / S. Annam / K. Давыдов", "5675. Coll. / Karavaievi", "*Stigmatomma / amblyops* Ka- / rav. typus", "Syntypus ww / *Stigmatomma / amblyops* Karaw.".

Material: SYNTYPES, 2 w (CASENT0916796) (Box 1).

Stigmatomma quadratum Karawajew, 1935a: 58, w.

Current status: ***Stigmatomma quadratum*** (s/f Amblyoponinae).

Type locality(-ies): "Poulo Dama, Archipel im Golf von Siam, südslich von der Insel Phuquoe, K. Davydov, Nr. 5673, 1 w".

Original Karawajew labels: 1 w, "Poula Dama / Арх. в Сиам. зал. / К. Давыдов", "5673. Coll. / Karavaievi", "*Stigmatomma / quadratum* / Karav. typus", "Holotypus w / *Stigmatomma / quadratum* Karaw.".

Material: HOLOTYPE, w (CASENT0916797) (Box 1).

Sysphincta europaea rossica Arnoldi, 1930: 144, Figs. 1–3, w, q.

Current status: **junior synonym** of ***Proceratium melinum*** (Roger, 1860: 291). Synonymy: Brown 1958: 248 (s/f Proceratiinae).

Type locality(-ies): "Aksaj (Dongebiet), den 16. Juli 1927, Nr. 2537, coll. Arnoldi".

Original Karawajew labels: 1 w, "Аксай, / Арнольди", "5453. Coll. / Karavaievi", "*Sysphincta / europaea / rossica* Arn. / typus", "Syntypus *Sysphincta / europaea rossica* / K. Arn.".

Material: SYNTYPE, 1 w (CASENT0916809) (Box 2).

Genus *Typhloteras* Karawajew, 1925b: 128.

Type species: *Typhloteras hamulatum* Karawajew, 1925b: 129, by monotypy.

Current status: **junior synonym** of ***Centromyrmex*** Mayr, 1866: 894. Synonymy: Brown 1953: 8.

Typhloteras hamulatum Karawajew, 1925b: 129, Fig. 5, w.

Current status: ***Centromyrmex hamulatum***. Combination in *Centromyrmex*: Brown 1953: 8 (s/f Ponerinae).

Type locality(-ies): "Siak, Sungei Pinang (Sumatra), O. John (Nr. 355, 363 und 366), einige ww bei Capritermes, Mirotermes und Eutermes gesammelt".

Original Karawajew labels: 2 w, "Sumatra, Siak, / Sungei Pinang, / O. John, 356, 363-6", "*Typhloteras / hamulatum* / Karavaiev, 1923. / Typus", "Syntypus ww / *Typhloteras / hamulatum* Karaw.".

Material: SYNTYPES, 2 w (CASENT0916831) (Box 3).

Notes. There is also 1 worker (def.) with the labels "Sumatra, Siak / Sungei Pinang / O. John, № 337-e", "*Typhloteras hamulatum* Karawajew, 1923. / Typus", "Syntypus / *Typhloteras / hamulatum* Karaw.", but its collection number (337-e) does not correspond with the numbers given in the original description. Beside this, there are one queen with the labels "O. John, 411", "*Typhloteras / hamulatum* Kar. / Det. Karawajew, 25", and one male with the labels "O. John, 411" and "*Typhloteras / hamulatum* Kar. / Det. Karawajew, 25". Despite the queen and male not belonging to the type series, Karawajew (1926e: 419) described them for the first time, and this material has important taxonomic value.

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