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65

A catalog of the Nicrophorinae (Coleoptera: Silphidae) of the world

DEREK S. SIKES, RONALD B. MADGE & ALFRED F. NEWTON



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Abstract

All available species-group names of the subfamily Nicrophorinae (Coleoptera: Silphidae) are cataloged herein. There are currently 68 valid species, three of which are fossils; and 168 invalid species-group names, 2 of which are *nomina dubia* and 17 of which are junior homonyms and thus objectively invalid; for a total of 236 available species-group names. The type specimens of 38 valid names and 63 invalid names were found and studied. The original descriptions of 65 valid species-group names and 130 invalid species-group names were found and studied. An annotated bibliography of 1151 references that cite nicrophorine names covering the years 1752 – early 2002 is presented.

The following 18 nomenclatural acts are made:

Lectotype designations (16): Type depositories precede species names. HNHM: Budapest: *Nicrophorus antennatus* (Reitter) / BMNH: London: *Nicrophorus interruptus* Stephens; *Nicrophorus mexicanus* Matthews; *Nicrophorus montivagus* Lewis; *Nicrophorus tenuipes* Lewis / MNHN: Paris: *Nicrophorus didymus* Brullé; *Nicrophorus insularis* Grouvelle; *Nicrophorus interruptus* var. *algericus* Pasquet; *Nicrophorus podagricus* Portevin; *Nicrophorus quadraticollis* Portevin; *Nicrophorus scrutator* Blanchard / ZMAS: St. Petersburg: *Nicrophorus mongolicus* Shchegoleva-Barovskaya; *Nicrophorus przewalskii* Semenov-Tian-Shanskij; *Nicrophorus reichardti* Kieseritzky / ZMHB: Berlin: *Nicrophorus japonicus* Harold / MCZC: Cambridge: *Nicrophorus defodiens* Mannerheim;

New nomina protecta/oblita (2): *Silpha* (*Nicrophorus*) *orientalis* (Herbst, 1784) NEW NOMEN OBLITUM (article 23.9.2 ICZN ed. 4); *Nicrophorus americanus* Olivier, 1790 NEW NOMEN PROTECTUM (see *N. orientalis*);

The following 93 taxonomic changes are made:

New status as valid species (2): *Nicrophorus sepulchralis* Heer NEW STATUS as valid species; *Nicrophorus morio* Gebler NEW STATUS as valid species;

New combination (1): *Silpha* (*Nicrophorus*) *orientalis* Herbst NEW COMBINATION as *Nicrophorus orientalis* (Herbst);

New species-group revised synonyms (12): These are junior synonyms or names of subspecific rank that are being moved to new senior synonyms (as absolute synonyms, i.e. rankless): *N. tibetanus* Hlissnikovsky REVISED SYNONYM of *N. argutor* Jakovlev; *N. lateralis* Portevin REVISED SYNONYM of *N. defodiens* Mannerheim; *N. plagiatus* Motschulsky REVISED SYNONYM of *N. defodiens* Mannerheim; *N. humeralis* Pic REVISED SYNONYM of *N. insularis* Grouvelle; *N. gallicus* Jacquelin du Val REVISED SYNONYM of *N. interruptus* Stephens; *N. suturalis* Motschulsky REVISED SYNONYM of *N. interruptus* Stephens; *N. submaculatus* Reitter REVISED SYNONYM of *N. investigator* Zetterstedt; *N. funebris* Jakovlev REVISED SYNONYM of *N. morio* Gebler; *N. requiescator* Gistel REVISED SYNONYM of *N. tomentosus* Weber; *N. interruptiolus* Strand REVISED SYNONYM of *N. vestigator* Herschel; *N. interruptus* Brullé REVISED SYNONYM of *N. brullei* Jakobson, (syn. of *N. vestigator* Herschel); *P. weberi* Bodemeyer REVISED SYNONYM of *Ptomascopus plagiatus* (Ménétriés);

New species-group synonyms (25): These are species-group names of specific rank that have not been synonymized previously. *N. pseudobrutator* Reitter NEW SYNONYM of *N. argutor* Jakovlev; *N. cadaverinus* Gistel NEW SYNONYM of *N. germanicus* (L.); *N. ornatus* Hlissnikovsky NEW SYNONYM of *N. germanicus* (L.); *N. proserpinae* Gistel NEW SYNONYM of *N. germanicus* (L.); *N. basalis* Gistel NEW SYNONYM of *N. interruptus* Stephens; *N. fossor* Erichson NEW SYNONYM of *N. interruptus* Stephens; *N. grahami* Swan & Papp NEW SYNONYM of *N.*

investigator Zetterstedt; *N. maritimus* Gistel NEW SYNONYM of *N. investigator* Zetterstedt; *N. praedator* (Reitter) NEW SYNONYM of *N. investigator* Zetterstedt; *N. karafutonis* Kôno NEW SYNONYM of *N. maculifrons* Kraatz; *N. lunulatus* Gistel NEW SYNONYM of *N. marginatus* Fabricius; *N. lunatus* Gistel NEW SYNONYM of *N. marginatus* Fabricius; *N. mixtus* Hlisnikovsky NEW SYNONYM of *N. montivagus* Lewis; *N. rugulipennis* Jakovlev NEW SYNONYM of *N. morio* Gebler; *N. benguetensis* Arnett NEW SYNONYM of *N. nepalensis* Hope; *N. burmanicus* Hlisnikovsky NEW SYNONYM of *N. oberthuri* Portevin; *N. unifasciatus* Hlisnikovsky NEW SYNONYM of *N. oberthuri* Portevin; *N. pulsator* Gistel NEW SYNONYM of *N. sayi* Laporte; *N. temporalis* Shchegoleva-Barovskaya NEW SYNONYM of *N. semenowi* (Reitter); *N. fasciatus* Hlisnikovsky NEW SYNONYM of *N. tenuipes* Lewis; *N. marginatus* Gistel NEW SYNONYM of *N. tomentosus* Weber; *N. bifasciatus* Hausmann NEW SYNONYM of *N. vespillo* (L.); *N. hadenius* Gistel NEW SYNONYM of *N. vespillo* (L.); *N. oregonensis* Swann & Papp NEW SYNONYM of *N. vespilloides* Herbst; *N. olfactor* Gistel NEW SYNONYM of *N. vestigator* Herschel;

New status as absolute synonyms (53): These are species-group names of subspecific rank that we consider to be invalid synonyms without rank. *N. centralis* Portevin NEW STATUS as absolute syn. of *N. antennatus* (Reitter); *N. rotundicollis* Portevin NEW STATUS as absolute syn. of *N. concolor* Kraatz; *N. armeniacus* Portevin NEW STATUS as absolute syn. of *N. germanicus* (L.); *N. bimaculatus* Haworth NEW STATUS as absolute syn. of *N. germanicus* (L.); *N. bipunctatus* Kraatz NEW STATUS as absolute syn. of *N. germanicus* (L.); *N. fascifer* (Reitter) NEW STATUS as absolute syn. of *N. germanicus* (L.); *N. speciosus* (J.D. Schulze) NEW STATUS as absolute syn. of *N. germanicus* (L.); *N. quadriguttata* Angell NEW STATUS as absolute syn. of *N. guttula* Motschulsky; *N. vandykei* Angell NEW STATUS as absolute syn. of *N. guttula* Motschulsky; *N. atricornis* Meier NEW STATUS as absolute syn. of *N. humator* (Gleditsch); *N. maculosus* Meier NEW STATUS as absolute syn. of *N. humator* (Gleditsch); *N. minnesotianus* Hatch NEW STATUS as absolute syn. of *N. hybridus* Hatch & Angell; *N. brunripes* Gradl NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. centrimaculatus* Reitter NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. corsicus* Laporte NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. funereus* Gén  NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. infuscaticornis* Portevin, NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. laportei* Meier NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. nigricans* Pasquet NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. pasqueti* Pic NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. trimaculatus* Gradl NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. trinitatus* Reitter NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. vodozi* Meier NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. algiricus* Pasquet NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. funerator* Fauvel NEW STATUS as absolute syn. of *N. investigator* Zetterstedt; *N. funeror* (Reitter) NEW STATUS as absolute syn. of *N. investigator* Zetterstedt; *N. insularis* Lafer NEW STATUS as absolute syn. of *N. investigator* Zetterstedt; *N. intermedius* Reitter NEW STATUS as absolute syn. of *N. investigator* Zetterstedt; *N. latifasciatus* Lewis NEW STATUS as absolute syn. of *N. investigator* Zetterstedt; *N. maritimus* Mannerheim NEW STATUS as absolute syn. of *N. investigator* Zetterstedt; *N. variolosus* Portevin NEW STATUS as absolute syn. of *N. investigator* Zetterstedt; *N. parvulus* Hlisnikovsky NEW STATUS as absolute synonym of *N. maculifrons* Kraatz; *N. nigrifrons* Portevin NEW STATUS as absolute syn. of *N. podagricus* Portevin; *N. immaculatus* Portevin NEW STATUS as absolute syn. of *N. quadripunctatus* Kraatz; *N. bohemicus* Roubal NEW STATUS as absolute syn. of *N. vespillo* (L.); *N. bolsmanni* Westhoff NEW STATUS as absolute syn. of *N. vespillo* (L.); *N. fauveli* Fauconnet NEW STATUS as absolute syn. of *N. vespillo* (L.); *N.*

minor Westhoff NEW STATUS as absolute syn. of *N. vespillo* (L.); *N. varendorffi* Westhoff NEW STATUS as absolute syn. of *N. vespillo* (L.); *N. altumi* Westhoff NEW STATUS as absolute syn. of *N. vespilloides* Herbst; *N. aurora* Motschulsky NEW STATUS as absolute syn. of *N. vespilloides* Herbst; *N. subfasciatus* Portevin NEW STATUS as absolute syn. of *N. vespilloides* Herbst; *N. subinterruptus* Pic NEW STATUS as absolute syn. of *N. vespilloides* Herbst; *N. sylvivagus* Reitter NEW STATUS as absolute syn. of *N. vespilloides* Herbst; *N. brullei* Jacobson NEW STATUS as absolute syn. of *N. vestigator* Herschel; *N. bipunctatus* Portevin NEW STATUS as absolute syn. of *N. vestigator* Herschel; *N. carreti* Pic NEW STATUS as absolute syn. of *N. vestigator* Herschel; *N. degener* Carret NEW STATUS as absolute syn. of *N. vestigator* Herschel; *N. obscuripennis* Portevin NEW STATUS as absolute syn. of *N. vestigator* Herschel; *N. rautenbergi* Reitter NEW STATUS as absolute syn. of *N. vestigator* Herschel; *N. viturati* Pic NEW STATUS as absolute syn. of *N. vestigator* Herschel; *P. lewisi* Portevin NEW STATUS as absolute syn. of *P. morio* Kraatz; *P. villosus* Portevin NEW STATUS as absolute syn. of *P. morio* Kraatz.

Key words: Coleoptera, Silphidae, Nicrophorinae, *Nicrophorus*, *Ptomascopus*, *Palaeosilpha*, *Eonecrophorus*, burying beetle, taxonomy, bibliography, catalog, synonymy, nomenclature

Introduction

This product represents the bulk of the nomenclatural and taxonomic portion of an in-progress monographic revision of the Nicrophorinae (Coleoptera: Silphidae) by the senior author. Species descriptions, distribution maps and data, keys, and phylogenetic analyses will appear separately. This catalog and bibliography will also be available in searchable format, on-line, at 'Nicrophorus Central' (Sikes, Trumbo & Peck 1999).

What is a bibliographic taxonomic catalog? Because many species have been given multiple names it is essential that knowledge of these names and their relation to the single valid name be presented in revisionary taxonomic work. Often, this is accomplished by listing chronologically each synonym under each valid name included in a standard synonymy table. Such tables are essential for associating names with species, but unlike a bibliographic catalog, they do not include the history of each name presented. This history can sometimes be simple, such as a name being synonymized a few years after being made available and never again used as a valid species name. It can also be complex, in which numerous authors disagree on a names' validity and/or rank. This information on how the taxonomic community has treated a given name throughout its history is only available in a bibliographic catalog which attempts to list every appearance of a name in a given taxon in the literature. This catalog attempts to do just that. All available species-group names in the Nicrophorinae are listed with citations of each names' appearance in the literature. However, this catalog is not complete. Certainly references exist which were not found that cite nicrophorine names, and some references included herein cited by prior workers could not be located in libraries for verification. Nevertheless, this catalog is an approximation of a complete catalog and should provide most of the significant changes that have occurred during the history of each name in the Nicrophorinae.