Some Observations on the Nature of Insect Names

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A recent study of dragonfly names (Montgomery, 1973) has led to a consideration of insect names, especially ancient and early English names. This interest was aroused, chiefly by the statement in Sarot's study of the folklore of the dragonfly from "A Linguistic Approach" that no recognizable name for dragonflies has been found in Anglo-Saxon, classical Latin or ancient Greek. Any language is capable of supplying names for all objects, including insects, which are recognized by its community of speakers. As so many names for dragonflies have been found in modern languages, (95 in English, over 60 in German, about 40 in French and almost 200 in Italian) and names for other insects are fairly numerous in these languages (for example: at least 13 for grasshopper or locust, eight for beetles, and six each for moth, fly and cicada in ancient Greek) this is surprising if not incredible. However, in several years of search I must say that I have been as unsuccessful as Sarot. The search is made rather difficult because all of the comprehensive dictionaries and glossaries of these languages which I have found are one-way, that is from the other language into English. Search for an English word in them is comparable in difficulty to getting where you wish to go by traveling the wrong way on a lane of a super-highway! A great amount of data on insect names in general has been acquired.

Names of insects are usually considered to be of two kinds—common and scientific or technical. Common names are those of the vernacular, or of ordinary language, plain English. Scientific names are Latin, at least, in form, and comprise a system of nomenclature, governed by an elaborate set of rules—The International Code of Zoological Nomenclature.

Common names are generally thought to be folk names developed by the usage of common people. Therefore, they are simple, familiar and generally understood by everyone. Perhaps, even the specialist should use them to maintain rapport with his audience, whoever that may be! Technical names are thought to be "manufactured" by taxonomists through the process of assembling bits and pieces of language (technically roots and affixes) into meaningful, but strange, exotic and incomprehensible terms. Thus, technical insect names are regarded by the non-taxonomist with the usual suspicion given to the jargon of the professional—the physician, the lawyer, the professor, etc. Even the economic entomologists have their own set of "approved" common names which are required in papers published in the professional journals. Can you imagine the haematologist or the dermatologist using common names for diseases of the blood or the skin in articles in a technical medical journal?

The presumed distinctions and differences between common and technical names are to a considerable degree spurious. Latin and Greek language elements are difficult only because of the unfamiliarity of the public at large, even the so-called intellectual community, with scientific nomenclature and terminology.

This unfamiliarity is probably due more to the specialization and exactness of scientific concepts than to the language. The student of the arts, or the humanities, is generally unalterably, seemingly almost congenitally, opposed to the type of detail and preciseness which constitute the everyday practices of the scientist. Furthermore, the English language is about three-fifths Latin, and the language, at least the writings, of any professional Biologist is probably more nearly four-fifths Latin and Greek derived. All of us have had our course in classical derivatives,—or wish we had, as we thumb through the glossaries of Brown (1956), Borror (1960), Jaegar (1944), Nybakken (1959), or Stearn (1966).

Insect names may be classified as to origin into some six groups, which are not at all mutually exclusive—primitive, borrowed, extended, associative, descriptive and synthetic. These groups are my own classification and may not correspond to the linguistic classifications of the origins of the words of a language.
Primitive names are those so old in the development of a language that no information about their origin, except from primitive roots as determined from comparative etymology, is available. In English such names can be traced back through Anglo-Saxon to proto-Germanic, and frequently to basic Indo-European. In most cases there are cognate names in related languages. They include such insect names as ant, bee, beetle, fly and wasp. The word bee may be traced back through some changes in spelling (bee-bey-be) to the Anglo-Saxon Beō, and old Teutonic bēon from the root bī, likely from the Indo-European root bhi-, to fear, in the sense of quivering, on the basis of buzzing or humming. There are cognate forms in German (Biene) and Dutch (bij). The development of a primitive name may be well illustrated by a study of adder, which is an element of many associative names for dragonfly in English (23) and Celtic (11). This word may be followed backward in a variety of spellings through Middle and Old English: adder-addre-addir-ather-eddyre-nedder to naedre which was close if not identical with the Anglo-Saxon. The original meaning was merely snake and the specialization to apply to a particular kind of snake developed relatively late. The initial n- was lost in Middle English (about 1300-1500) to the article, a nadder, becoming an adder. (For the opposite development note newt—an aut becoming a newt.) It is interesting that a variety of spellings of adder, going back to the 10th century, have survived in dialect form and appear in the local names for dragonfly in British provincial areas (English Dialect Dictionary, Wright, 1962). Cognate forms in Irish, Scottish, Welsh and Breton dialects are shown in the list of Celtic names for dragonfly (Montgomery, 1973). Other cognate forms are found in Dutch (adder), German (Natter), Latin (natrix) and Sanscrit (naga). All appear to be derived from the Indo-European root, (s)ne-, to wind, or to twist.

Borrowed names are words from other languages. They are adopted when the community of speakers of a language are in contact with another language which has an appropriate name for an insect, particularly if the insect is “new” to the experience of the borrowing language community. Borrowed names are frequently modified, sometimes considerably, into the pattern of the new language by folk etymology. The name cockroach is an excellent example of such a borrowed name. It came into English about 1600 through the writings of Capt. John Smith who interpreted the Spanish cucaracha as cacarootch. “A certaine India Bug, called by the Spanish a Cacarootch, the which creeping into Chests they eat and defile with their ill-scented dung.” (Oxford Dictionary, Murray et al., 1933). Smith’s rendition of the Spanish name was near a combination of two English words—cock, a male of the domestic fowl and roach, a carp-like fish (Leuciscus rutilus) although each word has several other meanings. Thus, the name for the insect, which probably soon became very familiar to the English speaking colonists in the New World, was quickly anglicized into what appears to be a word synthesized from two familiar zoological names.

Extended names are derived by the extension of the original meaning of a word to apply to an insect which may have some direct or vague connection with this original meaning. The original meaning may in time be lost, or may continue in use in the language along side of the new meaning. A good example of a name derived by extension is bug. In spite of its simple appearance bug is not a primitive insect name, but the word seems to have been borrowed from the Welsh, bwg, with the meaning of specter, or object of terror. As the first application to an insect referred specifically to the bedbug (Cimex lectularius) the logic of the name derived by extension can be readily understood. The original meaning of the borrowed word continues to exist in the language. It might be noted in passing that bugger, a technical term in criminal law referring to pederasty, has an entirely different origin. It is derived from Old French bougre, from late Latin Bulgarius, a heretic, and originally applied to Bulgarian from a group or sect of 11th century heretics in Bulgaria, to whom the abominable practices were imputed.

Most of the 95 dragonfly names listed (Montgomery, 1973) are associative although some of the associations are fanciful as are all of those named for snakes (snakefeeder, flying adder, and even dragonfly) and some are quite imaginary, even based on false assumptions, as horse stinger, eye stinger, etc. Some are descriptive, at least in part. Such names as mosquito hawk, water dipper and balance fly are descriptive of habits of dragonflies.
There is no real distinction between common and technical names in respect to formation by synthesis. Most insect common names are dual or multiple worded, and are compounded by combining words just as technical names are composed by combining roots and affixes.

There seems to be some objection to common names selected by Professors of Entomology, textbook authors and entomological writers as not being folk names as if there is something sacred about a folk name. However, with the increasing sophistication of the general public in entomology and their increasing knowledge of different insects, additional names are necessary. Professional entomologists should be the ones to create such names. Of course, we sometimes find an author who becomes "name-happy" and creates long series of names for which there is no actual need. Such names fail to achieve acceptance and die aborning. It is likely that names have always been created by individuals. Such primitive names as the original forms of bee and adder were probably formed by some observant individual and passed on to the language community. Some ancient Aryan in the eastern Baltic area heard the buzzing of a bee or saw a snake winding through the grass. He merely shouted the substantive form of the verb roots bhi-, to quiver, and sne, to twist, and created the names for bee and snake!

One set of very interesting insect names are the Limean generic names. Linnaeus used 89 names for genera in his class Insecta (synonymous with Arthropoda). They appeared in the first (1735), tenth (1758), and the twelfth (1766) editions of the Systema Naturae. (I have not examined the other editions but all of the Linnean names listed by Fabricius (1778) are included.) Five names listed in the fust edition were omitted in the tenth—Baceros, Gyrinus, Lampyris, Lucanus and Notopeda. Gyrinus and Lampyris were used by Geoffroy in 1762, Lucanus by Scopoli in 1763 and Notopeda by Fee in 1830 (in a rewritten edition of the Systema Naturae). Baceros appears to remain without valid nomenclatural use.

An examination of these names would seem to indicate that Linnaeus did an excellent job of synthesizing names at the beginning of binomial nomenclature. Dermites is derived from Spera, derma, skin, and esthia, to consume, as the name of a skin-eating beetle. Myrmeleon comes from myrmex, ant, and leon, lion, for that insect. They are, indeed, appropriate names but they were not coined by Nils Ingemarsson's son. dermites was used by Sophocles in the 5th century B.C., and Myrmeleon appeared in the Septuagint, the Greek version of the Old Testament made in Alexandria in the 3rd and 2nd centuries B.C. Of the 89 names (see List of Names) 82, or 91% have been identified in the glossaries of ancient Latin and/or Greek in almost the same form as used by Linnaeus, at least 56, or about 63%, were used as the names of insects in antiquity. Whether they were applied by the ancient writers to the same insects for which they are now used is not possible to determine in all cases. I presume that Linnaeus knew very little about the ancient names of insects. In fact, his student, Fabricius, implied that he knew very little about insects! Nevertheless, the glossaries cite Linnaeus frequently as authority for the insect to which an ancient Latin word referred. Twenty-four of the names were used (on one page) by Aldrovandus in 1602.

Linnaeus did not create, and at least when he first formulated his scheme of classification and first selected the names for genera, he had no intention of creating a special set of "technical names" for animals. He was a Botanist, but when he had worked out a system of classification of plants, he applied the same plan to animals and minerals. When the short manuscript (13 pages), containing the charts of classification, and very little else, was completed he went to Holland with the financial support of his future father-in-law. You may remember that there was some complaint about his spending more time dallying with the daughter of the wealthy town physician of Falun than in botanizing when he had gone to Dalecarlia on a grant of public funds to study plants. Apparently his time was well spent! Once in Holland he obtained his doctor's degree at the University of Harderwijk in a couple of weeks, and soon obtained the friendship of some of the leading scientists of the country and the support of two patrons who assisted him in publishing his Systema Naturae. From the publication of this paper in 1743 he was regarded as the outstanding authority on systematic Biology for considerably over a century—until Darwin's theory of evolution became the focal point of biological thought and classification ceased to be the main center of interest.
In the 1735 edition only genera were designated by single names, each species was
designated by a diagnosis of a few words as had been the practice since Aristotle. The binary
system (binomials), giving single names to species as well as to genera was not applied in
detail to plants until 1735 (8th edition) and not to animals until 1758 (10th edition).
Linnaeus wrote in Latin as the common language of the educated world of his day
and used the "common" Latin names for the different insects. He noted that he selected
those names from other authors which belonged, or were appropriate, for genera and
species(!): "Nomen Selectectum, genericum & specificum Authoris cujusdem, si quod
tale, vel proprium." I believe that most, if not all, of these names had been in wide use
by writers of the 16th and 17th centuries.

In the table of names, I have indicated those which appear to be identical with
ancient Latin words, whether names of "insects" or not, and the Greek word from which
each was derived, if any. I have also cited a few writers, usually only those showing the
earliest use of the word which I have found, and a few of the better-known authors from
whom Linnaeus, or more likely, his predecessors of the 16th and 17th centuries,
obtained the word. The number of these names which were used by Pliny and/or
Aristotle is quite surprising, as is the great preponderance of those which are really Greek
words, merely latinized. However, it must be remembered that Aristotle was the Father
of Zoology and that Pliny's Natural History was the principal zoological reference for
fifteen centuries. Also, it must be remembered that Rome, particularly the intelligentsia,
was bi-lingual throughout the classical period of Latin (from about the 2nd century B.C.
to the 4th century A.D.). What was it Caesar said when he recognized Brutus among his
assassins? "Et tu, Brute?" according to Shakespeare, but "Kal su ei ekelmon, kal su,
teknon?" (And thou art one of them, thou, my son?" in Greek) according to Suetonius.
Also note the reference to the Latin version of the Bible, the Vulgate, that is the
vernacular, or vulgar, tongue, in contrast to the Greek of the leaders, including the
church leaders (in the 4th century).

The Romans were not scholars, but generals and civil administrators. Thus, in the
heyday of Latin literature, from a century or two before the beginning of the Christian
era to an equal time afterwards, the authors found themselves with an inadequate
language. This situation was especially true in science and philosophy. This was well
expressed by Cicero: "We are obliged to create a vocabulary and to find names to attach
to new discoveries. This will not cause surprise to any moderately well-informed person,
when he reflects that in every branch of knowledge lying outside the most elementary
ones there must be a large measure of 'newness' about its vocabulary." Names were not
difficult to find, "the Greek had a name for it", usually two or more! The Roman
authors wrote in Latin although most of them were fluent in Greek because there was no
need to write in the latter language. All they knew and more had already been written.
The surviving Greek literature is enormous in comparison with the Latin, a ratio of about
10 to 1. It may be noted that in spite of the mass of Greek which has been "mined" for
the words of the dictionaries and lexicons there exists a great amount yet unstudied. It is
estimated that approximately 20,000 papyri are stored in the archives of the museums
and libraries of the world, and that only about half of them have been translated.

The study of insect name will continue. I am compiling glossaries of Latin and Greek
insect names and my search for the first use as insect names of the generic names of
Linnaeus will continue in the 16th and 17th century biological writings. The hunt for
ancient names of dragonflies will go on as a most absorbing avocation to my
odonatological studies.

THE "INSECT" GENERIC NAMES OF LINNAEUS

The list of names includes the names proposed by Linnaeus for insects (in the
"Linnean sense"—approximately synonymous with arthropods) in the first (1735), tenth
(1758) and twelfth (1766) editions of the Systema Naturae. Information about the names
is indicated by the following symbols:

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- names used in substantially the same form as those used by classical Latin and/or Greek authors for insects.
* - names appearing in glossaries of classical Latin or Greek but apparently not used in antiquity for insects.
° - words not found in glossaries of classical Latin, although some occurred in Greek as indicated.
+ - the Linnean name is a diminutive, or other derived form, of a Latin or Greek word.
a - name used for insect by Aldrovandus, 1602.
Prefix of a serial number (170-243) - names proposed in the 10th edition (1758)
Prefix of "12)" - names proposed in the 12th edition (1766)
Suffix of "(1)" to name - names listed in the 1st edition (1735)

Each name, if known in classical Latin in approximately the same form as used by Linnaeus, is followed by reference(s) to Latin author(s) as cited in glossaries. Diminutives or other derivatives used by Linnaeus, are followed by the source word with citations. For words derived from Greek, either directly or through classical Latin authors, the Greek original is given and Greek authors are cited. In some cases (and these may be impossible to distinguish) the classical Latin and Greek words may be cognates, rather than one being derived from the other. The Latin apis appears to be cognate with the English word bee, German Biene, etc., but amicus appears never to have been applied to an insect, but referred to the sacred bull of Egypt. Bär was derived from Latin (one of only a few Greek words of such origin) but did not refer to an insect, meaning purple. This derivation was from an alternate Latin meaning, a clot of blood, hence, by extension, purple, the color of blood.

Gender is indicated for Greek nouns and adjectives (for which the masculine is always cited) by the familiar designations of M-masculine, F-feminine, and N-neuter, rather than by the article which is used for this purpose in Greek dictionaries, lexicons and grammars. However, gender of the original Greek may have little significance for the use of the Linnean names in nomenclature. Linnaeus, or his predecessors, in adopting the name (even ancient Greek or Latin writers) to be applied to insects may have changed the form of the word to conform to another gender.

ANNOTATED LIST OF AUTHORS
(WithAbbreviations used in the List of Names)

These were selected from the ancient Greek and Latin authors from whose works words were compiled into lexicons and dictionaries of the classical languages. Works of most of these were published soon after the invention of printing. They were, thus, available to Linnaeus and the preceding 16th and 17th century writers on natural history as a source of "suitable" names for plants and animals. I have cited the authors whose works were well known and thus were the most likely sources for such names.

Ael - Aelianus, Greek author, 2nd-3rd centuries A.D.
Aesop - legendary Greek fabulist, 6th century B.C.
Aes - Aeschylus Greek tragic dramatist, 525-456 B.C.
Amb - one of the Latin "church fathers," 340?-397 A.D.
Aris - Aristotle, Greek philosopher and "scientist," father of Zoology, 384-322 B.C.
Art - Aristophanes, Greek comic dramatist, 450?-380? B.C.
Cato (the Elder) - Roman orator and historian, 234-149 B.C.
Cic - Cicero, Roman statesman, orator and author, 106-43 B.C.
Col - Columella, Latin writer on husbandry, 1st century A.D.
Dsc - Dioscorides, Greek physician, author of famous herbal, 1st century A.D.
Gal - Galen, Greek physician and medical author, 130?-200? A.D.
Hdt - Herodotus, Greek historian, 5th century B.C.
Hes - Hesiod, Greek poet and bucolic writer, 8th century B.C.
Hippocrates, Greek physician, father of medicine, reputed author of extensive medical writings (and the Hippocratic oath), 460?-377? B.C.
Homer, Greek, epic poet, author of the Iliad (I), ca. 750 B.C., and the Odyssey (O), ca. 720 B.C.
Horace, Roman poet, 65-8 B.C.
Hesychius, Greek lexicographer, 5th century A.D.
Isidore of Seville, Latin scholar and encyclopedist, 560?-636 A.D.
Livy, Roman historian, 59 B.C.-17 A.D.
Luc Lucretius, Roman poet-philosopher, 96?-55 B.C.
LXX - the Septuagint, Greek translation of the Old Testament, made at Alexandria, ca. 250-100 B.C.
Nicander, Greek epic poet, 2nd century B.C.
Ovid, Roman poet, 43 B.C.-18 A.D.
Petronius, Roman satirist, ?-66 A.D.
Pindar, Greek lyric poet, 522?-433 B.C.
Pliny, Roman naturalist and encyclopedist. His Natural History in 37 volumes made him the most influential "biologist" after Aristotle. 23-79 A.D.
Plutarch, Greek biographer and essayist, 46?-120 A.D.
Sophocles, Greek tragic poet, 496-406 B.C.
Suetonius, Roman biographer and historian, 69?-140? A.D.
Theophrastus, Greek philosopher and "scientist", successor to Aristotle, father of Botany, 372?-287? B.C.
Varro, Roman scholar and author, 116-27? B.C.
Vergil, Roman epic poet and bucolic writer, 70-19 B.C.
The Vulgate, Latin version of the Bible, first translated near the end of the 2nd century A.D.; revised (383-405 A.D.) by (and generally attributed to) St. Jerome (Sphronius Eusebius Hieronymus), 347-419 A.D.

LIST OF NAMES

235° Acaridae (1) = acaΣαρ(M) - Aris.
237° Araneidae (1) = αράνη(M) - Hdt.
237° Araneidae (1) = αράνη(M) - Hdt.
178° Attelabus (1) = αττελάβας(M) - Aris, H(O).
193° Blatta (1) = βλάττα(F) (from Latin)
228° Bombylius = βομβυλίας(M) - Aris, Dsc, Hpp.
12° Bruchus (1) = βροχός(M) - LXX, Thph.
184° Buprestis (1) = βύππρεστης(F) - Aris, Dsc, Hpp.
12° Byrrhus = βυρρός(M). Tyrherian for κυνάρος.
239° Cancer (1) = κανέρ(M), Pl, Ver.
181° Cantharidae (1) = κανθαρός(M) - Aris.
186° Carabidae (1) = καράβος(M) - Aris.
239° Cancer (1) = κανέρ(M), Pl, Ver.
181° Cantharidae (1) = κανθαρός(M) - Aris.
186° Carabidae (1) = καράβος(M) - Aris.
174° Cassidae (1) (Latin) = Κασίδα(M) - Aris.
179° Cerambix (1) = κεραμβίξ(M) - Hsch, Nic.
201° Cerceris (1) = κέρκερ(Σ) - Hes.
12° Chrysis = χρυσίς(F) - Art.
176° Chrysomelidae (1) = χρυσόμελλος(M) - Pl.
195° Cicada (1) (Latin) = κικάδα(M) - Lucas, Pl, Ver.
183° Cicindelidae (1) = κικίνδελα(M) - Aris, H(O).
198° Cicindelidae (1) (Latin) = κικίνδελα(M) - Liv, Pl, Var.
175° Coccinella (1) = κόκκινη(M) - Pl.
201° Coccus = κόκκος(M) - Thph.
226° Conops = κωνόπης(M) - Aris, Hdt.
224° Culex (1) = κυλέξ(M) - Lucas, Pl, Ver.
177° Curculio (1) = κυκλού(M) - Lucretius, Pl, Var, Ver.
12° Dapsis = δάπης(M) - Thph.
212° Doryphas (1) = δρυφάς(M) - Thph.
171° Derrostes (1) = δερρυστής(M) - Sop.
12° Diopsis = διώπτης(F) - Plu.
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185° DYTISCUS (1)  
182° ELATER  
225° EMPIS  
219* FORMICULA (1) (Latin) - Pl.  
219* FORMICA (1) - Cic, Hor, Pl., Ver.  
214* FORMICA (1) - Cic, Hor, Pl., Ver.  
194* GRYLLUS (1) Pl.  
219* HEMEROBIUS (1) - Cic, Hor, Pl., Ver.

180° IPPIS (1) - Cic, Pl.

172° HISTER - Liv, Ov, Var.  
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233° PEDICULUS (1) - Pl. (Sometimes written pediculus - Pl.) Related to (at least referring to the same insects) = phθέρ (M, later F) and = φθεψακονιος (F) - Dsc, hdt, Gal, Plu.

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LITERATURE CITED


