

LONGHORNED WOOD-BORING BEETLES
(CERAMBYCIDAE : COLEOPTERA)
OF COSTA RICA

An annotated species list

Frank T. Hovore, April, 2002

The following provides a brief taxonomic and biological synopsis of the family Cerambycidae (sensu lato) for Costa Rica. It was assembled in June, 2001, primarily to provide a working baseline for collection organization and field study focus at the National Institute for Biodiversity (INBio), University of Costa Rica (UCR). Each segment (tribes, or groups of tribes) has a summary of the species diversity as presently known, notes about the taxonomic status of the group, and where pertinent, a mention of known work in progress or projects initiated. This list contains described species through early 2001, but is a work in process in that it will be modified to accommodate taxonomic changes or new material examined; the number of undescribed taxa is an approximation of the number of apparently new taxa seen by the author in both public (UCR, INBio, USNM, CAS, UCB) and private collections. I am grateful to Humberto Lezama (Museo de Insectos, UCR), Angel Solís and Alvaro Herrera (INBio), Henry Hespeneheide (OTS, UCLA), John Chemsak (UCB), Keve Ribardo (CAS), Luis Diego Gomez (OTS, Las Cruces), Jack Longino and the ALAS lab staff (OTS, La Selva), the Tropical Science Center, Dan Janzen, Dick Penrose, Pat Sullivan, Ian Swift, and the late Ed Giesbert for specimen data, camaraderie and many other important contributions. The Costa Rican Ministerio del Ambiente y Energia is gratefully acknowledged for providing collecting and export permits.

PARANDRINAE

PARANDRINI

Hesperandra glabra (Degeer)
Hesperandra polita (Say)
Parandra (P.) angulicollis Bates

Subfamily appears to be relatively well-known taxonomically; recent revisional studies by Arigony; no new species in collections; biology similar for all taxa, which are generalist feeders in decaying logs and stumps.

Taxon summary: known species in Costa Rica: 3; number undescribed, 0.

PRIONINAE

MACROTOMINI

Mallodon dasystemus (Say)
M. m. molarius Bates
Mallodon spinibarbis (Linnaeus)*
Mallodonopsis corrosa Bates
M. mexicana Thomson
Parastrongylaspis linsleyi Giesbert
S. bullata Bates*
S. granigera Bates*
Strongylaspis corticaria Erichson*

Most taxa well-known and common in collections; *Strongylaspis* in need of review to determine true identity of *S. corticaria* versus other named taxa, probably no new species; recently described new *Mallodon* from Costa Rica (*M. mandibulare* Lackerbeck) is invalid taxon, being both a homonym, and a synonym (of *M. dasystemus*). Biology of most species known, but the last 4 taxa listed have no published biological data.

Taxon summary: known species in Costa Rica: 9; number undescribed, 0.

ERGATINI

Callipogon barbatum (Fabricius)
C. lemoinei Reiche*
C. (Orthomegas) fragosoi Bleuzen
C. (Orthomegas) monnei Bleuzen

ANCISTROTINI

Macrodonia dejeani Gory

MALLASPINI

Charmallaspis rhombodera (Bates)
Holonotus nigroaeneus (Bates)
H. sternalis Gahan
Insuetaspis paradoxa (Bates)
Scatopyrodes angusta (Taschenberg)
S. b. belti (Bates)
S. trichostetha Bates

PRIONINI

Callistoprionus fasciatus Tippmann
Derobrachus asperatus Bates
D. dentipes Chemsak
D. longicornis Bates
D. sulcicornis LeConte
Psalidognathus modestus Fries
P. superba or near

ANACOLINI

Myzomorphus scutellatus Sallé
Otheostethus melanurus Bates
Udeterus magnificus Galileo

Above tribes all recently reviewed or revised; a few minor corrections and notations may need to be done, and much more specimen data is needed for virtually all tribes; there may be one or more new taxa to be named in Anacolini; biology of most of the described taxa unknown or unpublished.

Taxon summary: described species in Costa Rica: 22; number undescribed, 1?

MEROSCELISINI

New genus, new species #1
New genus, new species #2

The entire known Costa Rican meroscelisine fauna at hand is undescribed, but papers underway in U.S. and Brasil will deal with these taxa.

Taxon summary: known species in Costa Rica: 2; number undescribed, 2.

CERAMBYCINAE

OEMINI

Atenizus simplex Bates
A. laticeps Bates
Malacopterus tenellus (Fabr.)
Temnopsis sp.*

Taxonomy of Oemini relatively straightforward, but *Temnopsis* is a tentative ID, from one old UCR specimen, possibly mislabeled. Biology of *Malacopterus* known, others not.

Taxon summary: known species in Costa Rica: 3; number undescribed, 1?.

ACHRYSONINI

Achryson surinamum (L.)
A. ornatipenne Perroud
Alastos batesi (Pascoe)
Niophis antennata Martins*

Tribe reviewed by Monné, taxonomy well known; full distribution of *Alastos* not well known; no biological data for last 3 taxa.

Taxon summary: known species in Costa Rica: 4; number undescribed, 0.

CERAMBYCINI

Bothrocerambyx nevermanni Schwarzer
Brasilianus batus (Linnaeus)
B. yucatecus Chemsak & Noguera
B. mexicanus Thomson
B. plicatus (Olivier)
Coleoxestia bimaculata Fuchs
C. nidita Bates
C. sanguinipes Bates
Coleoxestia n.sp., near nitida Bates
Coleoxestia sp. nr vittata Bates
Criodion antennatum Bates*
C. murinum Nonfried*
Poeciloxestia lanceolata Fragoso
Sphallambyx superbum (Aurivillius)*
Sphallotrichus puncticollis robustus (Bates)

Taxonomy of this tribe in part has been well-studied, but not completed, by Fragoso; *Criodion* species determinations are tentative. No new taxa seen in collections at hand, except perhaps the species of *Sphallambyx*, which may be new, and not *superbum* (described from Colombia). Biology known only for a few *Brasilianus*, and ecological distribution not well-known for any of the species.

Taxon summary: known species in Costa Rica: 15; number undescribed, 3?.

HESPEROPHANINI

Amphelictus bicolor Chemsak & Linsley
Amphelictus sp. nr brevidens Chemsak & Linsley
A. castaneus or panamensis Chemsak & Linsley*
Anatinomma alveolatum Bates*
A. bispinosum Aurivillius*
A. brevicornis Fisher

Members girdle twigs and limbs. Taxonomy of *Amphelictus* needs to be revisited, as 2 of 3 names can only be tentatively assigned; at least one new species at hand from extreme western Panama probably is present in Las Alturas region of Costa Rica as well.

Taxon summary: known species in Costa Rica: 6; number undescribed, 1?.

EBURIINI

Eburia aegrota Bates
E. fuliginus (Bates)
E. pedestris White
E. stigma (Olivier)*
Eburodacrys callixantha Bates
E. coalescens Bates

E. havanensis Chevrolat
E. sticticollis Bates
E. triocellata (Stål)

Eburia presently under review by Noguera; all new taxa at hand should be named in that work. Biology known for a few species only.

Taxon summary: known species in Costa Rica: 9; number undescribed, 3?.

ELAPHIDIINI

Aneflus (*Protaneflus*) *minutivestis* Linsley
A. (P.) planus Franz
A. (P.) pilosicornis Ch. & Lins.
Anelaphus daedalus (Bates)
A. jansoni Linsley
A. misellus (Bates)
Anelaphus sp.#1, nr *jansoni*
Anelaphus sp.#2, nr *jansoni*
Anelaphus sp., nr *giesberti* Chemsak & Linsley
Anopliomorpha sp., *hirsutum* Linsley or near
Atylostagma polita White
Elaphidion irroratum (Linnaeus)
E. scabricolle Bates*
Enaphalodes coronatum (White)
Eutrichophoroides albisparsus (Bates)
Ironeus duplex Bates
I. pulcher Bates
Megapsyrassa atkinsoni Chemsak & Giesbert
M. n.sp.
M. xestioides (Bates)
Micropsyrassa bimaculata (Bates)
M. minima Martins & Chemsak
Miltesthus marginatus Bates
Nephalioides rutilus (Bates)
Nyssicus topographicus (Linsley)
Paramallocera cribripennis (Bates)
Parastizocera procera (Erichson)
Peranoplium undulatum (Bates)
Peranoplium n. sp.
Psyrassa sallaei Bates*
P. testacea Linsley
P. subpicea (White)
Psyrassa sp. nr *testacea*
Psyrassa n. sp. (rounded elytral apices)
Orwellion g. gibbulum (Bates)
Sphaerion sp. indet.
Stenosphenus l. langurioides Bates
S. lineatus costaricensis Giesbert
S. o. ochraceus Bates
S. trispinosus Bates
Stizocera plicicollis (Germar)
Terpnissa listropterina Bates
Trichophoroides niveus Linsley
Tropimerus hovorei Giesbert

This is a large and complex tribe, with very high number of genera to species; numerous new taxa are at hand, at least some of which are in ms by Hovore at present; *Psyrassa* is currently being reviewed by Toledo at UNAM; other genera in need of work include *Anelaphus*, *Elaphidion*, and *Peranoplium*. Most species in the tribe are larval twig girdlers, but the larvae of a few species work in already-dead wood.

Taxon summary: known species in Costa Rica: 44; number undescribed, 10?.

PIEZOCERINI

Haruspex bivittis agnatus Melzer

Haruspex n. sp.

Hemilissa rufa Melzer*

Piezasteria helenae Martins*

Piezocera monochroa Bates

Tribe recently revised by Martins, but several taxa from Costa Rica can only be tentatively named herein; minor work to determine accuracy of identifications, and at least one new species at hand. Biologies of all species unknown, but *Hemilissa* and *Haruspex* usually taken on dead branches..

Taxon summary: known species in Costa Rica: 5; number undescribed, 1.

IBIDIONINI

Alcyopsis chalcea Bates

Asynapteron glabriolum (Bates)

Compsa leucozona Bates

C. macra Thomson

Compsibidion vanum Thomson

Corimbion martinsi Giesbert

Cycnidolon trituberculatum Martins

Diasporidion duplicatum (Gounelle)

Engyum virgulatum (Bates)

Gnomidolon basicoeruleum Martins

G. laetabile Bates

G. melanosomum Bates

G. proseni Martins

Heterachthes concretus Martins

H. ebenus (Newman)

H. fraterculus Martins & Napp

H. nigrocinctus Bates

H. rubricolor Melzer

Hexoplon albipenne Bates

Neocompsa bimaculata Martins & Napp

N. comula Martins

N. giesberti Martins & Napp

N. glaphyra Martins

N. lineolata (Bates)

N. mexicana (Thomson)

N. spinosa Martins

N. squalida (Thomson)

N. textilis (Thomson) or new

N. thelgema Martins

N. tuberosa Martins

N. v-flava Melzer

N. ventricosa (Bates)

Pygmodeon cribripenne (Bates)

P. ditelum (Bates)

P. excelsum Martins & Napp
P. obtusum (Bates)
P. validicorne (Bates)
P. sp. indet.
Stenygra h. histrio Serville
S. histrio nigrina Franz
Thoracibidion buqueti (Thomson)
Xalitla sp., genuina Martins, or near

Large, but relatively well-known tribe, completely revised by Martins, with numerous subsequent papers by same author, describing new taxa. There appear to yet be a few new taxa in Costa Rica, some of which presently are included in faunal works in progress. New taxa also at hand from Cocos Island. Biologies mostly unknown, but tribe in general associated with dry, dead twigs and branches, woody vines.

Taxon summary: known species in Costa Rica: 42; number undescribed, 2?.

OBRINI

Obrium albifasciatum Bates
O. angulosum Bates
O. cordicolle Bates
O. costaricum Hovore & Chemsak
O. cribripenne Bates
O. maculatum (Olivier)
O. ruficolle Bates

Tribe reviewed by Hovore & Chemsak; no new taxa at hand; biologies not published, but most species bore in small dead twigs.

Taxon summary: known species in Costa Rica: 7; number undescribed, 0.

HYBODERINI

Pachymerola ruficollis humeralis Giesbert

MOLORCHINI

Oxycoleus bicolor Melzer
Oxycoleus n. sp. – culicina-like
Oxycoleus n. sp. – Monteverde

NECYDALOPSINI

Eucharassus bicolor Melzer

E. dispar Bates
E. nevermanni Melzer
E. n. sp. #1
E. n. sp. #2
E. n. sp. #3
N. genus, n. sp. (Monteverde)

Above three tribes somewhat complex at higher classification level, latter may be polyphyletic, several of the new taxa are in manuscripts in progress; *Oxycoleus* needs work, with perhaps 3 new species at hand. *Eucharassus bicolor* appears to be the female of *E. dispar*, but this has not yet been published.

Taxon summary: known species in Costa Rica: 11; number undescribed, 7.

RHINOTRAGINI

Acyphoderes abdominalis (Olivier)
A. fulgida Chemsak & Linsley
A. sexualis Linsley
A. n. sp.

A. suavis Bates
Bromiades brachyptera Chevrolat
Cantharoxylum linsleyi Fisher
Crossomeles acutipennis Chemsak & Noguera
Epimelitta nigerimma Bates or *consobrina* Melzer
Ischasia nevermanni Fisher
I. rufina Thomson*
Isthmiade perpulchra Linsley
Odontocera buscki Fisher
O. exilis Fisher
O. fasciata (Olivier)
O. nevermanni Fisher
O. scabricollis Melzer
O. zeteki Fisher
Odontocera sp., nr *clara* Bates
Odontocera sp. indet.
Oxylymma tuberculicollis Fisher
Ommata aurantipennis Giesbert
O. beltiana Bates
O. championella Bates*
O. cyanipennis Bates
O. elegans White
O. turrialbae Giesbert
Ommata (*Ecliptophanes*) *tommyi* Hovore
Ommata sp. #1
Phepsia corinna (Pascoe)
Stenochariergus hollyae Giesbert & Hovore
Stenopseustes sp.
Tomopterus vespoides White

The tribe is mega-diverse and generally poorly known at present, with many new species at hand from mesoamerica overall, but relatively few from Costa Rica (one in ms by Hovore at present). Generic concepts for *Odontocera*, *Acyphoderes*, and *Ommata* need clarification. Specific biologies not known for Costa Rican fauna, but tribe generally utilizes dry dead wood for larval development.

Taxon summary: known species in Costa Rica: 33; number undescribed, 6.

EROSCHEMINI

Tethlimmena aliena Bates

The one described species possibly encompasses more than one taxon, and needs further study. Reared from *Persea* girdled by *Oncideres* (Hovore).

Taxon summary: known species in Costa Rica: 1; number undescribed, 1?.

CALLICHRMATINI

Callichroma batesi Gahan

Diotecnon i. *iris* (Taschenberg)

Mionochroma aureotincta (Bates)

M. v. vittata (Fabricius)

Plinthocoelium xanthogastrum (Bates)

Schwarzerion h. *holochlorum* (Bates)

Xenochroma azurea Demets

X. hovorei Giesbert

X. tibialis Giesbert

Xystrochroma clypeatum (Schwarzer)

Most genera reviewed by Giesbert, and no new species are at hand in material from Costa Rica at this time. Biologies unknown for most species, but most taxa bore in larger trunks and branches of fallen trees.

Taxon summary: known species in Costa Rica: 10; number undescribed, 0.

DRYOBINI

Ornithia m. mexicana (Sturm)

Only one common species is known. Larval biology not published, but adults usually found beneath bark on large burned stumps, or at flowers.

Taxon summary: known species in Costa Rica: 1; number undescribed, 0.

CLYTINI

Anthoboscus tricolor (Chevrolat)

Mecometopus jansonii Bates

M. macilentus Bates

M. solidicornis Bates

Megacyllene angulatus (Fabricius)

M. costaricensis (Thomson)*

M. ellifranziana Fuchs

M. guttata Chevrolat

M. panamensis (Bates)

Neoclytus beltianus (Bates)

N. cacticus (Chevrolat)

N. justini (Chevrolat)

N. lebasi Chevrolat

N. personatus Chemsak & Linsley

N. n. sp.

Ochraethes citrinus Chevrolat* (dubious record)

O. pollinosa (Chevrolat)

Ochraethes n. sp.

Placosternus crinicornis (Chevrolat)

P. erythropus (Chevrolat)

Tanyochraethes ochrozona (Bates)

Trichoxys viridicollis Chevrolat

Relatively well-known tribe, but there are few new species in collections at hand, some in manuscripts in progress. Some minor taxonomic sorting needed, and generic divisions not clear for all taxa; probably more new species to be discovered with additional collecting. Biologies not published for most taxa, but most clytine species breed in dead hardwoods, a few in living woody plants.

Taxon summary: known species in Costa Rica: 22; number undescribed, 2.

ANAGLYPTINI

Aphysotes tubericollis Bates

Diphyrama singularis Bates

Pempteurys sericans Bates

TILLOMORPHINI

E. boucardi (Bates)*

E. cleriformis Bates

E. cribellatus (Bates)

E. dimidiatipennis Melzer

E. linsleyi Giesbert & Chemsak

E. posticus (Pascoe)

E. pusillus Giesbert & Chemsak
E. succinus Giesbert & Chemsak
Tetranodus angulicollis Chemsak
T. reticeps (Bates)
T. xanthocollis Chemsak

Euderces was recently reviewed by Giesbert & Chemsak; not well-studied biologically, but several species reared from *Oncideres* girdles (Hovore, Giesbert) and dead twigs. Adults often found on blossoms of flowering trees.

Taxon summary: known species in Costa Rica: 14; number undescribed, 0.

CLEOMININI

Dihammophora aurovittata Bates
Dihammophora chontalensis Bates
Dihammophora sp. #1
Haenkea thoracica (Chevrolat)
Listroptera aterrima (Germar)

RHOPALOPHORINI

Coremia plumipes (Pallas)
Cosmisoma martyr Thomson
C. militaris Giesbert
C. plumicornis (Drury)
C. titania Bates
C. n. sp. (metallic purple)
Cycnoderus (*Ulododerus*) *barbatus* (Gounelle)
Ischionodonta serripes (Bates)
I. versicolor (Chevrolat)
Ozodes multituberculata Bates
O. xanthophasma Bates
Rhopalophora cupricollis Guerin
R. tenuis (Chevrolat)
R. rubecula Bates

These three tribes are currently being studied taxonomically by Napp, Mermudes, Marquez and graduate students in Brasil, and may prove to be more diverse than presently thought. Costa Rican representation is much less complex than the South American fauna; distributions and biologies are not well-known.

Taxon summary: known species in Costa Rica: 19; number undescribed, 2.

HETEROPSINI

Chrysoprasia belti Bates
C. hypocrita Erichson*
C. hirtula White
C. seticornis Bates
C. sp. (blackish)
Moneecles apollinarii (Gounelle)
Pronuba gracilis Hovore & Giesbert
P. incognita Hovore & Giesbert

Napp & Martins recently reviewed most of these genera, and tribe overall is well-studied taxonomically. Biologies have not been published for any of the species in Costa Rica, however.

Taxon summary: known species in Costa Rica: 8; number undescribed, 1.

PLATYARTHRIINI

Platyarthron chilense Thomson
P. laterale Bates
P. semivittatum Bates
P. sp. indet.

This tribe is not well-known taxonomically, and species names as applied are all somewhat tentative. Could be a good, compact thesis project at level of entire fauna in Mexico and Central America. Biologies unknown, but adults often sit on the stems of living plants, particularly Solanaceae.

Taxon summary: known species in Costa Rica: 4; number undescribed, 1?

PTEROPLATINI

Corynellus cinnabarinus Chemsak & Linsley
Deltosoma flavidum Aurivillius
N. genus, n. sp.

Small tribe in Costa Rica, only new taxon in manuscript in progress; biologies for Central American taxa not known.

Taxon summary: known species in Costa Rica: 3; number undescribed, 0.

TORNEUTINI

Chlorida cincta Guerin
C. festiva (Linn.)
Coccoderus sp. (amazonicus Bates?)
Gigantotrichoderes conicicollis Tippmann
G. flabellicornis (Zajciw)
Gnaphalodes trachyderoides Thomson
Thaumasus gigas (Olivier)
Xenambyx lansbergei (Thomson)

This tribe may be polyphyletic as presently constituted, and studies are underway in South America at the tribal level; Taxonomy of Costa Rican species is marginal: *Coccoderus* species may be new, *Gigantotrichoderes* may hold another species, *Thaumasus* may be male of *Xenambyx*.

Taxon summary: known species in Costa Rica: 8; number undescribed, 2?

TRACHYDERINI

Amphionthe caudalis Schwarzer
Ancylocera macrotela Bates*
Ancylosternus m. morio (Fabricius)
Axestoleus meridionalis (Bates)
Ceragenia insulana Fisher
Ceralocyna sp.?
Callona rutilans Bates *
Callona n. sp.
Crioprosopus amoenus Jordan*
Elytroleptus grandis Linsley
Galissus cyanopterus Dupont
G. n. sp
G. n. sp.
Gortonia linsleyi Hovore
Metaleptus angulatus (Chevrolat)
Oxymerus aculeatus lebasi Dupont

Parevander nobilis (Bates)
P. unicolor (Bates)
Sphaenothecus facetus Chemsak & Noguera
S. toledoii Chemsak & Noguera
Stenobatyle eburata (Chevrolat)
Trachyderes (T.) e. elegans
Trachyderes (T.) elegans blandus Dupont
T. (T.) hilaris Bates
T. (T.) s. succincta (Linnaeus)
T. steinhauseni (Huedepohl)
Zenochloris sp.
Zenochloris n. sp.
new genus, new species, nr Trachyderes

Polyphyletic tribe as presently constituted; there are several new taxa at hand (in manuscript), others are only tentatively determined. *Zenochloris* in particular may hold several new species in Costa Rica.

Taxon summary: known species in Costa Rica: 29; number undescribed, 7.

LISSONOTINI

Lissonotus flavocinctus multifasciatus Dupont
Phoenidnus n.sp.?

MEGADERINI

Megaderus stigma (Linnaeus)

These two tribes seem pretty simple in Costa Rica, although identity of material tentatively considered as a new *Phoenidnus* needs to be resolved.

Taxon summary: known species in Costa Rica: 3; number undescribed, 1.

LEPTURINAE

LEPTURINI

Chontalia cyanicolor Bates
Choriolaus gracilis (Chemsak & Linsley)
Cyphonotida rostrata Bates
Euryptera albosterna Chemsak & Linsley
Leptochoriolaus opacus Chemsak & Linsley
Lycidocerus sanguineus Chemsak & Linsley
Lycomorphoides simulans Linsley
Megachoriolaus lineatocollis Chemsak & Linsley
M. patricia (Bates)
Mimiptera fulvella (Bates)
Pseudotypocerus ater (Chemsak & Linsley)
P. inflaticollis Chemsak & Linsley*
Strangalia annae (Chemsak & Linsley)
S. belti (Bates)
S. cantharidis (Chemsak & Linsley)
S. elegans Giesbert
S. emaciata (Bates)
S. guindoni Giesbert
S. hovorei Giesbert
S. instabilis Giesbert
S. opleri Chemsak & Linsley

S. picticornis (Bates)
S. pseudocantharidis Giesbert
S. saltator (Bates)*
Strangalia spp. indet. (3 – 5)
Strangalidium chemsaki Giesbert
S. nigellum (Bates)
S. kunaianum Giesbert

This tribe has received considerable attention in recent years (not all new changes and/or names are included herein), but more new taxa are at hand, and the entire group needs review for Costa Rica and/or Central America. Biologies unknown for most taxa.

Taxon summary: known species in Costa Rica: 32; number undescribed, 5+.

LAMIINAE

MONOCHAMINI

Deliathus nivea detersa Bates
D. quadritaeniator (White)
Neoptychodes candidus (Bates)
N. cretatus (Bates)
N. hondurae (White)
N. trilineatus (L.)
Plagiohammus albatus (Bates)
P. elatus (Bates)
P. emanon Dillon & Dillon
P. pollinosus (Bates)
P. rubefactus (Bates)*
P. spinipennis (Thomson)
P. strandi Breuning
P. thiodes (Bates)*
Ptychodes politus lecontei Serville
Taeniotes inquinatus (Thomson)
T. preclarus Bates
T. scalaris (Fabr.)
T. xanthostictus Bates

Relatively well-known group taxonomically in Central America, less so in Ecuador; no obvious new species at hand, although some names may be incorrectly assigned. Biologies not known for most species.

Taxon summary: known species in Costa Rica: 19; number undescribed, 0.

TAPEININI

Tapeina costaricensis Breuning
T. transversifrons centralis Marinoni

Compact group taxonomically; biologies not studied for Costa Rican species.

Taxon summary: known species in Costa Rica: 2; number undescribed, 0.

ADETINI

Adetus analis (Haldeman)*
A. bacillarius Bates
A. consors Bates
A. costicollis Bates
A. denticauda Bates
A. excultus Bates

A. fasciatus Franz
A. furculicauda (Bates)
A. griseicauda (Bates)
A. leucostigma Bates
A. muticus (Thomson) [=*analis* auct.]
A. nitens Bates*
A. pictoides Breuning
A. pictus Bates
A. pulchellus (Thomson)
A. salvadorensis Franz*
A. subellipticus Bates
A. n. sp., nr *longicauda*

A review of this genus would be very useful, as existing taxonomic treatment by Breuning is practically useless. Some of the names are applied without confidence. Most taxa breed in vines and lianas, but genus is biologically heterogeneous, a situation which may reflect polyphyly.

Taxon summary: known species in Costa Rica: 18; number undescribed, 1.

APOMECCYNINI

Acestrilla minima Bates
Amphicnaeia apicalis Melzer
A. brevivittis Bates
A. crustulata Bates
A. lepida Melzer
A. quinquevittata Bates
A. sexnotata Melzer
A. strandi Breuning
Amphicnaeia n. sp.
Asyngenes (*Neosyngenes*) *venezuelensis* Breuning
Bebilis acuta *geometrica* Bates
B. divaricata Fisher
B. longipennis Bates*
B. mexicana Bates*
Bisaltes sp.
B. sp. #2
Dorcasta dasycera (Erichson)
Ischioloncha lineata Bates
Ischioloncha [?] sp.
Orteguaza lichenigera Lane*
Phrynidius echinus Bates
Ptericoptus panamensis Bates*
Rosalba approximata Melzer
R. costaricensis Melzer
R. obliqua (Bates)
Sarillus pygmaeus Bates
PTEROPLIINI
Ataxia fulvifrons (Bates)
A. lineata (Fabricius)
A. niveisparsa Bates
Epectasis juncea (Newman)*
Esthlogena porosa Bates
Esthlogena n. sp.

DESMIPHORINI

Desmiphora aegrota Bates
D. canescens Bates
D. cirrosa Erichson
D. fasciculata (Olivier)
D. hirticollis (Olivier)
D. mulsa Giesbert
Paradesmiphora farinosa (Bates)
Pogonillus subfasciatus Bates or near

APODASYINI

Atelodesmis piperita Bates
Atelodesmis n. sp.
Atimiola guttulata Bates
Eupogonius apicicornis Bates
E. cryptus Hovore
E. flavocinctus Bates
E. infimus Thomson
E. longipilis Bates*
E. major Bates
E. pubicollis Melzer
E. scutellaris Bates
E. strandi Breuning
E. subtessellatus Melzer
E. vittipennis Bates
Eupogonius n.sp. #1, nr major
Eupogonius n.sp. #2, nr major
Eupogonius n.sp. #3, nr vittipennis
Parestola zapotensis Bates

ESTOLINI

Blabia costaricensis Breuning
Cicatrissetoloides costaricensis Br. & Heyrovsky
Estola ignobilis Bates
E. misella Bates
E. strandiella Breuning
E. vittulata Bates
Estola sp. nr misella
Estola sp. nr ignobilis
Estoloides (E.) fulvitaris (Bates)
E. (E.) longicornis Breuning
E. (E.) perforata (Bates)*
E. (E.) strandiella Breuning*
E. (E.) turrialbae Breuning
E. (Parestoloides) costaricensis Breuning*
E. (P.) esthlogenoides Breuning*
E. (P.) parva Breuning*
Periestola strandi Breuning
Pseudestoloides costaricensis Br. & Heyrovsky

The preceding four tribes are very messy taxonomically, thanks to Breuning. Many new species no doubt lurk within existing names assigned by that author, and no doubt many synonymies are needed as well. Breuning types are scattered, and usually unidentifiable to species due to their terrible condition and/or indecipherable labels. Many excellent thesis projects lie within these tribes. Genera in particular need of review, and probably workable, include *Amphicnaeia*, *Bisaltes*, *Esthlogena*, *Eupogonius*, *Estola* and

Estoloides. New taxa are at hand in collections in all these genera, and the larval biologies are largely unknown.

Taxon summary: known species in Costa Rica: 77; number undescribed, 12+.

POGONOCHERINI

Ecyrus albifrons Chemsak & Linsley

E. arcuatus Gahan*

Lypsimena fuscata Haldeman

L. tomentosa Chemsak & Linsley*

Poliaenus n. sp.

N. genus, n. sp

COMPSOSOMATINI

Aerenea impetiginosa Thomson

Aerenea n. sp.

Tessarecphora arachnoides centralis Marinoni

Both tribes relatively compact within the fauna, but new taxa are at hand in both. Issues in pogonocherines will be resolved in upcoming manuscripts.

Taxon summary: known species in Costa Rica: 9; number undescribed, 3.

ONCIDERINI

Cacostola acuticauda Marinoni & Martins

Cacostola sp. #1, nr *volvula* (Fabricius)

Cacostola sp. #2

Cacostola sp. #3

Cacostola sp. #4

Charoides fulvofasciata Dillon & Dillon

C. lycimnia Dillon & Dillon

C. pallida Dillon & Dillon

Cylicasta nysa Dillon & Dillon

Ecthoea quadricornis Olivier

Eudesmus grisescens Serville *

Furona degenera (Bates)

Hesychotypa cedestes Dillon & Dillon

H. turbida Bates*

H. heraldica Bates

Hypsioma (?) n. sp.

Ischiocentra monteverdensis Giesbert

I. stockwelli Giesbert

Jamesia ericksoni Hovore

J. multivittata Bates

J. papulenta Thomson

Lochmaeocles batesi Aurivillius

L. consobrinus Dillon & Dillon

L. sparsus Bates

L. t. tessellatus (Thomson)

L. tessellatus costaricae Chemsak

Oncideres a. albomarginata Thomson

O. fisheri Dillon & Dillon

O. fulvostillata Bates or near

O. minuta Thomson*

O. pittieri Gahan

O. punctata Dillon & Dillon

O. putator brevifasciatus Dillon & Dillon

O. O. rubra Franz
 O. sp. indet.
 Periergates chiriquiensis Bates*
 Sternycha approximata Dillon & Dillon*
 S. paupera (Bates)*
 Trachysomus surdus Dillon & Dillon*
 Trestonia assulina Bates
 T. confusa Dillon & Dillon
 T. pulcherrima Dillon & Dillon
 T. pyralis Dillon & Dillon
 Tybalmia caeca Bates
 T. funeraria Bates
 Venustus zeteki Dillon & Dillon

Most parts of this tribe are relatively well-studied, but *Cacostola* is a mess. Numerous new species are at hand in collections and no useful key is available. Work needed in *Trestonia* as well. Hovore has new *Hypsioma* in manuscript.

Taxon summary: known species in Costa Rica: 46; number undescribed, 6.

LATICRANIINI

Laticranium mandibulare Lane

AGAPANTHIINI

Amillarus apicalis Thomson
 Helvina howdenorum Hovore & Giesbert
 Hippopsis lemniscata (Fabr.)
 H. tremata Galileo & Martins
 Spalacopsis protensa Pascoe*
 S. sp., variegata Bates or near

ANISOCERINI

Anisocerus palliatus White
 Batesbeltia belti (Bates)
 Parachalastinus championi (Bates)
 P. rubrocinctus Bates
 P. nigrescens Galileo & Martins
 Hoplistocerus gemmatus Bates
 Mauesia n. sp.
 Onychocerus crassus (Voet)
 Taurolema flavocincta Gounelle
 T. nasicornis Schwarzer
 Taurolema n. sp.
 Thryallis leucophaeus White
 T. ocellatus Chemsak & McCarty

POLYRHAPHIDINI

Polyrhaphis angustata Buquet
 P. batesi Hovore & McCarty
 P. belti Hovore & McCarty
 P. paraensis Bates

Preceding four tribes relatively well-known, but some new taxa are at hand, and some synonymy needed in Anisocerini; *Spalacopsis* is very poorly understood taxonomically south of the U.S.

Taxon summary: known species in Costa Rica: 23; number undescribed, 3.

ACROCININI

Acrocinus longimanus (Linn.)

One genus and species in tribe, well-known and well-studied.

Taxon summary: known species in Costa Rica: 1; number undescribed, 0.

ACANTHODERINI

Acanthoderes bivittata White

A. circumflexa Jac. duVal

A. inquinata Bates

A. laevicollis Bates

A. polysticta Bates

Acanthoderes n. sp. #1

Acanthoderes n. sp. #2

Acanthoderes n. sp. #3

Ackakya n. sp.

Amblysaphes striatus Bates

Alphus cavifrons Bates

Dufauxia sp.

Macronemus asperulus White

Myoxinus pictus (Erichson)

Nesozineus bucki (Breuning)*

Oreodera c-album Bates

O. canotogata Bates

O. costaricensis Thomson

O. fasciculosus Thomson

O. fluctuosa Bates

O. g. glauca (Linnaeus)

O. granulifera Bates

O. graphiptera Bates

O. inscripta Bates

O. lezamai Hovore

O. mimetica Lane*

O. purpurascens Bates

O. semialba Bates

O. verrucosa Bates

O. n. sp. #1

Paradiscopus maculatus Schwarzer

P. n. sp.

Pseudaethomerus maximus Tippmann

Pycnomorphus centrolineatus (Bates)

Scleronotus sp. indet.

Steirastoma albiceps Bates

S. brevis (Sulzer) *

S. histrionicum White

S. larva Thomson

S. stellio Pascoe*

S. melanogenys White

S. senex White

Tetrasarus formosus Bates

T. pictulus Bates

Tetrasarus n. sp. #1

Tetrasarus n. sp. #2

Zikanita n. sp.

A large and complex tribe, with most genera relatively poorly defined; Hovore & Chemsak have most of the new species listed herein described in submitted manuscript
Taxon summary: known species in Costa Rica: 47; number undescribed, 11.

ACANTHOCININI

Alcathous polyrhaphoides (White)
Alcidion humeralis (Perty)
Alphinellus sp. nr subcornutus Bates
Amniscites pictipes Bates
Anisopodus affinis Martins
A. costaricensis Lara & Shenefelt
A. dispar Bates
A. hamaticollis Bates
A. hiekei Martins
A. humeralis Bates
A. nigripes Bates
A. scriptipennis Bates
A. strigosus (Erichson)*
A. xylinus Bates*
A. n. sp.#1
A. n. sp.#2
A. n. sp.#3, nr degener Bates
A. n. sp.#4
A. n. sp.#5
A. n. sp.#6 (nr nigripes)
Apteralcidion lapierrei Hovore
A. (?) n. sp.
Atrypanius conspersus (Germar)
A. irrorellus Bates* (= spreta Bates?)
A. punctatellus Bates
A. implexus (Erichson)
Canidia c. cincticornis Thomson
C. c. balteatus Lacordaire
Carpheolus sublineatus Bates
C, sp. nr sublineatus
Carphina arcifera Bates
Cobelura claviger (Bates)
Cobelura n. sp.
Colobeutrypanius ornatus Tippmann
Cosmotoma adjuncta Bates
C. fasciata Fisher
Eleothinus abstrusus Bates
E. pygmaeus Bates
Eleothinus sp. nr abstrusus Bates
Eutrypanus mucoreus (Bates)
Graphisurus eucharis Bates
G. vexillaris Bates
Hexacona armata Bates
Hexacona or near, n. sp.#1
Hexacona or near, n. sp.#2
Hylettus coenobita (Erichson)
H. seniculus (Germar)
Hyperplatys argus Bates
H. pusillus nigrisparsa (Bates)*

Lagocheirus aranaeiformis ypsilon Voet
 L. cristulatus Bates
 L. giesberti Hovore
 L. kathleenae Hovore
 L. plantaris indistinctus Dillon
 L. praecellens Bates
 L. r. rogersi Bates
 L. rosaceus Bates
 L. simplicicornis Bates
 L. tuberculatus v-album Bates
 L. undatus Voet
 Leptostylus angulicollis Bates
 L. cineraceus Bates
 L. cristulatus Bates
 L. decipiens Bates
 L. g. gibbulosus Bates
 L. hilaris Bates
 L. hispidulus Bates
 L. laevicauda chiriquinus Bates
 L. leucopygus Bates
 L. lividus Hovore
 L. macrostigma Bates
 L. metallicus Bates
 L. notaticollis Bates
 L. ochropygus Bates
 L. orbiculus Bates*
 L. petulans Bates
 L. pygialis Bates
 L. phrissominus Bates*
 L. pilulus Bates
 L. retrorsus Bates
 L. spermovoratis Chemsak
 L. subfurcatus Bates
 L. triangulifera Bates
 L. trigonus Bates
 L. viridescens Bates*
 L. viriditinctus Bates
 L. x-griseus Bates
 L. zonatus Bates
 Leptostylus sp.#1 nr albicinctus Bates
 Leptostylus sp.#2
 Leptostylus sp.#3 nr gibbulosus
 Leptostylus sp.#4
 Leptostylus sp.#5
 Leptostylus sp.#6
 Leptostylus sp.#7
 Leptostylus sp.#8
 Leptostylus sp.#9
 Leptostylus sp.#10
 Leptostylus sp.#11
 Leptrichillus minutus Gilmour*
 Lepturgantes pacifica Gilmour
 Lepturges charicles Bates
 L. festivus Bates

L. figuratus Pascoe*
L. infilatus Bates*
L. laeteguttata Bates*
L. limpida Bates*
L. navicularis Bates
L. proxima Melzer
L. sejunctimacula Bates*
L. sexvittata Bates
L. n. sp.#1
L. n. sp.#2
L. n. sp.#3
Lepturges (Chaeturges) inscripta Bates*
Lithargyrus melzeri Martins & Monne
Lophopoeum humerosum (Monne & Martins)
L. saronotum (Bates)
Mecotetartus antennatus Bates
Nealcidion adjunctum (Thomson)
N. brachiale (Bates)
N. lineatum (Bates)
N. p. privatum (Pascoe)
N. scutellatum (Bates)
Nealcidion sp. #1
Nealcidion sp. #2
Nealcidion sp. #3
Neoeutrypanus decorus (Bates)
N. mutilatus (Germar)
Nyssodectes longula (Bates)
N. roseicollis (Bates)
Nyssodectes sp. nov.
Nyssodrycina binocolata (Bates)
Nyssodrycina corticalis (Bates)
N. haldemani (Bates)
N. leucopyga (Bates)
N. infima (Bates)
N. scutellata (Bates)
N. sp. nr polypspila (Bates)
N. n. sp.#1
N. n. sp.#2
Nyssodrysternum ocellatum (Bates)
N. poriferum (Bates)
N. serpentinum (Erichson)
N. sulphurescens (Bates)[=Stenolis]
N. univittis (Bates)
N. vigintiguttatum (Bates)
N. n. sp.
Oedopeza guttigera Bates
O. pogonocheroides Serville
O. setiger Bates
Olenosus serrimanus Bates
Onalcidion fibrosum Martins & Monne
O. pictulum (White)*
Onalcidion n.sp.
Ozineus arietinus Bates
O. cribripennis Bates

O. elongatus Bates
O. dorsalis Melzer
O. moestus Bates
O. sp. indet.#1
O. sp. indet. #2
O. n.sp.
Paracobelura curiosa Monne & Martins
Paracobelura n. sp.?
Paranisopodus heterotarsus Monne & Martins*
Paranisopodus sp.
*Pattalinus sp.**
Pentheochaetes apicalis Melzer
P. turbidus Melzer
Phrissolaus inspersus Bates
Proxatrypanius rockefelleri Gilmour
*Sporetus sp.**
Stenolis c. calligramma (Bates)
S. calligramma consobrina Melzer
S. circumscripta (Bates)
S. decemguttata (Bates)
S. inclusa (Bates)
S. laetifica (Bates)
S. polygramma (Bates)
S. polytaenia (Bates)
S. pulverea (Bates)
S. theobromae (Lara & Shenefelt)
Stenolis sp. #1
Stenolis sp. #2
Sympagus laetabilis (Bates)
Tithonus acutispinis (Bates)
T. barbiscapus (Bates)
Trichotithonus curvatus (Bates)
T. hispidus (Bates)
T. tenebrosus Monné
Trypanidius mexicanus Thomson
T. notatus (Fabricius)
T. rubripes Bates
Urgleptes charilla (Bates)
U. elinaeae Gilmour* (=fasciata Bates?)
U. euprepes (Bates)
U. histrionella (Bates)
U. laticollis (Bates)
U. laticollis Gilmour
U. literata (Bates)
U. mixta (Bates)
U. multinotata (Bates)*
U. ornatissima (Bates)
U. pareuprepes Gilmour
U. penrosei Hovore [ms name]
U. physodera (Bates)
U. pluristrigosa (Bates)
U. ruficollis (Bates)
U. trivittata (Bates)
U. tumidicollis (Bates)

U. unilineata (Bates)
Urgleptes sp. nr tumidicollis
Urgleptes sp. nr laticollis
Urgleptes sp. nr tumidicollis
Urgleptes sp. nr fasciata
Xenocona pulchra Gilmour
N. genus, n. sp., near Hexacona
N. genus, n. sp., near Xenostylus

A huge, complex, but relatively homogenous tribe, with many new genera and species at hand in collections. South American components even richer, probably in excess of 1,500 new species. Many good thesis projects lie within. Hovore has a number of new taxa in manuscript, but many more remain to be determined or described. Biology not published for most species, but typically they are subcortical borers.

Taxon summary: known species in Costa Rica: 218; number undescribed: 50+.

CYRTININI

Cyrtinus sp. indet #1
C. sp. indet. #2
C. sp. indet. #3
Omosarotes n. sp.
N. g., n. sp. [may be Scopadus]

A very small tribe at present, but at least several new taxa are at hand in collections. Most of the new taxa are presently in manuscripts in progress.

Taxon summary: known species in Costa Rica: 5; number undescribed: 3?

COLOBOTHEINI

Carneades hemileuca Bates
C. superba Bates
Carneades n. sp.
Carterica pygmaea Bates
C. n. sp. #1
C. n. sp. #2
C. n. sp. #3
C. n. sp. #4
Colobothia aleata Bates
C. bitincta Bates
C. chemsaki Giesbert
C. chontalensis Bates
C. dispersa Bates
C. distincta Pascoe
C. pleuralis Casey
C. rincona Giesbert
C. unilineata Bates
C. n. sp.
Colobothina perplexa Hovore
N. gen. n. sp.
Priscilla hypsiomoides Thomson
Sangaris geometrica Bates
S. giesberti Hovore
S. lezamai Hovore
S. multimaculata Hovore
Sympleurotis sp., near armatus

Difficult tribe to define absolutely against the breadth of the preceding tribe, but relatively compact overall; new taxa described by Hovore in *Sangaris*, and other new taxa presently in manuscript. *Colobothea* reviewed by Giesbert some years ago, but needs update for Central America, as several new taxa are at hand.

Taxon summary: known species in Costa Rica: 26; number undescribed: 8.

PHYTOECINI

Mecas (*Dylobolus*) *rotundicollis* (Thomson)

The only known species in Costa Rica is widespread and relatively well studied.

Taxon summary: known species in Costa Rica: 1; number undescribed: 0.

TETRAOPINI

Phaea auricapilla vittulata Melzer

P. copei Chemsak

P. elegantula Melzer

P. flavovittata Bates

P. giesberti Chemsak

P. hatsueae Chemsak

P. hovorei Chemsak

P. janzeni Chemsak

P. kellyae Chemsak

P. lateralis Bates*

P. lawi Chemsak

P. miniata Pascoe

P. mirabilis Bates

P. nevermanni Melzer*

P. phthisica Bates*

P. rosea Bates

P. rubella Bates

P. schildi Melzer

P. scuticollis Bates

P. sherylae Chemsak

P. signaticornis Melzer

Tetraopes comes Bates

T. paracomis Chemsak

Both genera recently revised, but both are relatively complex, and new taxa undoubtedly will be collected as new areas are better explored entomologically.

Taxon summary: known species in Costa Rica: 23; number undescribed: 0.

HEMILOPHINI

A. fraudatrix Bates

A. ventralis Gahan*

Adesmus n. sp.#1

Adesmus n. sp.#2

Adesmus n. sp.#3

Adesmus n. sp.#4 nr *princeps* Bates

Adesmus n. sp.#6

Cephalodina crassiceps Bates

Cephalodina capito Bates

Cirrhicera championi Bates

C. cinereola Bates

C. cristipennis Bates
C. panamensis Bates
C. sallaei Thomson
Erana dispar Bates*
E. fulveola Bates
E. leuconoe Bates
Essostruthella nevermanni Lane
Hilaroleopsis sp., nr *pluricostatus* Bates
Icimauna angaba Martins & Galileo
I. aysa Martins & Galileo
Isomerida cinctiventris Bates
I. lineata Bates
Itumbiara subdilitata Bates*
I. picticornis (Bates)
Juninia beckeri Martins & Galileo
Lycidola sp. nr *belti* Bates
L. expansa Bates
Oedudes bifasciatus Bates
O. druryi Thomson
O. notaticollis Lane
Oedudes sp. indet, nr *bifasciatus*
Phoebe albaria Bates
P. luteola Bates
P. mexicana Bates
Tetamauara eximia (Bates)
Tyrinthia lycinella Bates*
T. xanthe Bates*
Woytkowskia gruberi Martins & Galileo

Extraordinarily complex and evolutionary derived tribe; generic concepts being explored by Brazilian authors Martins and Galileo, but Costa Rican material generally not well-represented in studies. Many new taxa at hand in collections, and fogging surveys undoubtedly will reveal more. Known biologies include twig girdling, similar to *Oncideres*.

Taxon summary: known species in Costa Rica: 39; number undescribed: 9.

AERENICINI

Aerenicopsis championi Bates*
A. costaricensis (Breuning)
A. n. sp.
Antodice cretata Bates
A. nympa Bates
Eulachnesia smaragdina Bates
Holoaerenica apleta Martins
Montesia fasciolata Galileo & Martins
Recchia hirsuta Bates
n. genus?, *n. sp.* (cantharid mimetic)

Like preceding tribe, this group is highly derived and complicated taxonomically. Recent revision of tribe clarified most issues, but additional new taxa are at hand from Central America.

Taxon summary: known species in Costa Rica: 10; number undescribed: 2.

CALLIINI

Asemolea n. sp.

A. minuta (Bates)
Callia fulvocincta Bates
C. n. sp. nr chrysomelina Bates
Callityrinthia mimetica Galileo & Martins
N. gen. n. sp.
Cymatonycha castanea Bates or n.sp.
Drycothaea cribrata Bates*
D. stictica Bates*
Drycothaea sp. nr sallaei Thomson
Harringtonia d'almeidai Dillon & Dillon
Mimolaia calopteron (Bates)
FALSAMBLESTHIINI
Bactriola paupercula Bates
B. vittulata Bates

These two tribes are difficult to work with at present. Callini recently reviewed by Galileo, but *Drycothaea* needs further study north of Panama.

Taxon summary: known species in Costa Rica: 14; number undescribed: 4?

DISTENIINAE

DISTENIINI

Distenia cribristernis Bates
D. geniculata Bates
D. limbata Bates
D. phaeocera Bates
D. pilatei Chevrolat
D. rugiscapis Bates*
D. n. sp.
D. simplex Bates
D. spinipennis Fisher
D. spinosa Bates [=striatiscapis?]
D. striatiscapis Villiers
D. trifasciata Bates
Distenia sp. #1
Distenia sp. #2
Distenia sp. #3
Distenia sp. #4
Paracometes emarginata (Fisher)
P. pulcherimma (Bates)
P. hilaris Bates
P. sp. indet

Numerous new species in both genera in Mexico and Central America. Presently no-one working in subfamily overall, but some new taxa in manuscript by Hovore.

Taxon summary: known species in Costa Rica: 20; number undescribed: 6.

Summary

The Costa Rican Cerambycidae fauna currently encompasses no fewer than 943 species, of which 170 (18%) are thought to be undescribed. The actual number of undescribed taxa is somewhat higher than this figure, however, as most of the material not included in this analysis falls into that category. INBio taxonomy partners Hovore, Chemsak and Giesbert* have described 103 of the total species presently named (or in

active manuscript), 11% of the described fauna, and an additional 30 – 40 new species are in early manuscript preparation at this time by Hovore and/or Chemsak (some with additional co-authors). It is anticipated that all manuscript names presently in progress will be finalized within 3 years. The probable total for the country will exceed 1,000 species.

* deceased