

Neotropical Tree Species and Their Faunas of Xylophagous Longicorns (Coleoptera: Cerambycidae) in French Guiana

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I. Abstract	304
II. Introduction.....	304
III. Methods and Materials.....	306

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A. Sinnamary River Basin Study Site	306
B. Rearing Experiments	306
C. Additional Data	346
IV. Results and Discussion	346
A. Classification of Host Specificity	346
B. Beetle Guilds of Abundantly Represented Plant Taxa	348
1. Moraceae	348
2. Malvales	348
3. Lecythidaceae	351
4. Sapotaceae	351
5. Fabales	352
6. Apocynaceae	353
7. Latex-Producing Plants	353
V. Conclusions	353
VI. Acknowledgments	354
VII. Literature Cited	354

I. Abstract

Estimates of the total number of species in existence are based, in part, upon assumptions about the host specificity of tropical insects. These estimates are difficult to evaluate because there is so little data available describing the host-plant affiliations of tropical insects. Over a three-year period, 690 trees in the Sinnamary River Basin of French Guiana were felled and investigated for their associated cerambycid fauna. These trees (belonging to approximately 200 species representing 38 plant families) ultimately gave rise to 334 species of cerambycids. One-quarter of these beetle species had not yet been described, and hundreds of previously unknown host-plant associations were documented. These data are presented in a table which also includes the results of additional rearing experiments in French Guiana, as well as selected literature references. Organized by host-tree family, the table facilitates the circumscription of beetle guilds occurring on related hosts. Abundantly represented plant families typically gave rise to faunas including numerous taxonomically unrelated beetles. The beetle guilds associated with different plant families had very different ratios of specialist:generalist species. The majority of the specialists successfully reproduced in related tree species belonging to a particular plant family; only a few cerambycid species appear to depend exclusively on a single host. These data contribute to an understanding of host specificity and host fidelity in tropical insects.

II. Introduction

Tropical rain forests are the repository for much of the Earth's biological diversity. Although a mere 7% of the land surface supports tropical rain forests (Wilson, 1988), they are home to a disproportionate number of the world's plant and animal species. Projections have been made that, given current rates of tropical deforestation, most of these forests will have been either cleared or significantly degraded by 2135 A D. It is thus presumed that we are in the midst of a mass extinction event unparalleled within the last 65 million years (Wilson, 1988). The magnitude of this event cannot be described without a clear understanding of the rate of habitat loss, which has been the subject of varying estimates (Lugo, 1988), and the relationship between geographic area and the number of species that can be supported (Wilson,

1988). Other poorly understood variables include the relative species richness of different types of tropical forest (Lugo, 1988) and the distribution ranges of tropical forest species (Wilson, 1988), the majority of which are insects.

Even should data permit the calculation of credible extinction rates (see Lugo, 1988, for a summary), it would be difficult to generate reliable figures predicting how many species might be lost, because we lack baseline documentation of many species that currently exist. Current high-end estimates of the potential number of extant species (30–50 million) were formulated on the basis of the results of experiments in which insecticides were used to knock insects down from the canopies of tropical trees (Erwin, 1982, 1988). These estimates have engendered great controversy, in part due to the assumption that many tropical arthropods are dependent on a single host plant for survival (Erwin, 1982). Subsequent studies have compared the insect faunas of conspecific trees with those of unrelated tree species and have suggested that Erwin may have overestimated the host fidelity of tropical insects (Kitching et al., 1997; Mawdsley & Stork, 1997). These studies, also based on canopy-fogging experiments, do not adequately sample concealed feeders such as leaf-miners and bark- or wood-borers. In addition, due to the chaotic profusion of arthropod species and individuals harvested after the release of insecticides, very few trees can actually be sampled. The state of knowledge regarding the host specificity of tropical insects is still rudimentary at best.

This paper presents the results of an extended study of cerambycid beetles and their associated host plants in French Guiana, undertaken by the first author. French Guiana is part of the Guayana floristic province in northeastern South America (Mori, 1991), a species-rich region with between 7000 and 10,000 angiosperms (Lindeman & Mori, 1989). Although numerous forest types are represented, including mangrove, marsh, swamp, and montane forest, much of French Guiana is covered with intact, and relatively well-investigated, seasonal evergreen forest (Granville, 1986).

Cerambycids (longicorns, long-horned beetles, timber beetles) play an important role in the recycling of nutrients in the forest. The females of most species oviposit their eggs into freshly killed or damaged wood with persistent bark that protects the immature stages of the beetles (Linsley, 1959, 1961). After about a week, the eggs hatch into larvae which, feeding on the wood, gain weight and pass through five or six larval instars (Hequet & Tavakilian, 1996). As they feed, the larvae create systems of tunnels and galleries throughout the wood, which may then be colonized by other animals or microorganisms. The larvae eventually excavate pupal chambers underneath the bark. After metamorphosis, the adult beetles chew exit holes through the bark of the host and commence the search for mates and appropriate host plants. The feeding habits of the rather short-lived adult longicorns can be quite variable. They may feed on numerous plant parts (Linsley, 1959, 1961) not necessarily belonging to the host plant in which the larvae developed. Therefore, when we discuss the host specificity of longicorns, we refer to reproductive-host specificity.

Cerambycidae is one of the largest insect families and is particularly diverse in the tropics. As recently as 1983, only 330 cerambycid species had been recorded in French Guiana, but well over 1400 species have now been documented, including 600 that are currently being described (Hequet & Tavakilian, 1996; Tavakilian, in prep.). Although metropolitan France occupies an area more than five times as large as French Guiana, French Guiana supports 10 times as many tree species. France has a predictably diminished cerambycid fauna of only 235 species (Tavakilian, 1993), and fewer than 1000 species are found in all of the United States and Canada (Arnett, 1988).

The only way to provide incontrovertible documentation of host-plant association is to actually rear an insect from an accurately identified host. More than 1000 host-plant records

have been established for the cerambycids of French Guiana via the arduous process of rearing adult beetles from freshly fallen wood. Host-plant associations for 348 cerambycid species reared from more than 200 tree species are presented in Table I. While the host-plant associations for the 235 cerambycid species found in France were revealed over a period of 200 years (Tavakilian, 1993), most of the data presented here were assembled between 1991 and 1993. During this time, a massive study was conducted to document the biodiversity of an area of the Sinnamary River Basin subsequently inundated by a reservoir formed behind the Petit Saut Dam. Table I also incorporates the results from additional rearing experiments in French Guiana, as well as selected literature references. We propose a quantitative system to designate the reproductive-host specificity of cerambycid species reared, and discuss patterns of host utilization by beetle guilds associated with well-represented plant taxa.

III. Materials and Methods

A. SINNAMARY RIVER BASIN STUDY SITE

Most of the beetle-plant interactions reported on here were obtained from trees felled on the Sinnamary River in an area now inundated by the reservoir formed after the closure of the Petit Saut Dam.

The Sinnamary River Basin, covering 6000 km², is located in north central French Guiana. Because the Sinnamary Basin encompasses little relief and does not include savannas, the species richness of the basin is not as great as it is in areas of comparable size in other parts of French Guiana (Hoff, 1994). Variation in forest vegetation in the Sinnamary Basin is dictated by soil moisture, ranging from swamp forests dominated by *Euterpe oleracea* Martius at some places along rivers and streams to mixed forest on well-drained soil. The mixed forest does not differ fundamentally in structure and composition from this type of forest in other parts of French Guiana (Hoff, 1994, 1996).

Annual rainfall is usually less than 3000 mm. However, some areas may receive as little as 2000 mm and others as much as 3600 mm. There are two dry seasons each year, a long one from July to November and a short one in February and March. Winds are light throughout the year (Hoff, 1994).

Trees were felled at two localities in close proximity to one another. One study was located at the mouth of Crique Plomb and the other was situated between Crique Plomb and Crique Tigre at about 500 meters above Saut Tigre. The former site was subject to periodic inundation, whereas the latter site was situated at roughly 80 meters above the river and was not subject to inundation before the closure of the dam.

B. REARING EXPERIMENTS

Between 1991 and 1993, 690 trees and lianas were felled (a complete list of these can be made available upon request). The cuts were made during different parts of the dry season (July–November), when the adults of most cerambycid species are active. The plants belonged to 38 plant families. Abundant plant taxa included Moraceae, Malvales, Lecythidaceae, Sapotaceae, Fabales, and Apocynaceae. Although these taxa were represented by numerous samples, the selection of individuals was not random. Rare tree species and lianas were favored because it was anticipated that they might give rise to poorly known cerambycid species.

(Text continues on p. 346)

Table I
Neotropical tree species and their cerambycid faunas in French Guiana

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
Subclass Magnoliidae Order Magnoliales ANNONACEAE <i>Anaxagorea dolichocarpa</i> Sprague & Sandwith / M23664	<i>Igualda posticalis</i> Thomson, 1868	ISD	Calliini
<i>Annona ambotay</i> Aublet / M23585	<i>Alphus semilis</i> Bates, 1862	S/GEN	Acanthoderini
<i>A. muricata</i> Linnaeus f. / *Marie-Francoise PREVOST det. ⁺	<i>Alphus semilis</i> Bates, 1862	S/GEN	Acanthoderini
<i>Guatteria schomburgkiana</i> Martius / L1705	<i>Mecometopus triangularis</i> (Castelnau & Gory, 1836)	G	Clytini
<i>Oxandra asbeckii</i> (Pulle) R.E. Fries / L1734, L1761, M23388, M23573	<i>Hexoplax carissimum</i> (White, 1855) (L1761) <i>Odontocera trisignata</i> Gounelle, 1911 (L1734, M23388, M23573) <i>Ommata</i> sp. 1400 (M23388, M23573) <i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) (L1734) <i>Macronemus antennator</i> (Fabricius, 1801) (M23388, M23573)	ISD S/SP S/SP G G	Ibidionini Rhinotragini Rhinotragini Clytini Acanthoderini
<i>Xylopia pulcherrima</i> Sandwith / L1372, L1817	<i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) (L1372) <i>Eupromerella clavator</i> (Fabricius, 1801) (L1372) <i>Oedozepe</i> sp. 1327 (L1817)	G ISD G	Clytini Acanthoderini Acanthocinini
<i>X. sericea</i> Saint-Hilaire / *F2313	<i>Opades costipennis</i> (Buquet, 1844) <i>Colobothea hirtipes</i> (Degeer, 1775)	G G	Eburini Colobotheini
MYRISTICACEAE <i>Iryanthera sagotiana</i> (Bentham) Warburg / *CTFT 1147	<i>Xenocrasis politipennis</i> (Zajciw, 1971)	ISD	Rhinotragini
<i>Virola micheli</i> Heckel / M23558	<i>Brasilius plicatus</i> (Olivier, 1790) <i>Macropophora trochlearis</i> (Linnaeus, 1758)	G G	Cerambycini Acrocinini
<i>V. sebifera</i> Aublet / L1586, L1594	<i>Jamesia globifera</i> (Fabricius, 1801) (L1586) <i>Macropophora trochlearis</i> (Linnaeus, 1758) (L1594)	G G	Onciderini Acrocinini

TABLE I contd

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>V. surinamensis</i> (Rolander) Warburg / L1602	<i>Sympetrasmus thoracicus</i> (White, 1855)	G	Acanthoderini
	<i>Leptostylus plautus</i> Monné & Hoffmann, 1981	G	Acanthocinini
	<i>Nyssodrysternum signiferum</i> (Bates, 1864)	G	Acanthocinini
	<i>Toronaeus perforator</i> Bates, 1864	G	Acanthocinini
<i>Virola</i> sp. / M23507	<i>Brasilianus plicatus</i> (Olivier, 1790)	G	Cerambycini
Order Laurales LAURACEAE			
<i>Amba parviflora</i> (Meissner) Mez / S&P2130	<i>Phygopoda</i> sp. 1236	S/FAM	Rhinotragini
<i>Licaria canella</i> (Meissner) Kostermans / M23587	<i>Anoplomerus globulicollis</i> Buquet, 1860	S/FAM	Hesperophanini
<i>L. martiniana</i> (Mez) Kostermans / M23391, M23568	<i>Anoplomerus globulicollis</i> Buquet, 1860 (M23391)	S/FAM	Hesperophanini
	<i>Phygopoda</i> sp. 1236 (M23568)	S/FAM	Rhinotragini
<i>L. rigida</i> (Kostermans) Kostermans / L1720	<i>Ochrus</i> sp. 1346	S/FAM	Achrysonini
	<i>Phygopoda</i> sp. 1236	S/FAM	Rhinotragini
<i>Mezilaurus itauba</i> (Meissner) Taubert ex Mez / *L1243	<i>Ommata</i> sp. 1340	ISD	Rhinotragini
<i>Ocotea argyrophylla</i> Ducke / L1357, S&P2147	<i>Anoplomerus globulicollis</i> Buquet, 1860	S/FAM	Hesperophanini
<i>O. guianensis</i> Aublet / *F1505	<i>Anoplomerus globulicollis</i> Buquet, 1860	S/FAM	Hesperophanini
	<i>Heterachthes tysiophis</i> (Thomson, 1867)	ISD	Ibidionini
	<i>Cosmisoma speculiferum</i> (Gory, 1831)	ISD	Rhopalophorini
	<i>Lepturgantes seriatus</i> Monné, 1988	ISD	Acanthocinini
<i>O. rubra</i> Mez / L1683, L1767	<i>Ochrus grammoderus</i> Lacordaire, 1869 (L1767)	ISD	Achrysonini
	<i>Anoplomerus globulicollis</i> Buquet, 1860 (L1683)	S/FAM	Hesperophanini
	<i>Lepturges (Chaeturges)</i> sp. 708 (L1767)	ISD	Acanthocinini
<i>Ocotea</i> sp. / L1307, L1694, L1701, L1840, M23394, M23512, Daniel FOUQUET det.† by wood structure	<i>Parandra punctatissima</i> (Thomson, 1861) (Daniel FOUQUET det.†)	ISD	Parandrini
	<i>Ochrus</i> sp. 1346 (L1694, L1840)	S/FAM	Achrysonini
	<i>Ozodes infuscatus</i> Bates, 1870 (L1307)	G	Necydalopsini
	<i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) (L1701, M23394, M23512)	G	Clytini

TABLE I contd.

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>Ocotea</i> sp. contd	<i>Cosmisoma lineellum</i> Bates, 1870 (L1694) <i>Estola cayennensis</i> Breuning, 1940 (M23512) <i>Colobothea elongata</i> Gahan, 1889 (L1307)	ISD ISD G	Rhopalophorini Desmiphorini Colobotheini
<i>Rhodostemonodaphne grandis</i> (Mez) Rohwer / L1867. *S1473	<i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) (L1867) <i>Paroecus charpentierae</i> Villiers, 1971 (L1867, S1473) <i>Colobothea obconica</i> Aurivillius, 1902 (S1473)	G S/FAM ISD	Clytini Acanthocinini Colobotheini
Subclass Hamamelidae Order Urticales MORACEAE <i>Artocarpus altitlis</i> (S Parkinson) Fosberg / *Jean-Jacques de GRANVILLE det. †	<i>Taeniotes cayennensis</i> Thomson, 1859 <i>T. pulverulentus</i> (Olivier, 1790) <i>Acrocinus longimanus</i> (Linnaeus, 1758) <i>Hylettus coenobita</i> (Erichson, 1847) <i>Atrypanius remissus</i> (Erichson, 1847) <i>Nyssodrysternum cretatum</i> Monné, 1985	S/FAM ISD S/LAT S/LAT ISD ISD	Lamiini Lamiini Acrocinini Acanthocinini Acanthocinini Acanthocinini
<i>Bagassa guianensis</i> Aublet / *Denis LOUBRY det. †, *Yves CARAGLIO det. †, *Christian FEUILLET det. †	<i>Taeniotes cayennensis</i> Thomson, 1859 (Denis LOUBRY det. †) <i>Acrocinus longimanus</i> (Linnaeus, 1758) (Christian FEUILLET det. †) <i>Oreodera bituberculata</i> Bates, 1861 (Yves CARAGLIO det. †) <i>O. glauca</i> (Linnaeus, 1758) (Denis LOUBRY det. †) <i>Atrypanius conspersus</i> (Germar, 1824) (Denis LOUBRY det. †)	S/FAM S/LAT G G S/FAM	Lamiini Acrocinini Acanthoderini Acanthoderini Acanthocinini
<i>Brosimum acutifolium</i> Huber subsp. <i>acutifolium</i> C. C. Berg / S&P2105. C315	<i>Acrocinus longimanus</i> (Linnaeus, 1758) (C315) <i>Alphus malleri</i> Lane, 1955 (S&P2105) <i>Hylettus coenobita</i> (Erichson, 1847) (C315)	S/LAT S/GEN S/LAT	Acrocinini Acanthoderini Acanthocinini
<i>B. guianense</i> (Aublet) Huber / L1346, L1504, L1529, L1730, L1826, L1850, L1882, M23504, M23578	<i>Taeniotes cayennensis</i> Thomson, 1859 (M23578) <i>Macropophora trochlearis</i> (Linnaeus, 1758) (L1346, L1504, L1529, L1850, in Duffy) <i>Alphus malleri</i> Lane, 1955 (L1730, L1826, L1850, L1882, M23504, M23578) <i>Alphus</i> sp. 1366 (L1826) <i>Oreodera bituberculata</i> Bates, 1861 (M23578) <i>Hylettus coenobita</i> (Erichson, 1847) (L1346, M23578)	S/FAM G S/GEN S/GEN G S/LAT	Lamiini Acrocinini Acanthoderini Acanthoderini Acanthoderini Acanthocinini

TABLE I contd

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>B. guianense</i> contd.	<i>Toronaeus magnificus</i> (Tippmann, 1953) (L1504, L1826, L1850, M23578) <i>Nyssodectes</i> sp 275 (L1882) <i>Nyssodrycina pulchella</i> (Bates, 1863) (L1882) <i>Nyssodrysternum caudatum</i> (Bates, 1864) (L1346, L1504, L1730, L1826, L1850, L1882, M23504, M23578) <i>N. flavolineatum</i> Monné, 1985 (M23504) <i>N. propinquum</i> (Bates, 1864) (L1882, M23578) <i>N. rodens</i> (Bates, 1864) (L1882) <i>N. signiferum</i> (Bates, 1864) (L1826) <i>N. simulatum</i> (Bates, 1864) (L1826)	S/GEN ISD S/LAT S/GEN S/GEN G G G S/GEN	Acanthocinini Acanthocinini Acanthocinini Acanthocinini Acanthocinini Acanthocinini Acanthocinini Acanthocinini Acanthocinini
<i>B. parnarioides</i> Ducke / L1800, M15283, *S1487	<i>Cylicasta liturata</i> (Fabricius, 1801) (L1800) <i>Acrocinus longimanus</i> (Linnaeus, 1758) (M15283) <i>Alphus aurivilli</i> Lane, 1970 (S1487) <i>A. malleri</i> Lane, 1955 (S1487) <i>Alphus</i> sp 1366 (L1800) <i>Myoxinus pictus</i> (Erichson, 1847) (S1487) <i>Nyssodrysternum caudatum</i> (Bates, 1864) (S1487) <i>N. propinquum</i> (Bates, 1864) (L1800)	ISD S/LAT S/ORD S/GEN S/GEN ISD S/GEN G	Onciderini Acrocinini Acanthoderini Acanthoderini Acanthoderini Acanthoderini Acanthocinini Acanthocinini
<i>B. rubescens</i> Taubert / L1383, L1731, L1839, M23640. *S1479. *Gérard TAVAKILIAN det ⁻	<i>Orthomegas cinnamomeus</i> (Linnaeus, 1758) (Gérard TAVAKILIAN det ⁻) <i>Mecometopus globicollis</i> (Castelnau & Gory, 1836) (M23640) <i>Taeniotes cayennensis</i> Thomson, 1859 (L1383) <i>Acrocinus longimanus</i> (Linnaeus, 1758) (S1479) <i>Alphus malleri</i> Lane, 1955 (L1731, L1839, M23640, S1479) <i>Hylettus coenobita</i> (Erichson, 1847) (L1731, S1479, M23640) <i>Nyssodrysternum caudatum</i> (Bates, 1864) (L1839) <i>N. flavolineatum</i> Monné, 1985 (M23640) <i>N. propinquum</i> (Bates, 1864) (L1839) <i>N. signiferum</i> (Bates, 1864) (L1839) <i>N. simulatum</i> (Bates, 1864) (L1731, L1839, M23640)	ISD G S/FAM S/LAT S/GEN S/LAT S/GEN S/GEN G G S/GEN	Callipogonini Clytini Lamiini Acrocinini Acanthoderini Acanthocinini Acanthocinini Acanthocinini Acanthocinini Acanthocinini

TABLE I contd

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>B. rubescens</i> contd.	<i>Toronaeus magnificus</i> (Tippmann, 1953) (L1383, L1731, M23640, S1479) <i>Colobothea lineatocollis</i> Bates, 1865 (L1383)	S/GEN G	Acanthocini Colobotheini
<i>B. utile</i> (Kunth) Pittier subsp. <i>ovatifolium</i> (Ducke) C C Berg / M23490	<i>Acrocinus longimanus</i> (Linnaeus, 1758) <i>Macropophora trochlearis</i> (Linnaeus, 1758)	S/LAT G	Acrocinini Acrocinini
<i>Brosimum</i> sp. / *Daniel FOUQUET det. + by wood structure	<i>Oncideres chevrolati</i> Thomson, 1868	ISD	Onciderini
<i>Clarisia ilicifolia</i> (Sprengel) Lanjou & Rossberg / *F1331	<i>Macropophora trochlearis</i> (Linnaeus, 1758) <i>Oreodera bituberculata</i> Bates, 1861	G G	Acrocinini Acanthoderini
<i>Ficus cf. gomelleira</i> Kunth & Bouche / *S1490	<i>Acrocinus longimanus</i> (Linnaeus, 1758)	S/LAT	Acrocinini
<i>F. guianensis</i> Desvoux / F1339, L1339, *S1785	<i>Taenotes cayennensis</i> Thomson, 1859 (L1339) <i>Acrocinus longimanus</i> (Linnaeus, 1758) (F1339) <i>Oreodera glauca</i> (Linnaeus, 1758) (S1785) <i>Hylettus coenobita</i> (Erichson, 1847) (L1339)	S/FAM S/LAT G S/LAT	Lamini Acrocinini Acanthoderini Acanthocini
<i>F. leiophylla</i> C.C Berg / *Christian FEUILLET det. +	<i>Atrypanius conspersus</i> (Germar, 1824) <i>Carphina ligneola</i> (Bates, 1865)	S/FAM ISD	Acanthocini Acanthocini
<i>Ficus</i> sp. / *Daniel SABATIER det. +	<i>Psapharochrus lateralis</i> (Bates, 1861)	G	Acanthoderini
<i>Helicostylis tomentosa</i> (Poepig & Endlicher) Rusby / M23429	<i>Rosalba inscripta</i> (Bates, 1866)	ISD	Apomecynini
<i>Perebea mollis</i> (Poepig & Endlicher) Huber / *S1450	<i>Acrocinus longimanus</i> (Linnaeus, 1758) <i>Hylettus coenobita</i> (Erichson, 1847)	S/LAT S/LAT	Acrocinini Acanthocini
<i>P. mollis</i> Huber subsp. <i>rubra</i> (Trecul) C.C. Berg / M23401	<i>Alphus malleri</i> Lane, 1955 <i>Hylettus coenobita</i> (Erichson, 1847) <i>Nyssodrysternum caudatum</i> (Bates, 1864) <i>N. propinquum</i> (Bates, 1864)	S/GEN S/LAT S/GEN G	Acanthoderini Acanthocini Acanthocini Acanthocini
<i>Trymatococcus oligandrus</i> (R Benoist) Lanjou & M23538	<i>Macronemus antennator</i> (Fabricius, 1801)	G	Acanthoderini

TABLE I contd.

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
CECROPIACEAE <i>Cecropia palmata</i> Willdenow / L1570	<i>Macropophora trochlearis</i> (Linnaeus, 1758) <i>Drycothaea angustifrons</i> (Breuning, 1943) <i>D. brasiliensis</i> (Breuning, 1974)	G S/GEN S/GEN	Acrocinini Calliini Calliini
<i>C. sciadophylla</i> Martius / L1766, Christian FEUILLET det. *	<i>Lepturges complanatus</i> Bates, 1863 (Christian FEUILLET det. *) <i>Callia bicolor</i> (Breuning, 1960) (Christian FEUILLET det. *) <i>Drycothaea ochreoscutellaris</i> (Breuning, 1940) (L1766)	ISD ISD ISD	Acanthocinini Calliini Calliini
<i>Cecropia</i> sp. / *Gérard TAVAKILIAN det. *	<i>Drycothaea angustifrons</i> (Breuning, 1943) <i>D. brasiliensis</i> (Breuning, 1974)	S/GEN S/GEN	Calliini Calliini
<i>Coussapoa latifolia</i> Aublet / L1077, L1340, L1524, M23681	<i>Neoclytus</i> sp. 649 (M23681) <i>Alphus aurivillii</i> Lane, 1970 (L1340, M23681) <i>Anisopodus phalangodes</i> (Erichson, 1847) (L1340, M23681) <i>Nyssodryssina binoculata</i> (Bates, 1864) (L1524) <i>Nyssodrysternum efflictum</i> (Bates, 1864) (M23681) <i>Toronaeus virens</i> Bates, 1864 (M23681) gen. sp. 388 (L1077)	G S/ORD S/FAM S/GEN G G ISD	Clytini Acanthoderini Acanthocinini Acanthocinini Acanthocinini Acanthocinini Colobotheini
<i>Coussapoa</i> sp. / M23682	<i>Nyssodrysternum efflictum</i> (Bates, 1864) <i>Nyssodrysternum propinquum</i> (Bates, 1864) <i>Toronaeus virens</i> Bates, 1864	G G G	Acanthocinini Acanthocinini Acanthocinini
<i>Coussapoa</i> sp. nov. / L1722 (C.C. Berg det.)	<i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) <i>Anisopodus phalangodes</i> (Erichson, 1847) <i>Nyssodryssina binoculata</i> (Bates, 1864) <i>Priscilla hypsiomoides</i> Thomson, 1864 (L1722)	G S/FAM S/GEN ISD	Clytini Acanthocinini Acanthocinini Colobotheini
<i>Pouroyuma melinonii</i> R. Benoist / L1316, L1552	<i>Anisopodus batesi</i> Gilmour, 1965 (L1552) <i>A. phalangodes</i> (Erichson, 1847) (L1316) <i>Colobothea elongata</i> Gahan, 1889 (L1316)	G S/FAM G	Acanthocinini Acanthocinini Colobotheini
<i>P. mollis</i> Trecul subsp. <i>mollis</i> / S&P2122	<i>Anisopodus batesi</i> Gilmour, 1965 <i>Colobothea elongata</i> Gahan, 1889	G G	Acanthocinini Colobotheini
<i>P. bicolor</i> Martius / L1809	<i>Alphus foveatus</i> Marmonni & Martins, 1978 <i>Nyssodrysternum</i> sp. 217	G ISD	Acanthoderini Acanthocinini

TABLE I contd.

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
Subclass Caryophyllidae Order Polygonales POLYGONACEAE <i>Coccoloba ascendens</i> Duss ex Lindau / M23621	<i>Odontocera</i> sp. 873	ISD	Rhinotragini
Subclass Dilleniidae Order Dilleniales DILLENIACEAE <i>Dolichocarpus guianensis</i> (Aublet) Gilg / L1391	<i>Phrynocris notabilis</i> Bates, 1867	S/FAM	Hesperophanini
<i>Dolichocarpus</i> sp. / M23428	<i>Phrynocris notabilis</i> Bates, 1867	S/FAM	Hesperophanini
Order Theales CARYOCARACEAE <i>Caryocar glabrum</i> (Aublet) Persoon / M23383, M23579, F2325	<i>Nyssodrysternum propinquum</i> (Bates, 1864) (M23579) <i>Tropidozineus impensus</i> Monné & Martins, 1976 (F2325, M23383, M23579)	G S/SP	Acanthocinini Acanthocinini
<i>C. microcarpum</i> Ducke / L1515	<i>Oreodera</i> sp 1006 <i>Nealcidion emertum</i> (Erichson, 1847)	G ISD	Acanthoderini Acanthocinini
QUIINACEAE <i>Quina oiapocensis</i> Pires / L1681, L1707	<i>Odontocera</i> sp. 1350 (L1681, L1707) <i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) (L1681)	S/GEN G	Rhinotragini Clytini
<i>Quina</i> sp. L1381	<i>Odontocera</i> sp. 1350	S/GEN	Rhinotragini
CLUSIACEAE <i>Carapa ampla</i> Ducke / *Daniel SABATIER det. ⁺	<i>Oreodera jacquieri</i> Thomson, 1865	S/FAM	Acanthoderini
<i>Clusia densifolia</i> Martius / L1506, Christian FEUILLET det. ⁺	<i>Oreodera jacquieri</i> Thomson, 1865 (Christian FEUILLET det. ⁺) <i>O. roppai</i> Monné & Fragoso, 1988 (L1506) <i>Oedozepe</i> sp. 1327 (L1506)	S/FAM ISD G	Acanthoderini Acanthoderini Acanthocinini
<i>C. grandiflora</i> Spltgerber / L1342, L1827, Marie-Francoise PREVOST det. ⁺ , Daniel SABATIER det. ⁺	<i>Acanthoderes daviesi</i> (Swederus, 1787) (L1827) <i>Oreodera jacquieri</i> Thomson, 1865 (Daniel SABATIER det. ⁺) <i>Atrypanius</i> sp 372 (Marie-Francoise PREVOST det. ⁺)	S/SP S/FAM ISD	Acanthoderini Acanthoderini Acanthocinini

TABLE I contd.

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>C. grandiflora</i> contd.	<i>Lepturges (Chaeturges) dorsalis</i> Tavakilian & Monné, 1989 (nec White, 1855) (L1342) <i>Nyssodrysternum lemniscatum</i> Monné, 1985 (L1342)	ISD S/FAM	Acanthocinini Acanthocinini
<i>C. scrobiculata</i> R. Benoist / Michel HOFF det ⁺	<i>Oreodera bituberculata</i> Bates, 1861 <i>O. jacquieri</i> Thomson, 1865 <i>Anisopodus batesi</i> Gilmour, 1965 <i>Nyssodrysternum lemniscatum</i> Monné, 1985	G S/FAM G S/FAM	Acanthoderini Acanthoderini Acanthocinini Acanthocinini
<i>Clusia</i> sp. / M23649	<i>Oreodera jacquieri</i> Thomson, 1865 <i>Anisopodus batesi</i> Gilmour, 1965	S/FAM G	Acanthoderini Acanthocinini
<i>Moronobea coccinea</i> Aublet / L1719, *S1784, M23636	<i>Heterachthes</i> sp. 929 (L1719) <i>Stenoidion amphigyum</i> Martins, 1970 (M23636) <i>Acanthoderes laportei</i> Aurivillius, 1923 (L1719) <i>Nyssodrysternum lemniscatum</i> Monné, 1985 (S1784) <i>N. signiferum</i> (Bates, 1864) (S1784)	ISD S/FAM S/FAM S/FAM G	Ibidionini Ibidionini Acanthoderini Acanthocinini Acanthocinini
<i>Symphonia globulifera</i> Linnaeus f. / *F1342, L1583, M23553	<i>Brasilianus plicatus</i> (Olivier, 1790) (F1342, L1583, M23553) <i>Stenoidion amphigyum</i> Martins, 1970 (M23553) <i>Jamesia globifera</i> (Fabricius, 1801) (L1583) <i>Macropophora trochlearis</i> (Linnaeus, 1758) (L1583) <i>Oreodera</i> sp. 118 (M23553) <i>Nyssodrysternum lemniscatum</i> Monné, 1985 (F1342) <i>N. propinquum</i> (Bates, 1864) (L1583, M23553)	G S/FAM G G ISD S/FAM G	Cerambycini Ibidionini Onciderini Acrocini Acanthoderini Acanthocinini Acanthocinini
<i>Symphonia</i> sp. / L1699	<i>Acanthoderes laportei</i> Aurivillius, 1923	S/FAM	Acanthoderini
<i>Tovomita chosyana</i> Planchon & Tulasne / M23446	<i>Nyssodrysternum lemniscatum</i> Monné, 1985	S/FAM	Acanthocinini
<i>Tovomita</i> sp. / M23411	<i>Amphicnaeia</i> sp. gen. sp. 1402	ISD ISD	Apomecynini Acanthocinini
Order Malvales ELAEOCARPACEAE <i>Sloanea garckeana</i> K. Schumann / *S1457	<i>Nyssodrysternum signiferum</i> (Bates, 1864)	G	Acanthocinini

TABLE I contd

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>Sloanea</i> sp / L1700, L1149, L1708, L1883, L1886, M23527, M23564, M23601, M23687	<i>Ectenessa ornatipennis</i> Tippmann, 1960 (L1149) <i>Periboëum pubescens</i> (Olivier, 1790) (L1700) <i>Neoclytus</i> sp. 649 (M23527) <i>Mecometopus globicollis</i> (Castelnau & Gory, 1836) (M23564, M23687) <i>M. triangularis</i> (Castelnau & Gory, 1836) (L1700, M23687) <i>Chlorida curta</i> Thomson, 1857 (M23687) <i>Trachyderes melas</i> Bates, 1870 (M23564, M23687) <i>Symperasmus thoracicus</i> (White, 1855) (M23601) <i>Erphaea</i> sp. 682 (L1886) <i>Nyssodrysternum rodens</i> (Bates, 1864) (L1883) <i>N. signiferum</i> (Bates, 1864) (L1149, L1708, L1883) <i>Toronaeus perforator</i> Bates, 1864 (L1149, L1700, M23527) <i>T. virens</i> Bates, 1864 (L1883)	ISD (S/FAM) G G G G S/GEN G G G G G G G	Achrysonini Elaphidionini Clytini Clytini Clytini Bothriospilina Trachyderina Acanthoderini Acanthocinini Acanthocinini Acanthocinini Acanthocinini Acanthocinini
TILIACEAE			
<i>Aperiba glabra</i> Aublet / L1558	<i>Oreodera undulata</i> Bates, 1861	S/ORD	Acanthoderini
<i>Lueheopsis rugosa</i> (Pulle) M Burret / L1878	<i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) <i>Colobothea lineatocollis</i> Bates, 1865	G G	Clytini Colobotheni
STERCULIACEAE			
<i>Sterculia frondosa</i> Richard / L1762	<i>Steirastoma melanogenys</i> White, 1855	S/ORD	Acanthoderini
<i>Sterculia pruriens</i> K. Schumann /*F1343, L1328, L1377, M23692	<i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) (M23692) <i>Steirastoma breve</i> (Sulzer, 1776) (L1328) <i>S. melanogenys</i> White, 1855 (F1343, M23692) <i>Anisopodus batesi</i> Gilmour, 1965 (L1328) <i>Erphaea</i> sp 682 (L1377) <i>Lepturges</i> sp 710 (F1343)	G S/ORD S/ORD G G S/ORD	Clytini Acanthoderini Acanthoderini Acanthocinini Acanthocinini Acanthocinini
<i>Theobroma cacao</i> L / *Daniel SABATIER det *	<i>Euthima rodens</i> (Bates, 1865) <i>Oreodera glauca</i> (Linnaeus, 1758) <i>O. melzeri</i> Monné & Fragoso, 1988 <i>Oedopeza ocellator</i> (Fabricius, 1801)	G G ISD G	Onciderini Acanthoderini Acanthoderini Acanthocinini

TABLE I contd

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>T. subincanum</i> Martius / L1821	<i>Oreodera undulata</i> Bates, 1861 <i>Psapharochrus vetustus</i> (Bates, 1880)	S/ORD ISD	Acanthoderini Acanthoderini
BOMBACACEAE <i>Catostemma fragrans</i> Benth. / L1680, L1724, L1794, M23417, M23534, *P2160	<i>Ectenessa</i> sp. 974 (L1724) <i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) (M23534) <i>Estoloides alboscuteellaris</i> Breuning, 1943 (L1724) <i>Xenofrea</i> sp. 560 (L1794) <i>Psapharochrus spinicornis</i> (Tippmann, 1960) (L1794, M23417) <i>Steirastoma genisspina</i> Schwarzer, 1923 (L1680, L1794, M23417, P2160) <i>S. melanogenys</i> White, 1855 (L1680, M23534) <i>Hylettus semiculus</i> (Germar, 1824) (L1680, M23417) <i>Lepturges limpidus</i> Bates, 1872 (M23417) <i>Lepturges</i> sp. 710 (L1680, L1724, M23417, M23534) <i>Nyssodrysternum efflictum</i> (Bates, 1864) (L1680) <i>N. propinquum</i> (Bates, 1864) (M23534) <i>Ozineus</i> sp. 1426 (L1680, L1724)	ISD G ISD ISD S/SP S/SP S/ORD S/SP ISD S/ORD G G G	Achyronini Clytini Desmiphorini Xenofreini Acanthoderini Acanthoderini Acanthoderini Acanthocinini Acanthocinini Acanthocinini Acanthocinini Acanthocinini Acanthocinini Acanthocinini
<i>Ceiba pentandra</i> Gaertner / *Marie-Francoise PREVOST det ⁺	<i>Steirastoma breve</i> (Sulzer, 1776)	S/ORD	Acanthoderini
<i>Pachira aquatica</i> Aublet / L1319	<i>Steirastoma breve</i> (Sulzer, 1776) <i>S. melanogenys</i> White, 1855	S/ORD S/ORD	Acanthoderini Acanthoderini
<i>P. insignis</i> Savignone / L1824	<i>Steirastoma breve</i> (Sulzer, 1776) <i>Toronaeus perforator</i> Bates, 1864	S/ORD G	Acanthoderini Acanthocinini
MALVACEAE <i>*Abelmoschus esculentus</i> (L.) Moench	<i>Steirastoma breve</i> (Sulzer, 1776) (in DUFFY)	S/ORD	Acanthoderini
Order Lecythidales LECYTHIDACEAE <i>Corythophora ramosa</i> W. A. Rodrigues subsp <i>rubra</i> Mori / L1685, L1704	<i>Periboemus pubescens</i> (Olivier, 1790) (L1685, L1704) <i>Nyssodrysternum signiferum</i> (Bates, 1864) (L1685) <i>Palame mimetica</i> Monné, 1985 (L1704)	S/FAM G S/FAM	Elaphidionini Acanthocinini Acanthocinini

TABLE I contd

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>E. micrantha</i> (O.C. Berg) Miers / M23479, *S1509	<i>Periboeum pubescens</i> (Olivier, 1790) (M23479, S1509) <i>Xenofrea</i> sp. 450 (M23629) <i>Neoeutrypanus incertus</i> (Bates, 1864) (M23479) <i>Palame anceps</i> (Bates, 1864) (S1509) <i>P. crassimana</i> Bates, 1864 (M23479, S1509) <i>Xylergates elaineae</i> Gilmour, 1962 (M23479) <i>Xylergatina pulchra</i> (Lane, 1957) (M23629)	S/FAM ISD S/FAM S/FAM S/FAM S/FAM	Elaphidionini Xenofreini Acanthocinini Acanthocinini Acanthocinini Acanthocinini
<i>E. parviflora</i> (Aublet) Miers / L1709	<i>Periboeum pubescens</i> (Olivier, 1790) <i>Neobaryssinus</i> sp. 851 <i>Neoeutrypanus incertus</i> (Bates, 1864) <i>Neopalame</i> sp. 911 <i>Palame mimetica</i> Monné, 1985 <i>Xylergatina pulchra</i> (Lane, 1957)	S/FAM ISD S/FAM S/GEN S/FAM S/FAM	Elaphidionini Acanthocinini Acanthocinini Acanthocinini Acanthocinini Acanthocinini
<i>E. sagotiana</i> Miers / M23386, M23404, *S1762	<i>Periboeum pubescens</i> (Olivier, 1790) (M23386, M23404) <i>Neoeutrypanus incertus</i> (Bates, 1864) (M23386, S1762) <i>Oedozepe leucostigma</i> Bates, 1864 (S1762) <i>Palame crassimana</i> Bates, 1864 (M23386, S1762) <i>P. mimetica</i> Monné, 1985 (M23386) <i>Xylergates elaineae</i> Gilmour, 1962 (S1762) <i>Xylergatina pulchra</i> (Lane, 1957) (M23386)	S/FAM S/FAM S/FAM S/FAM S/FAM S/FAM S/FAM	Elaphidionini Acanthocinini Acanthocinini Acanthocinini Acanthocinini Acanthocinini Acanthocinini
<i>E. wachenheimi</i> (R. Benoist) Sandwith / L1574, L1607, L1853, M23614	<i>Periboeum pubescens</i> (Olivier, 1790) (L1853, M23614) <i>Neoeutrypanus incertus</i> (Bates, 1864) (L1574, L1607, L1853) <i>Oedozepe leucostigma</i> Bates, 1864 (L1574) <i>Palame anceps</i> (Bates, 1864) (L1607) <i>P. mimetica</i> Monné, 1985 (M23614) <i>Xylergatina pulchra</i> (Lane, 1957) (L1574)	S/FAM S/FAM S/FAM S/FAM S/FAM S/FAM	Elaphidionini Acanthocinini Acanthocinini Acanthocinini Acanthocinini Acanthocinini
<i>Eschweilera</i> sp / L1782, L1801	<i>Periboeum pubescens</i> (Olivier, 1790) (L1801) <i>Neoeutrypanus incertus</i> (Bates, 1864) (L1801) <i>Neopalame</i> sp. 911 (L1801) <i>Palame crassimana</i> Bates, 1864 (L1801) <i>P. mimetica</i> Monné, 1985 (L1801) <i>Xylergatina pulchra</i> (Lane, 1957) (L1782, L1801)	S/FAM S/FAM S/GEN S/FAM S/FAM S/FAM	Elaphidionini Acanthocinini Acanthocinini Acanthocinini Acanthocinini Acanthocinini

TABLE I contd.

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>Lecythis confertiflora</i> (A.C. Smith) Mori / L1303, M23693	<i>Periboeum pubescens</i> (Olivier, 1790) (L1303) <i>Neoeutrypanus incertus</i> (Bates, 1864) (L1303, M23693) <i>Palame mimetica</i> Monné, 1985 (L1303) <i>Xylergatina pulchra</i> (Lane, 1957) (L1303, M23693)	S/FAM S/FAM S/FAM S/FAM	Elaphidionini Acanthocinini Acanthocinini Acanthocinini
<i>L. corrugata</i> Poiteau / L1511	<i>Periboeum pubescens</i> (Olivier, 1790) <i>Palame crassimana</i> Bates, 1864	S/FAM S/FAM	Elaphidionini Acanthocinini
<i>L. holcogyne</i> (Sandwith) Mori / S&P2108	<i>Periboeum pubescens</i> (Olivier, 1790) <i>Neoeutrypanus mutilatus</i> (Germar, 1824) <i>Palame crassimana</i> Bates, 1864 <i>Xylergates elaineae</i> Gilmour, 1962	S/FAM S/FAM S/FAM S/FAM	Elaphidionini Acanthocinini Acanthocinini Acanthocinini
<i>L. idatimon</i> Aublet / M23484, M23531, M23547, *S1764	<i>Periboeum pubescens</i> (Olivier, 1790) (M23531, M23547) <i>Palame crassimana</i> Bates, 1864 (S1764) <i>P. mimetica</i> Monné, 1985 (M23484, M23531) <i>Xylergatina pulchra</i> (Lane, 1957) (S1764)	S/FAM S/FAM S/FAM S/FAM	Elaphidionini Acanthocinini Acanthocinini Acanthocinini
<i>L. persistens</i> Sagot subsp. <i>aurantiaca</i> Mori / *S1476	<i>Neoeutrypanus incertus</i> (Bates, 1864) <i>Palame crassimana</i> Bates, 1864 <i>P. mimetica</i> Monné, 1985 <i>Xylergatina pulchra</i> (Lane, 1957)	S/FAM S/FAM S/FAM S/FAM	Acanthocinini Acanthocinini Acanthocinini Acanthocinini
<i>L. persistens</i> Sagot subsp. <i>persistens</i> / L1347, L1502, L1601, M23589	<i>Periboeum pubescens</i> (Olivier, 1790) (L1347, M23589) <i>Neoeutrypanus incertus</i> (Bates, 1864) (L1347) <i>Oedopeza leucostigma</i> Bates, 1864 (L1502) <i>Palame mimetica</i> Monné, 1985 (L1347, L1601, M23589) <i>Xylergatina pulchra</i> (Lane, 1957) (L1347, L1502, M23589)	S/FAM S/FAM S/FAM S/FAM S/FAM	Elaphidionini Acanthocinini Acanthocinini Acanthocinini Acanthocinini
<i>L. poiteaui</i> O.C. Berg / L1520	<i>Xylergatina pulchra</i> (Lane, 1957)	S/FAM	Acanthocinini
Order Violales FLACOURTIACEAE <i>Casearia acuminata</i> de Candolle / *F2306	<i>Opades costipennis</i> (Buquet, 1844) <i>Phygopoda subvestita</i> (White, 1855)	G ISD	Eburini Rhinostragmi
<i>Homalium guianense</i> (Aublet) Oken / L1832	<i>Toronaeus virens</i> Bates, 1864	G	Acanthocinini
<i>Laeta procera</i> (Poeppig) Eichler / S&P2135	<i>Opades costipennis</i> (Buquet, 1844)	G	Eburini

TABLE I contd

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>E. guianensis</i> contd	<i>Tomopterus servillei</i> Magno, 1995 (L1684, L1710, L1764) <i>Callichroma auricomum</i> (Linnaeus, 1767) (L1764, S1475) <i>Mionochroma aureotinctum</i> (Bates, 1870) (S1475) <i>Oreodera albata</i> Villiers, 1971 (L1684, L1710, L1759) <i>Pycnomorphus centrolineatus</i> (Bates, 1862) (L1684, L1710, L1759, L1764) <i>Pycnomorphus</i> sp. 739 (S1475)	S/FAM S/FAM S/FAM S/LAT S/FAM S/FAM	Rhinotragini Callichromatini Callichromatini Acanthoderini Acanthoderini Acanthoderini
<i>E. sp aff guianensis</i> Eyma / M23513, M23544	<i>Protosphaerion signatipenne</i> Gounelle, 1909 (M23513) <i>Ischasia</i> sp. 926 (M23513) <i>Ommata</i> sp. 311 (M23513, M23544) <i>Tomopterus obliquus</i> Bates, 1870 (M23513) <i>Tomopterus clavicornis</i> Magno, 1995 (M23513, M23544) <i>Pycnomorphus</i> sp. 739 (M23513)	S/FAM S/FAM S/FAM S/FAM S/SP S/FAM	Elaphidionini Rhinotragini Rhinotragini Rhinotragini Rhinotragini Acanthoderini
<i>E. ramiflora</i> Martius / *S1766	<i>Tomopterus consobrinus</i> Gounelle, 1911 <i>Mionochroma vittatum</i> (Fabricius, 1775)	S/FAM S/FAM	Rhinotragini Callichromatini
<i>Manilkara bidentata</i> (A de Candolle) A Chevalier / *F1361, L1748, M23424, L1748, Daniel SABATIER det *	<i>Tomopterus aurantiacosignatus</i> Zajciw, 1969 (F1361, L1748) <i>Callichroma auricomum</i> (Linnaeus, 1767) (Daniel SABATIER det *) <i>Callichroma velutinum</i> (Fabricius, 1775) (L1748, M23424) <i>Mionochroma aureotinctum</i> (Bates, 1870) (L1748) <i>M. aurosum</i> (Schmidt, 1924) (L1748) <i>M. vittatum</i> (Fabricius, 1775) (L1748) <i>Desmiphora</i> sp. 639 (L1748)	S/SP S/FAM S/GEN S/FAM S/FAM S/FAM S/FAM	Rhinotragini Callichromatini Callichromatini Callichromatini Callichromatini Callichromatini Desmiphorini
<i>M. huberi</i> (Ducke) Standley / M23477, *S1469	<i>Protosphaerion signatipenne</i> Gounelle, 1909 (S1469) <i>Tomopterus grossefoveolatus</i> Zajciw, 1964 (M23477) <i>Callichroma auricomum</i> (Linnaeus, 1767) (M23477) <i>C. velutinum</i> (Fabricius, 1775) (S1469) <i>Mionochroma aureotinctum</i> (Bates, 1870) (M23477)	S/FAM ISD S/FAM S/GEN S/FAM	Elaphidionini Rhinotragini Callichromatini Callichromatini Callichromatini
<i>Micropholis cayennensis</i> Pennington / *S1470	<i>Tomopterus consobrinus</i> Gounelle, 1911 <i>Tomopterus servillei</i> Magno, 1995	S/FAM S/FAM	Rhinotragini Rhinotragini

TABLE I contd

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>M. guyanensis</i> (A. de Candolle) Pierre / *F2317, L1320, M23408, M23440, M23508, M23561	<i>Temnopsis oculata</i> Zajciw. 1960 (M23440) <i>Protosphaerion signatipenne</i> Gounelle. 1909 (M23408, M23440, M23508, M23561) <i>Ischasia</i> sp. 926 (F2317, M23408, M23440) <i>Optomerus roppai</i> Magno. 1995 (F2317, M23408, M23508, M23561) <i>Tomopterus obliquus</i> Bates. 1870 (L1320, M23440) <i>Tomopterus servillei</i> Magno. 1995 (M23508, M23561) <i>Mionochroma aureotinctum</i> (Bates. 1870) (F2317, M23408, M23440) <i>M. aurosum</i> (Schmidt. 1924) (M23561) <i>Desmiphora</i> sp. 639 (M23408) <i>Oreodera albata</i> Villiers. 1971 (M23408, M23561) <i>Pycnomorphus centrolineatus</i> (Bates. 1862) (F2317, M23408, M23440, M23508, M23561) <i>Pycnomorphus</i> sp. 424 (M23508, M23561) <i>Pycnomorphus</i> sp. 739 (M23508, M23561)	ISD S/FAM S/FAM S/SP S/FAM S/FAM S/FAM S/FAM S/FAM S/LAT S/FAM S/FAM S/FAM	Oemini Elaphidionini Rhinotragini Rhinotragini Rhinotragini Rhinotragini Callichromatini Callichromatini Desmiphorini Acanthoderini Acanthoderini Acanthoderini Acanthoderini
<i>M. guyanensis</i> (A. de Candolle) Pierre subsp. <i>duckeana</i> (Baehni) Pennington / *S2366	<i>Mionochroma vittatum</i> (Fabricius. 1775)	S/FAM	Callichromatini
<i>M. melinoniana</i> Pierre / *Daniel SABATIER det ⁺	<i>Mionochroma ocreatum</i> (Bates. 1870)	ISD	Callichromatini
<i>M. obscura</i> Pennington / L1760, M23482	<i>Ischasia</i> sp. 926 (L1760) <i>Tomopterus servillei</i> Magno. 1995 (M23482) <i>Lepturges (Chaeturges)</i> sp. 356 (M23482)	S/FAM S/FAM ISD	Rhinotragini Rhinotragini Acanthocinini
<i>Micropholis venulosa</i> (Martius & Endlicher) Pierre / *S1776	<i>Ischasia</i> sp. 817	ISD	Rhinotragini
<i>Micropholis</i> sp. / M23519	<i>Tomopterus consobrinus</i> Gounelle. 1911 <i>Mionochroma aureotinctum</i> (Bates, 1870)	S/FAM S/FAM	Rhinotragini Callichromatini
<i>Pouteria ambelanifolia</i> (Sandwith) Pennington / *S1461	<i>Tomopterus consobrinus</i> Gounelle. 1911	S/FAM	Rhinotragini

TABLE I contd.

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>P. bangui</i> (Rusby) Pennington / L1314	<i>Callichroma auricomum</i> (Linnaeus, 1767) <i>Mionochroma aureotinctum</i> (Bates, 1870) <i>Tomopterus obliquus</i> Bates, 1870 <i>Tomopterus servillei</i> Magno, 1995	S/FAM S/FAM S/FAM S/FAM	Callichromatini Callichromatini Rhinostragini Rhinostragini
<i>Pouteria</i> sp. aff. <i>caimito</i> (Ruiz & Pavon) Radlkofer / L1526	<i>Mionochroma vittatum</i> (Fabricius, 1775)	S/FAM	Callichromatini
<i>P. cayennensis</i> (A. de Candolle) Eyma / L1711, L1723	<i>Protosphaerion signatipenne</i> Gounelle, 1909 (L1723) <i>Ischasia</i> sp. 926 (L1723) <i>Phygopoda</i> sp. 654 (L1723) <i>Tomopterus obliquus</i> Bates, 1870 (L1711, L1723) <i>Tomopterus servillei</i> Magno, 1995 (L1723) <i>Mionochroma aureotinctum</i> (Bates, 1870) (L1711, L1723) <i>Oreodera basiradiata</i> Tippmann, 1960 (L1711, L1723) <i>Pycnomorphus centrolineatus</i> (Bates, 1862) (L1711, L1723) <i>Pycnomorphus</i> sp. 424 (L1711, L1723) <i>Ozineus</i> sp. 1426, aff. <i>strigosus</i> (Bates, 1863) (L1711)	S/FAM S/FAM S/FAM S/FAM S/FAM S/FAM S/FAM S/FAM S/FAM S/LAT S/FAM S/FAM S/FAM G	Elaphidionini Rhinostragini Rhinostragini Rhinostragini Rhinostragini Callichromatini Acanthoderini Acanthoderini Acanthoderini Acanthoderini Acanthoderini Acanthoderini Acanthoderini Acanthoderini
<i>P. deliciosa</i> Pennington / L1777	<i>Mionochroma vittatum</i> (Fabricius, 1775)	S/FAM	Callichromatini
<i>P. gonggrijpi</i> Eyma / *S1525	<i>Tomopterus obliquus</i> Bates, 1870	S/FAM	Rhinostragini
<i>P. guanensis</i> Aublet / *S1515, *S1759	<i>Tomopterus obliquus</i> Bates, 1870 (S1515) <i>Mionochroma vittatum</i> (Fabricius, 1775) (S1759)	S/FAM S/FAM	Rhinostragini Callichromatini
<i>P. hispida</i> Eyma / *S3045	<i>Mionochroma vittatum</i> (Fabricius, 1775) gen. sp. 1272	S/FAM ISD	Callichromatini Acanthoderini
<i>P. macrophylla</i> (Lamarck) Eyma / L1862	<i>Tomopterus consobrinus</i> Gounelle, 1911	S/FAM	Rhinostragini
<i>P. oblanceolata</i> Pires / L1736	<i>Ischasia</i> sp. 926 <i>Tomopterus obliquus</i> Bates, 1870 <i>Mionochroma aureotinctum</i> (Bates, 1870)	S/FAM S/FAM S/FAM	Rhinostragini Rhinostragini Callichromatini
<i>P. singularis</i> Pennington / *S1770	<i>Mionochroma vittatum</i> (Fabricius, 1775)	S/FAM	Callichromatini
<i>Pouteria</i> sp. / L1771, L1842, L1852, L1880, L1881, M23395, M23396, M23405, M23438, M23480, M23487, M23522, M23604, M23653, M23663, M23666, M23677, *S1772	<i>Protosphaerion signatipenne</i> Gounelle, 1909 (M23395, M23405) <i>Acorethra zischkai</i> Tippmann, 1960 (M23604) <i>Ischasia</i> sp. 926 (L1881, M23395) <i>Ischasia</i> sp. I410 (M23666) <i>Ommata</i> sp. 311 (M23438)	S/FAM S/FAM S/FAM ISD S/FAM	Elaphidionini Rhinostragini Rhinostragini Rhinostragini Rhinostragini

TABLE I contd

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>Pouteria</i> sp. contd.	<i>Tomopterus consobrinus</i> Gounelle, 1911 (L1771, M23677) <i>T. obliquus</i> Bates, 1870 (M23395, M23396, M23405, M23487, M23653, M23663, M23666, M23677) <i>Tomopterus clavicornis</i> Magno, 1995 (M23438) <i>Callichroma auricomum</i> (Linnaeus, 1767) (L1842, M23677) <i>Mionochroma aureotinctum</i> (Bates, 1870) (L1842, L1881, M23395, M23480, M23487, M23522, M23663, M23666) <i>M. vittatum</i> (Fabricius, 1775) (L1771, L1852, L1880, L1881) <i>Oreodera albata</i> Villiers, 1971 (M23438) <i>Pycnomorphus centrolineatus</i> (Bates, 1862) (M23405) <i>Pycnomorphus</i> sp. 702 (M23653, M23663, S1772)	S/FAM S/FAM S/FAM S/FAM S/FAM S/FAM S/LAT S/FAM S/FAM	Rhinotragini Rhinotragini Rhinotragini Callichromatini Callichromatini Acanthoderini Acanthoderini Acanthoderini
<i>Pradosia cochlearia</i> (Lecomte) Pennington / *F2322	<i>Phygopoda</i> sp. 654 <i>Mionochroma aureotinctum</i> (Bates, 1870) <i>Pycnomorphus</i> sp. 702	S/FAM S/FAM S/FAM	Rhinotragini Callichromatini Acanthoderini
<i>P. ptychandra</i> (Eyma) Pennington / L1828	<i>Mionochroma aureotinctum</i> (Bates, 1870) <i>Pycnomorphus</i> sp. 702	S/FAM S/FAM	Callichromatini Acanthoderini
Subclass Rosidae Order Rosales CONNARACEAE <i>Connarus perrotteti</i> (A P. de Candolle) Planchon / M23499, M23530 <i>Connarus</i> sp. / L1697	<i>Compsibidion basale</i> (White, 1855) (M23499, M23530) <i>Heterachthes</i> sp. 394 (M23530) <i>Compsibidion basale</i> (White, 1855) <i>Odontocera</i> sp. 1368 <i>Macronemus antennator</i> (Fabricius, 1801)	S/GEN ISD S/GEN ISD G	Ibdionini Ibdionini Ibdionini Rhinotragini Acanthoderini
CHRYSOBALANACEAE <i>Couepia guianensis</i> Aublet / M23432	<i>Toronaeus sumptuosus</i> Lane, 1973	S/FAM	Acanthocinini
<i>C. guianensis</i> Aublet subsp. <i>guianensis</i> Prance S&P2129	<i>Mecometopus globicollis</i> (Castelnau & Gory, 1836) <i>Chlorida curta</i> Thomson, 1857	G G	Clytini Bothriospilina
<i>Hirtella glandulosa</i> Sprengel / L1769, S&P2112	<i>Nyssodrysternum signiferum</i> (Bates, 1864)	G	Acanthocinini

TABLE I contd.

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>Licania alba</i> (Bernoulli) Cuatrecasas / *Daniel SABATIER det.†	<i>Toronaeus sumptuosus</i> Lane, 1973	S/FAM	Acanthocinini
<i>L. cyathodes</i> R. Benoist / *S1485	<i>Pycnomorphus</i> sp. 628	G	Acanthoderini
<i>L. licaniflora</i> (Sagot) Fritsch / *F2314	<i>Toronaeus virens</i> Bates, 1864	G	Acanthocinini
<i>Licania</i> sp / L1355, M23426	<i>Platysternus hebraeus</i> (Fabricius, 1781) (M23426) <i>Toronaeus virens</i> Bates, 1864 (L1355, M23426)	ISD G	Amisocerini Acanthocinini
Order Fabales tribe Swartzieae (insertae sedis) <i>Bocoa prouacensis</i> Aublet / L1351, L1744, M23496, Daniel SABATIER det.†	<i>Cycnidolon approximatum</i> (White, 1855) (L1351, L1744) <i>Agaone notabilis</i> (White, 1855) (Daniel SABATIER det.†) <i>Odontocera molorchoides</i> (White, 1855) (L1351, L1744, M23496) <i>Odontocera</i> sp 1018 (L1744)	S/FAM S/FAM S/FAM S/ORD	Ibidionini Rhinostragani Rhinostragani Rhinostragani
* <i>Swartzia benthamiana</i> Miquel	<i>Oedozepe setigera</i> (Bates, 1864) (in DUFFY)	(S/FAM)	Acanthocinini
<i>S. guianensis</i> (Aublet) Urban / *S1522	<i>Cycnidolon approximatum</i> (White, 1855) <i>Agaone notabilis</i> (White, 1855)	S/FAM S/FAM	Ibidionini Rhinostragani
<i>S. oblanceolata</i> Sandwith / *S2358	<i>Odontocera molorchoides</i> (White, 1855) <i>Nyssodrysternum signiferum</i> (Bates, 1864)	S/FAM G	Rhinostragani Acanthocinini
<i>S. panacoco</i> (Aublet) Cowan / L1804, M23615	<i>Agaone notabilis</i> (White, 1855) (L1804, M23615) <i>Odontocera molorchoides</i> (White, 1855) (L1804, M23615) <i>Odontocera</i> sp 1018 (L1804, M23615) <i>Oedozepe ocellator</i> (Fabricius, 1801) (L1804)	S/FAM S/FAM S/ORD G	Rhinostragani Rhinostragani Rhinostragani Acanthocinini
<i>S. polyphylla</i> A. P. de Candolle / M23413, M23594, L1192, L1735	<i>Cycnidolon approximatum</i> (White, 1855) (L1192, L1735, M23413) <i>Agaone notabilis</i> (White, 1855) (L1192, M23413) <i>Odontocera molorchoides</i> (White, 1855) (L1192, M23413) <i>Odontocera</i> sp 1018 (L1735, M23413) <i>Mecometopus globicollis</i> (Castelnau & Gory, 1836) (L1192, M23413) <i>Nyssodrysternum efflictum</i> (Bates, 1864) (L1735, M23413) <i>Nyssodrysternum signiferum</i> (Bates, 1864) (L1735, M23413) <i>Colobothea hirtipes</i> (Degeer, 1775) (L1735, M23594)	S/FAM S/FAM S/FAM S/ORD G G G G	Ibidionini Rhinostragani Rhinostragani Rhinostragani Clytini Acanthocinini Acanthocinini Colobotheini

TABLE I contd

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>S. remiger</i> Amshoff / L1387	<i>Gorybia semiopaca</i> Martins, 1976 <i>Odontocera</i> sp 1018	ISD S/ORD	Piezocerini Rhinostragini
MIMOSACEAE <i>Abarema barbouriana</i> (Standley) Barneby & Grimes / M23659	<i>Hemilissa catapota</i> Martins, 1976 <i>Thoracibidion ruficaudatum</i> (Thomson, 1865)	S/FAM S/FAM	Piezocerini Ibidionini
<i>A. curvicarpa</i> (Irwin) Barneby & Grimes / *G&S3312	<i>Lochmaeocles pulcher</i> Dillon & Dillon, 1946 <i>Oedozepe apicale</i> (Gilmour, 1962) <i>O ocellator</i> (Fabricius, 1801)	S/FAM S/ORD G	Onciderini Acanthocinini Acanthocinini
<i>A. jupunba</i> (Willdenow) Britton & Killip / *F2307, L1875, M23688	<i>Hemilissa catapota</i> Martins, 1976 (F2307) <i>Thoracibidion ruficaudatum</i> (Thomson, 1865) (F2307) <i>T. striatocolle</i> (White, 1855) (F2307) <i>Oedozepe ocellator</i> (Fabricius, 1801) (F2307, L1875, M23688) <i>Colobothea eximia</i> Aurivillius, 1902 (F2307)	S/FAM S/FAM S/FAM G S/ORD	Piezocerini Ibidionini Ibidionini Acanthocinini Colobotheini
<i>Balizia pedicellaris</i> (de Candolle) Barneby & Grimes / *F1341, *S1774	<i>Thoracibidion ruficaudatum</i> (Thomson, 1865) (F1341) <i>T. striatocolle</i> (White, 1855) (F1341) <i>Lochmaeocles callidryas</i> (Bates, 1865) (S1774) <i>L. pulcher</i> Dillon & Dillon, 1946 (F1341) <i>Polyrhaphis papulosa</i> (Olivier, 1795) (F1341) <i>Nyssodrysternum serpentinum</i> (Erichson, 1847) (S1774) <i>Oedozepe ocellator</i> (Fabricius, 1801) (F1341) <i>Paroecus celebensis</i> (Thomson, 1857) (F1341)	S/FAM S/FAM ISD S/FAM S/FAM S/ORD G ISD	Ibidionini Ibidionini Onciderini Onciderini Polyrhaphidini Acanthocinini Acanthocinini Acanthocinini
<i>Enterolobium schomburgkii</i> (Bentham) Bentham / L1579, L1763, L1874, M23652, S2367	<i>Hesperoburna balouporum</i> Tavakilian & Monné, 1991 (M23652) <i>Aposphaeron punctulatum</i> Martins & Napp, 1992 (L1763) <i>Hemilissa catapota</i> Martins, 1976 (L1763, L1874) <i>Thoracibidion ruficaudatum</i> (Thomson, 1865) (L1763, S2367) <i>T. striatocolle</i> (White, 1855) (L1763, L1874, S2367) <i>Phygopoda fulvitaris</i> Gounelle, 1911 (M23652) <i>Oedozepe apicale</i> (Gilmour, 1962) (L1579) <i>O ocellator</i> (Fabricius, 1801) (L1763, S2367)	ISD S/FAM S/FAM S/FAM S/FAM ISD S/ORD G	Hesperophanini Elaphidionini Piezocerini Ibidionini Ibidionini Rhinostragini Acanthocinini Acanthocinini

TABLE I contd.

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>Hydrochorea corymbosa</i> (L.C. Richard) Barneby & Grimes / L1300, L1818	<i>Thoracibidion ruficaudatum</i> (Thomson, 1865) (L1300) <i>T. striatocolle</i> (White, 1855) (L1300) <i>Tybalma pupillata</i> (Pascoe, 1859) (L1300) <i>Nyssodrysternum signiferum</i> (Bates, 1864) (L1818) <i>Oedopeza apicale</i> (Gilmour, 1962) (L1300) <i>O. ocellator</i> (Fabricius, 1801) (L1300) <i>O. setigera</i> (Bates, 1864) (L1300) <i>Toronaeus virens</i> Bates, 1864 (L1300) <i>Colobothea macularis</i> (Olivier, 1792) (L1300)	S/FAM S/FAM S/FAM G S/ORD G S/FAM G ISD	Ibidionini Ibidionini Onciderini Acanthocinini Acanthocinini Acanthocinini Acanthocinini Acanthocinini Colobotheini
<i>Inga alba</i> (Schwartz) Willdenow / L1749	<i>Thoracibidion striatocolle</i> (White, 1855) <i>Odontocera</i> sp. 1376 <i>Phygopoda</i> sp. 1377 <i>Chrysoprasis moerens</i> White, 1853 <i>Polyrhaphis papulosa</i> (Olivier, 1795) <i>Cosmotoma</i> sp. 313	S/FAM ISD ISD S/FAM S/FAM S/ORD	Ibidionini Rhinostragini Rhinostragini Heteropsini Polyrhaphidini Acanthocinini
<i>I. bourgoni</i> (Aublet) de Candolle / *Daniel SABATIER det *	<i>Orthostoma chryseis</i> (Bates, 1870) <i>Chrysoprasis chlorogaster</i> Aurivillius, 1910 <i>Colobothea eximia</i> Aurivillius, 1902	ISD G S/ORD	Compsocerini Heteropsini Colobotheini
<i>I. capitata</i> Desvieux / *F1504	<i>Eburodacrys sexmaculata</i> (Olivier, 1790) <i>Andraegoidus lacordairei lacordairei</i> (Dupont, 1838) <i>Estola hirsuta</i> (Degeer, 1775)	S/ORD ISD G	Eburini Trachyderma Desmiphorini
<i>I. huberi</i> Ducke / L1549, L1565	<i>Hesychotypa liturata</i> (Bates, 1865) (L1549) <i>Tybalma pupillata</i> (Pascoe, 1859) (L1565) <i>Oedopeza apicale</i> (Gilmour, 1962) (L1565) <i>O. setigera</i> (Bates, 1864) (L1565)	G S/FAM S/ORD S/FAM	Onciderini Onciderini Acanthocinini Acanthocinini
<i>I. lomatoxylla</i> (Bentham) Pittier / L1585	<i>Cosmotoma</i> sp. 313 <i>Nyssodrysternum serpentinum</i> (Erichson, 1847) <i>Oedopeza ocellator</i> (Fabricius, 1801)	S/ORD S/ORD G	Acanthocinini Acanthocinini Acanthocinini
<i>I. melinonis</i> Sagot / L1780	<i>Nyssodrysternum serpentinum</i> (Erichson, 1847) <i>Oedopeza ocellator</i> (Fabricius, 1801)	S/ORD G	Acanthocinini Acanthocinini
<i>I. pilosula</i> (L. C. Richard) Macbride / *S1768	<i>Polyrhaphis papulosa</i> (Olivier, 1795)	S/FAM	Polyrhaphidini

TABLE I contd

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>Inga</i> sp / L1374, L1582, L1864, L1871, M23456, M23491, M23501, M23549, M23654, M23669	<i>Brasilianus plicatus</i> (Olivier, 1790) (L1582) <i>Eburodacrys</i> sp 1282 (M23501) <i>Hemilissa catapotta</i> Martins, 1976 (L1864, M23456) <i>Hemilissa</i> sp. 1328 (L1374) <i>Thoracibidion striatocolle</i> (White, 1855) (L1864, L1871) <i>Chrysoprasis moerens</i> White, 1853 (M23491, M23549, M23669) <i>Hesychotypa jaspidea</i> (Bates, 1865) (L1374) <i>Polyrhaphis papulosa</i> (Olivier, 1795) (M23501) <i>Nyssodrycina venusta</i> (Bates, 1863) (M23654) <i>Oedopeza apicale</i> (Gilmour, 1962) (L1374) <i>O ocellator</i> (Fabricius, 1801) (M23456) <i>Pentheochaetes</i> sp. 230 (M23654)	G ISD S/FAM ISD S/FAM S/FAM ISD S/FAM ISD S/ORD G S/FAM	Cerambycini Eburini Piezocerini Piezocerini Ibidionini Heteropsini Onciderini Polyrhaphidini Acanthocinini Acanthocinini Acanthocinini
<i>Parkia mtida</i> Miquel / L1302, L1564, *S1511	<i>Eburodacrys</i> sp 1033 (S1511) <i>Mephritus auricolle</i> Tavakilian & Martins, 1991 (L1302) <i>Thoracibidion striatocolle</i> (White, 1855) (L1302) <i>Chrysoprasis</i> sp. 1023 (L1302, S1511) <i>Polyrhaphis spinosa</i> (Drury, 1773) (L1302, L1564) <i>Oedopeza ocellator</i> (Fabricius, 1801) (L1564, S1511) <i>Colobothea eximia</i> Aurivillius, 1902 (L1302, L1564)	ISD ISD S/FAM S/SP S/ORD G S/ORD	Eburini Elaphidionini Ibidionini Heteropsini Polyrhaphidini Acanthocinini Colobotheini
<i>P. pendula</i> (Willdenow) Bentham / *Daniel SABATIER det ⁺	<i>Oncideres gemmata</i> Dillon & Dillon, 1946	ISD	Onciderini
<i>P. velutina</i> R. Benoist / *S2369	<i>Polyrhaphis spinosa</i> (Drury, 1773)	S/ORD	Polyrhaphidini
<i>Pseudopiptadenia suaveolens</i> (Miquel) Grimes / L1743, M23575, S&P2121	<i>Hemilissa catapotta</i> Martins, 1976 (L1743) <i>Cynidolon batesianum</i> (White, 1855) (S&P2121) <i>Thoracibidion ruficaudatum</i> (Thomson, 1865) (L1743) <i>Epimelitta</i> sp 1355 (M23575) <i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) (L1743) <i>Chrysoprasis aeneicollis</i> (Buquet, 1844) (S&P2121) <i>Chrysoprasis</i> sp 514 (S&P2121) <i>Cosmotoma adjuncta</i> (Thomson, 1860) (S&P2121)	S/FAM S/ORD S/FAM ISD G ISD ISD S/ORD	Piezocerini Ibidionini Ibidionini Rhinotragini Clytini Heteropsini Heteropsini Acanthocinini

TABLE I contd

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>Zygia cataractae</i> (Kunth) L. Rico / L1844	<i>Eburodacrys</i> sp. 636 (L1844) <i>Nyssodrysternum signiferum</i> (Bates, 1864) (L1844) <i>Pentheochaetes</i> sp. 230 (L1844)	G G S/FAM	Eburini Acanthocinini Acanthocinini
<i>Z. racemosa</i> (Ducke) Barneby & Grimes / M23670, M23686, *S&P4085	<i>Thoracibidion ruficaudatum</i> (Thomson, 1865) (M23686) <i>Ommata</i> sp. 1017 (M23670, S&P4085) <i>Chrysoprasis moerens</i> White, 1853 (M23670)	S/FAM S/SP S/FAM	Ibidionini Rhinotragini Heteropsini
<i>Z. sabatieri</i> Barneby & Grimes / L1747, M23605	<i>Hemilissa catapota</i> Martins, 1976 (L1747) <i>Ceragema lepreurii</i> Buquet in Guérin-Méneville, 1844 (M23605)	S/FAM S/ORD	Piezocerini Trachyderma
<i>Z. tetragona</i> Barneby & Grimes / L1752	<i>Aposphaerion punctulatum</i> Martins & Napp, 1992 <i>Hemilissa catapota</i> Martins, 1976 <i>Thoracibidion ruficaudatum</i> (Thomson, 1865) <i>Macronemus antennator</i> (Fabricius, 1801)	S/FAM S/FAM S/FAM G	Elaphidionini Piezocerini Ibidionini Acanthoderini
CAESALPINIACEAE <i>Bauhinia guianensis</i> Aublet / M23471, M23641, M23678	<i>Compsibidion charle</i> (Bates, 1870) (M23641) <i>Ischasia</i> sp. 1399 (M23641) <i>Mecometopus globicollis</i> (Castelnau & Gory, 1836) (M23641) <i>M. triangularis</i> (Castelnau & Gory, 1836) (M23641) <i>Lissonotus equestris</i> (Fabricius, 1787) (M23641, M23678) <i>Cylicasta</i> sp. 1417 (M23641) <i>Estola</i> sp. 435 (M23641, M23678) gen sp. 951 (M23641, M23678) gen sp. 1393 (M23641, M23678) gen sp. 1398 (M23641) <i>Colobothea</i> sp. 322 (M23471) <i>Hilobothea latevittata</i> (Bates, 1865) (M23471, M23641, M23678)	ISD ISD G G S/ORD ISD S/GEN S/GEN ISD ISD S/GEN S/GEN	Ibidionini Rhinotragini Clytini Clytini Lissonotini Onciderini Desmiphorini Acanthocinini ISD Acanthocinini ISD Acanthocinini Colobotheini Colobotheini
<i>B. outimouta</i> Aublet / M23559	<i>Hemilissa opaca</i> Martins, 1976 <i>Colobothea</i> sp. 322 <i>Hilobothea latevittata</i> (Bates, 1865)	G S/GEN S/GEN	Piezocerini Colobotheini Colobotheini
<i>Bauhinia</i> sp. / L1721	<i>Estola</i> sp. 435 gen sp. 951 <i>Hilobothea latevittata</i> (Bates, 1865)	S/GEN S/GEN S/GEN	Desmiphorini Acanthocinini Colobotheini

TABLE I contd.

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>Caesalpinia pulcherrama</i> Swartz / *Marie-Francoise PREVOST det. ⁺	<i>Lophopoeum carinatum</i> Bates, 1863	ISD	Acanthocinini
<i>Chamaecrista apoucouita</i> (Aublet) Irwin & Barneby / L1823, *S&P3036	<i>Odontocera</i> sp. 1018 (L1823) <i>Chrysoprasis floralis</i> Bates, 1870 (S&P3036) <i>Macronemus antennator</i> (Fabricius, 1801) (S&P3036)	S/ORD ISD G	Rhinotragini Heteropsini Acanthoderini
<i>Copaifera epunctata</i> Amshoff / *L1070	<i>Onychocerus aculeicornis</i> (Kirby, 1818) <i>Pseudaethomerus lacordairei</i> (Bates, 1862) <i>Toronaeus perforator</i> Bates, 1864	S/FAM S/FAM G	Anisocerini Acanthoderini Acanthocinini
<i>Crudia aromatica</i> (Aublet) Willdenow / S&P2111	<i>Cicatrizocera bilistrata</i> (Lane, 1959) <i>Odontocera</i> sp. 1018 <i>Cosmotoma</i> sp. 313	S/ORD S/ORD S/ORD	Piezocerini Rhinotragini Acanthocinini
<i>C. bracteata</i> Bentham / L1335, L1733, L1779, M23492, M23676, *S1787	<i>Cicatrizocera bilistrata</i> (Lane, 1959) (L1335, L1773, L1779, M23492, M23676) <i>Odontocera</i> sp. 1018 (L1335, L1779) <i>Batus barbicornis</i> (Linnaeus, 1764) (L1773) <i>Macronemus antennator</i> (Fabricius, 1801) (M23492) <i>Cosmotoma adjuncta</i> (Thomson, 1860) (L1335) <i>Cosmotomidius</i> sp. 1071 (S1787)	S/ORD S/ORD S/FAM G S/ORD ISD	Piezocerini Rhinotragini Trachyderina Acanthoderini Acanthocinini Acanthocinini
<i>C. tomentosa</i> Aublet / *Daniel SABATIER det. ⁺	<i>Cicatrizocera bilistrata</i> (Lane, 1959)	S/ORD	Piezocerini
<i>Dicorynia guianensis</i> Amshoff / L1348, M23447	<i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) (M23447) <i>Nyssodrysternum signiferum</i> (Bates, 1864) (L1348, M23447) <i>Toronaeus virens</i> Bates, 1864 (L1348)	G G G	Clytini Acanthocinini Acanthocinini
<i>Eperua falcata</i> Aublet / L1811, M23384, *Christian FEUILLET det. ⁺	<i>Brasilianus plicatus</i> (Olivier, 1790) (in DUFFY) <i>Sphaerion cassum</i> (Newman, 1841) (M23384) <i>Cycnidolon batesianum</i> (White, 1855) (M23384) <i>Chlorida curta</i> Thomson, 1857 (M23384) <i>Onychocerus aculeicornis</i> (Kirby, 1818) (L1811) <i>Polyrhaphis spinosa</i> (Drury, 1773) (L1811) <i>Alphus foveatus</i> Marinoni & Martins, 1978 (Christian FEUILLET det. ⁺)	G S/FAM S/ORD G S/FAM S/ORD G	Cerambycini Elaphidionini Ibidionini Bothriospilina Anisocerini Polyrhaphudini Acanthoderini

TABLE I contd.

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>E. falcata</i> contd	<i>Pseudaethomerus lacordairei</i> (Bates, 1862) (L1811, M23384) <i>Nyssodrysternum signiferum</i> (Bates, 1864) (L1811) <i>Toronaeus virens</i> Bates, 1864 (M23384) <i>Colobothea carneola</i> Bates, 1865 (L1811)	S/FAM G G G	Acanthoderini Acanthocinini Acanthocinini Colobotheini
<i>E. grandiflora</i> (Aublet) Benthham / L1605, Daniel SABATIER det. ⁺	<i>Brasilianus plicatus</i> (Olivier, 1790) (Daniel SABATIER det. ⁺) <i>Sphaerion cassum</i> (Newman, 1841) (Daniel SABATIER det. ⁺) <i>Onychocerus aculeicornis</i> (Kirby, 1818) (Daniel SABATIER det. ⁺) <i>Toronaeus perforator</i> Bates, 1864 (L1605)	G S/FAM S/FAM G	Cerambycini Elaphidionini Anisocerini Acanthocinini
<i>E. rubiginosa</i> Miquel / L1323, L1368, L1851, M23617	<i>Brasilianus plicatus</i> (Olivier, 1790) (L1368) <i>Eburodacrys</i> sp (L1851) <i>Sphaerion cassum</i> (Newman, 1841) (L1323, L1368, L1851) <i>Cycnidolon batesianum</i> (White, 1855) (L1368) <i>Ommata elegans</i> White, 1855 (L1851) <i>Ommata</i> sp. 1259 (M23617) <i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) (L1323, L1368, L1851, M23617) <i>Chlorida curta</i> Thomson, 1857 (L1851) <i>C. denticulata</i> Buquet, 1860 (L1323, L1851, M23617) <i>Onychocerus aculeicornis</i> (Kirby, 1818) (L1851) <i>Polyrhaphis spinosa</i> (Drury, 1773) (L1368) <i>Alphus foveatus</i> Marinoni & Martins, 1978 (L1851) <i>Macronemus antennator</i> (Fabricius, 1801) (L1323) <i>Pseudaethomerus lacordairei</i> (Bates, 1862) (L1323, L1851, M23617) <i>Nyssodrysternum efflictum</i> (Bates, 1864) (L1323, M23617) <i>Toronaeus virens</i> Bates, 1864 (L1323) <i>Colobothea carneola</i> Bates, 1865 (L1323, L1851, L1368)	G ISD S/FAM S/ORD ISD ISD G G G S/FAM S/ORD G G S/FAM G G G	Cerambycini Eburini Elaphidionini Ibidionini Rhinothragini Rhinothragini Clytini Bothriospilina Bothriospilina Anisocerini Polyrhaphidini Acanthoderini Acanthoderini Acanthocinini Acanthocinini Colobotheini
<i>Heterostemon</i> sp / M23409, M23467, M23470	<i>Mecometopus globicollis</i> (Castelnau & Gory, 1836) (M23467) <i>M. triangularis</i> (Castelnau & Gory, 1836) (M23409) <i>Lissonotus equestris</i> (Fabricius, 1787) (M23409, M23467) <i>Chlorida festiva</i> (Linnaeus, 1758) (M23409) <i>Alphus foveatus</i> Marinoni & Martins, 1978 (M23409) <i>Pseudaethomerus lacordairei</i> (Bates, 1862) (M23467, M23470)	G G S/ORD G G S/FAM	Clytini Clytini Lissonotini Bothriospilina Acanthoderini Acanthoderini

TABLE I contd

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>Hymenaea courbaril</i> Linnaeus / *S&P 3490, *S&P3492. *Daniel FOUQUET det + by wood structure	<i>Achryson surinamum</i> (Linnaeus, 1767) (S&P 3490) <i>Brasilianus plicatus</i> (Olivier, 1790) (S&P 3490) <i>Eburodacrys sexmaculata</i> (Olivier, 1790) (S&P3492) <i>Mecometopus leprieuri</i> (Castelnau & Gory, 1836) (Daniel FOUQUET det.) <i>Chrysoprasis</i> sp. 1030 (S&P 3490) <i>Lissonotus equestris</i> (Fabricius, 1787) (S&P 3490) <i>Chlorida festiva</i> (Linnaeus, 1758) (S&P3492) <i>Batus barbicornis</i> (Linnaeus, 1764) (in Lacordaire) <i>Trachyderes succinctus succinctus</i> (Linnaeus, 1758) (S&P3492) <i>Polyrhaphis spinosa</i> (Drury, 1773) (S&P 3490) <i>Pseudaethomerus lacordairei</i> (Bates, 1862) (S&P 3490) <i>Granastyochus elegantissimus</i> (Tippmann, 1953) (S&P 3490) <i>Colobothea eximia</i> Aurivillius, 1902 (S&P 3490)	ISD G S/ORD ISD S/FAM S/ORD G S/FAM G S/ORD S/FAM S/ORD S/ORD	Achrysonini Cerambycini Eburini Clytini Heteropsini Lissonotini Bothrospilina Trachyderina Trachyderina Polyrhaphidini Acanthoderini Acanthocinini Colobotheini
<i>Macrobium bifolium</i> (Aublet) Persoon / L1336, L1523, L1813	<i>Polyrhaphis fabricii</i> Thomson, 1865 (L1336) <i>Alphus foveatus</i> Marinoni & Martins, 1978 (L1336, L1813) <i>Macronemus antennator</i> (Fabricius, 1801) (L1523) <i>Oreodera crinita</i> Monné & Fragoso, 1988 (L1813) <i>Pseudaethomerus lacordairei</i> (Bates, 1862) (L1813) <i>Cosmotoma adjuncta</i> (Thomson, 1860) (L1523) <i>Colobothea pimplaea</i> Bates, 1865 (L1523)	ISD G G ISD S/FAM S/ORD S/ORD	Polyrhaphidini Acanthoderini Acanthoderini Acanthoderini Acanthoderini Acanthocinini Colobotheini
<i>Peltoogyne lecontei</i> Ducke / *S3019	<i>Brasilianus plicatus</i> (Olivier, 1790) <i>Nyssodrysternum signiferum</i> (Bates, 1864)	G G	Cerambycini Acanthocinini
<i>P. venosa</i> (Vahl) Bentham / *L836, L1686, M23622, M23632	<i>Brasilianus plicatus</i> (Olivier, 1790) (M23622, M23632) <i>Sphaerion cassum</i> (Newman, 1841) (L1686) <i>Sphaerion</i> sp. 26 (L1686) <i>Sphaerion</i> sp. 524 (L1686) <i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) (L1686, M23622, M23632) <i>Nyssodrysternum signiferum</i> (Bates, 1864) (L1686, M23622)	G S/FAM S/GEN ISD G G	Cerambycini Elaphidionini Elaphidionini Elaphidionini Clytini Acanthocinini

TABLE I contd

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>P. venosa</i> contd	<i>Toronaeus virens</i> Bates, 1864 (M23622) <i>Colobothea hirtipes</i> (Degeer, 1775) (L836)	G G	Acanthocini Colobotheini
<i>Peltogyne</i> sp / *Daniel FOUQUET det + by wood structure	<i>Sphaerion</i> sp 26	S/GEN	Elaphidionini
<i>Sclerobium albiflorum</i> R Benoist / L1793	<i>Chrysoprasis rotundicollis</i> Bates, 1870	ISD	Heteropsini
<i>S. melinoni</i> Harms / L1364, S&P2120	<i>Eburodacrys</i> sp. 636 (L1364, S&P2120) <i>Chrysoprasis</i> sp 1030 (L1364)	G S/FAM	Eburini Heteropsini
<i>S. paraense</i> Huber / L1380, M23542	<i>Hemilissa</i> sp 1330 <i>Chrysoprasis</i> sp. 1030 <i>Chrysoprasis</i> sp 1411	ISD S/FAM ISD	Piezocerini Heteropsini Heteropsini
<i>S. cf. paraense</i> Huber / S&P2125, *S1465	<i>Eburodacrys</i> sp 636 <i>Homogenes lepreurii</i> (Buquet, 1844) (S1465)	G ISD	Eburini Heteropsini
* <i>Tamarindus indica</i> Linnaeus	<i>Achryson surinamum</i> (Linnaeus, 1767) (in DUFFY) <i>Eburodacrys sexmaculata</i> (Olivier, 1790) (in DUFFY)	ISD S/ORD	Achrysonini Eburini
<i>Touacapoua americana</i> Aublet / *F1349, M23459, M23680, *S1500	<i>Orthostoma</i> sp 694 (S1500) <i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) (F1349, M23680) <i>Mecometopus</i> sp 696 (F1349, M23459, M23680) <i>Argyrodes pulchella</i> Bates, 1867 (F1349) <i>Pycnomorphus</i> sp 628 (F1349) <i>Nyssodrysternum efflictum</i> (Bates, 1864) (F1349, M23459)	ISD G S/SP ISD G G	Compocerini Clytini Clytini Rhopalophorini Acanthoderini Acanthocini
FABACEAE			
<i>Acosmium nitens</i> (J Vogel) Yakovlev / M23644	<i>Acyphoderes abdominalis</i> (Olivier, 1795) <i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) <i>Oedopeza apicale</i> (Gilmour, 1962) <i>Colobothea hirtipes</i> (Degeer, 1775)	S/FAM G S/ORD G	Rhinotragini Clytini Acanthocini Colobotheini
<i>Andra coriacea</i> Pulle / *F1344, L1365, M23646, Denis LOUBRY det +	<i>Acyphoderes abdominalis</i> (Olivier, 1795) (F1344, M23646) <i>Lissonotus equestris</i> (Fabricius, 1787) (Denis LOUBRY det. + 1995) <i>Mecometopus globicollis</i> (Castelnau & Gory, 1836) (M23646) <i>M. triangularis</i> (Castelnau & Gory, 1836) (M23646)	S/FAM S/ORD G G	Rhinotragini Lissonotini Clytini Clytini

TABLE I contd

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>A. coriacea</i> contd.	<i>Nyssodrysternum signiferum</i> (Bates, 1864) (F1344, M23646)	G	Acanthocinini
	<i>Toronaeus virens</i> Bates, 1864 (L1365)	G	Acanthocinini
<i>Dioclea violacea</i> Martius ex Bentham / Daniel-Yves ALEXANDRE det ⁺	<i>Sphallotrichus puncticolle</i> (Bates, 1870)	ISD	Cerambycini
<i>Diploptoris purpurea</i> (Richard) Amshoff / L591, L1712, *S&P3493	<i>Hemilissa</i> sp. 1311 (L1712)	ISD	Piezocerini
	<i>Chlorida festiva</i> (Linnaeus, 1758) (S&P3493)	G	Bothriospilina
	<i>Pucallpa robusta</i> Monné, 1978 (L1712)	ISD	Acanthocinini
	<i>Hamatastus excelsus</i> Monné, 1978 (L591)	ISD	Acanthocinini
	<i>Colobothea appendiculata</i> Aurivillius, 1902 (S&P3493)	ISD	Colobotheini
<i>Dipteryx punctata</i> (Blake) Amshoff / L1797	<i>Odontocera simplex</i> White, 1855	S/FAM	Rhinotragini
	<i>Odontocera</i> sp. 392	S/FAM	Rhinotragini
<i>Dussia discolor</i> (Bentham) Amshoff / M23412, M23625	<i>Granastoychus elegantissimus</i> (Tippmann, 1953) (M23412)	S/ORD	Acanthocinini
	<i>Nyssodrysternum signiferum</i> (Bates, 1864) (M23412, M23625)	G	Acanthocinini
<i>Hymenolobium excelsum</i> Bentham / *S1477	<i>Acyphoderes abdominalis</i> (Olivier, 1795)	S/FAM	Rhinotragini
	<i>Chlorida festiva</i> (Linnaeus, 1758)	G	Bothriospilina
	<i>Nyssodrysternum signiferum</i> (Bates, 1864)	G	Acanthocinini
<i>Hymenolobium flavum</i> Kleinhoonte / *L1245, L1362	<i>Acyphoderes abdominalis</i> (Olivier, 1795) (L1245, L1362)	S/FAM	Rhinotragini
	<i>Odontocera colon</i> (Bates, 1870) (L1362)	S/FAM	Rhinotragini
	<i>Trachyderes succinctus succinctus</i> (Linnaeus, 1758) (L1245)	G	Trachyderina
<i>H. petraeum</i> Ducke / M23694	<i>Acyphoderes abdominalis</i> (Olivier, 1795)	S/FAM	Rhinotragini
<i>Lonchocarpus</i> sp. / L1838	<i>Charoides tigrinata</i> (Thomson, 1868)	ISD	Onciderini
	<i>Hypsioma constellata</i> Thomson, 1868	ISD	Onciderini
	<i>Trestonia forticornis</i> Buquet, 1859	ISD	Onciderini
	<i>Nyssodrysternum serpentinum</i> (Erichson, 1847)	S/ORD	Acanthocinini
<i>Machaerum</i> sp. / L1815	<i>Oedopeza ocellator</i> (Fabricius, 1801)	G	Acanthocinini
	<i>Carterca mucronata</i> (Olivier, 1795)	ISD	Colobotheini
	<i>Colobothea hirtipes</i> (Degeer, 1775)	G	Colobotheini
	<i>Colobothea</i> sp. 844	ISD	Colobotheini
<i>Monopteryx inpaie</i> Rodrigues / L1580, L1739	<i>Odontocera simplex</i> White, 1855 (L1739)	S/FAM	Rhinotragini
	<i>Nyssodrysternum efflictum</i> (Bates, 1864) (L1580, L1739)	G	Acanthocinini
	<i>N. signiferum</i> (Bates, 1864) (L1739)	G	Acanthocinini

TABLE I contd

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>M. inpa</i> contd	<i>Toronaeus perforator</i> Bates, 1864 (L1739) <i>T. virens</i> Bates, 1864 (L1580, L1739)	G G	Acanthocinini Acanthocinini
<i>Ormosia nobilis</i> Tulasne / M23548, M23611	<i>Odontocera</i> sp. 938 (M23548) <i>Ommata</i> sp. 1329 (M23548) <i>Mecometopus globicollis</i> (Castelnau & Gory, 1836) (M23548) <i>M. triangularis</i> (Castelnau & Gory, 1836) (M23611) <i>Chlorida festiva</i> (Linnaeus, 1758) (M23611) <i>Nyssodrysternum efflictum</i> (Bates, 1864) (M23611) <i>N. signiferum</i> (Bates, 1864) (M23548, M23611) <i>Toronaeus virens</i> Bates, 1864 (M23611)	ISD S/FAM G G G G G G	Rhinotragini Rhinotragini Clytini Clytini Bothriospilina Acanthocinini Acanthocinini
<i>O. paraensis</i> Ducke / L1796	<i>Cicatrizocera bilistrata</i> (Lane, 1959) <i>Cycnidolon batesianum</i> (White, 1855) <i>Mecometopus globicollis</i> (Castelnau & Gory, 1836) <i>Chlorida denticulata</i> Buquet, 1860	S/ORD S/ORD G G	Piezocerini Ibidonini Clytini Bothriospilina
<i>Paramachaerium ormosioides</i> (Ducke) Ducke / L1870, *S1782	<i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) (L1870) <i>Ceragenia leprieurii</i> Buquet in Guérin-Méneville, 1844 (L1870) <i>Macropophora trochlearis</i> (Linnaeus, 1758) (S1782) <i>Nyssodrysternum serpentinum</i> (Erichson, 1847) (L1870) <i>Colobothea carneola</i> Bates, 1865 (L1870) <i>C. hirtipes</i> (Degeer, 1775) (L1870, S1782)	G S/ORD G S/ORD G G	Clytini Trachyderina Acrocinini Acanthocinini Colobotheini Colobotheini
<i>Poecilanthus hostmanni</i> (Bentham) Amshoff / M23668	<i>Odontocera colon</i> (Bates, 1870)	S/FAM	Rhinotragini
<i>Pterocarpus officinalis</i> N.J. Jacquin / L1366, L1382, L1569	<i>Colobothea hirtipes</i> (Degeer, 1775) L1366, L1382, L1569 <i>C. pimplaea</i> Bates, 1865 (L1382)	G S/ORD	Colobotheini Colobotheini
<i>Taralea oppositifolia</i> Aublet / L1512, L1567, L1611, L1848	<i>Odontocera simplex</i> White, 1855 (L1611) <i>Odontocera</i> sp. 392 (L1512, L1567, L1611, L1848) <i>Ommata (Eclipta)</i> sp. 411 (L1611, L1848) <i>Oedozepe ocellator</i> (Fabricius, 1801) (L1611)	S/FAM S/FAM S/SP G	Rhinotragini Rhinotragini Rhinotragini Acanthocinini
<i>Vatairea cf. paraensis</i> Ducke / *S&P 3763	<i>Ommata</i> sp. 1329 <i>Lepturges (Chaeturges) repandus</i> Tavakilian & Monné, 1989	S/FAM ISD	Rhinotragini Acanthocinini

TABLE I contd.

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
Order Myrtales MYRTACEAE <i>Psidium guajava</i> Linnaeus / *Marie-Francoise PREVOST det. ⁺	<i>Trachyderes succinctus succinctus</i> (Linnaeus, 1758)	G	Trachyderina
MELASTOMATACEAE <i>Micomia tschudyoides</i> Cogniaux / L1792	<i>Ozodes infuscatus</i> Bates, 1870	G	Necydalopsini
COMBRETACEAE * <i>Buchenavia capitata</i> (Vahl) Eichler	<i>Eburodacrys sulphureosignata</i> (Erichson, 1847) (in DUFFY)	G	Eburiini
<i>B. mitidissima</i> (L. C. Richard) Alwan & Stace / L1390	<i>Oreodera</i> sp. 1006 <i>Carphina petulans</i> (Kirsch, 1875)	G ISD	Acanthoderini Acanthocinini
Order Rhizophorales RHIZOPHORACEAE * <i>Rhizophora</i> sp	<i>Eburodacrys sulphureosignata</i> (Erichson, 1847) (in DUFFY)	G	Eburiini
Order Santalales OLACACEAE <i>Chaunochiton kappleri</i> (Sagot ex Engler) Duce / L1798	<i>Oreodera bituberculata</i> Bates, 1861 <i>Colobothea hirtipes</i> (Degeer, 1775)	G G	Acanthoderini Colobotheini
<i>Heisteria densifrons</i> Engler / M23443	<i>Ommata paradisiaca</i> Tippmann, 1953	ISD	Rhinotragini
<i>Minquartia guianensis</i> Aublet / L1350	<i>Mecometopus globicollis</i> (Castelnau & Gory, 1836)	G	Clytini
Order Celastrales CELASTRACEAE <i>Goupia glabra</i> Aublet / *F2324	<i>Toronaeus perforator</i> Bates, 1864	G	Acanthocinini
<i>Maytenus</i> sp / M23495, M23540, M23554, Daniel FOUQUET det. ⁺ by wood structure	<i>Pygmodeon involutum</i> (Bates, 1870) (M23495, M23540, M23554) <i>Ommata</i> sp 1255 (M23495, M23554) <i>Chrysopraxis bipartita</i> Zajciw, 1963	S/GEN S/GEN ISD	Ibidionini Rhinotragini Heteropsini
HIPPOCRATEACEAE <i>Cheilochlinum cognatum</i> (Miers) A. C. Smith / S&P2152	<i>Phespia cercerina</i> (Bates, 1870)	ISD	Rhinotragini
<i>Tontelea nectandriifolia</i> (A. C. Smith) A. C. Smith / M23624	<i>Compsibidion multizonatum</i> Martins, 1969	ISD	Ibidionini

TABLE I contd.

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
Order Euphorbiales EUPHORBIACEAE			
* <i>Alchornea triplinervia</i> (Sprengel) Muller Argoviensis	<i>Trypanidius notatus</i> (Fabricius, 1787) (in DUFFY)	ISD	Acanthocinini
* <i>A floribunda</i> (Bentham) Muller Argoviensis	<i>Oreodera bituberculata</i> Bates, 1861 (in DUFFY)	G	Acanthoderini
	<i>Psapharochrus lateralis</i> (Bates, 1861) (in DUFFY)	G	Acanthoderini
<i>Amanoa guianensis</i> Aublet / L1825	<i>Ommata</i> sp. 1357	ISD	Rhinotragini
<i>Chaetocarpus schomburgkianus</i> Pax & K. Hoffmann / *F2316	<i>Mecometopus triangularis</i> (Castelnau & Gory, 1836)	G	Clytini
	<i>Pycnomorphus</i> sp. 628	G	Acanthoderini
<i>Conceveiba guianensis</i> Aublet / M23672, *S1447	<i>Ataxia obscura</i> (Fabricius, 1801) (M23672)	S/FAM	Pteropliini
	<i>Oreodera albata</i> Villiers, 1971 (S1447)	S/LAT	Acanthoderini
	<i>O. basiradata</i> Tippmann, 1960 (S1447)	S/LAT	Acanthoderini
	<i>O. glauca</i> (Linnaeus, 1758) (S1447)	G	Acanthoderini
	<i>Erphaea</i> sp. 682 (M23672)	G	Acanthocinini
	<i>Hylettus coenobita</i> (Erichson, 1847) (S1447)	S/LAT	Acanthocinini
	<i>Nyssodrysternum signiferum</i> (Bates, 1864) (S1447)	G	Acanthocinini
	<i>Colobothea hirtipes</i> (Degeer, 1775) (S1447)	G	Colobotheini
<i>Croton matourensis</i> Aublet / L1376	<i>Mecometopus triangularis</i> (Castelnau & Gory, 1836)	G	Clytini
<i>Drypetes variabilis</i> Uittien / *Daniel SABATIER det.†	<i>Eburodacrys puella</i> (Newman, 1840)	ISD	Eburini
	<i>Macropophora trochlearis</i> (Linnaeus, 1758)	G	Acrocini
	<i>Oreodera bituberculata</i> Bates, 1861	G	Acanthoderini
<i>Drypetes</i> sp. / L1855	<i>Nyssodrysternum rodens</i> (Bates, 1864)	G	Acanthocinini
<i>Glycydendron amazonicum</i> Ducke / *L1246	<i>Mecometopus aurantesignatus</i> Zajciw, 1964	S/FAM	Clytini
	<i>Macropophora trochlearis</i> (Linnaeus, 1758)	G	Acrocini
<i>Hevea brasiliensis</i> (A. Jussieu) Muller-Argoviensis / *Fabrice PINARD det.† 1995	<i>Malacopterus tenellus</i> (Fabricius, 1801)	S/GEN	Oemini
	<i>Mecometopus aurantesignatus</i> Zajciw, 1964	S/FAM	Clytini
	<i>M triangularis</i> (Castelnau & Gory, 1836)	G	Clytini
	<i>Trachyderes succinctus succinctus</i> (Linnaeus, 1758)	G	Trachyderina
	<i>Hesychotypa hturata</i> (Bates, 1865)	G	Onciderini
	<i>Oreodera bituberculata</i> Bates, 1861	G	Acanthoderini

TABLE I contd

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>H. brasiliensis</i> contd.	<i>Nealcidion triangulare</i> (Bates, 1863) <i>Colobothea lineatocollis</i> Bates, 1865	S/LAT G	Acanthocinini Colobotheini
<i>H. guianensis</i> Aublet / L1738, M23418, M23536	<i>Malacopterus tenellus</i> (Fabricius, 1801) (L1738, M23418) <i>Mecometopus aurantisignatus</i> Zajciv, 1964 (L1738, M23536) <i>M. triangularis</i> (Castelnau & Gory, 1836) (L1738) <i>Chlorida denticulata</i> Buquet, 1860 (L1738) <i>C. festiva</i> (Linnaeus, 1758) (L1738, M23418) <i>Macropophora trochlearis</i> (Linnaeus, 1758) (M23418) <i>Nyssodrycina pulchella</i> (Bates, 1863) (L1738) <i>Nyssodrysterium efflictum</i> (Bates, 1864) (M23418) <i>N. signiferum</i> (Bates, 1864) (L1738, M23418) <i>Colobothea carneola</i> Bates, 1865 (L1738) <i>C. lineatocollis</i> Bates, 1865 (L1738)	S/GEN S/FAM G G G G G G G G G	Oemini Clytini Clytini Bothriospilina Bothriospilina Acrocinini Acanthocinini Acanthocinini Acanthocinini Colobotheini Colobotheini
* <i>Hura crepitans</i> Linnaeus	<i>Onychocerus crassus</i> (Voet, 1778) (in DUFFY) <i>Lagocheirus araneiformis fulvescens</i> Dillon, 1957 (in DUFFY)	G G	Anisocerni Acanthocinini
<i>Manihot esculenta</i> Crantz / *Guy COUTURIER det. ⁺	<i>Anisopodus lignicola</i> Bates, 1863	ISD	Acanthocinini
<i>Pausandra martini</i> Baillon / *S&P4164	<i>Stenoidion corallinum</i> (Bates, 1870) <i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) <i>Helvina uncinata</i> Thomson, 1864 <i>Ataxia obscura</i> (Fabricius, 1801) <i>Esthlogena albolineata</i> (Breuning, 1940) <i>Estola annulata</i> (Fabricius, 1801) <i>Oreodera basipencilata</i> Tippmann, 1960 <i>Hemucladus dejeani</i> Buquet, 1857	ISD G ISD S/FAM ISD ISD ISD ISD	Ibidionini Clytini Agapanthini Pteropliini Pteropliini Desmiphorini Acanthoderini Calliini
* <i>Pera glabrata</i> (Schott) Baillon	<i>Anisopodus phalangodes</i> (Erichson, 1847) (in DUFFY)	(S/FAM)	Acanthocinini
<i>Sapum glandulosum</i> (Linnaeus) Morong / M15364	<i>Oreodera bituberculata</i> Bates, 1861	G	Acanthoderini
<i>S. paucinervium</i> Hemsley / S&P2151	<i>Oreodera bituberculata</i> Bates, 1861 <i>Trypanidus notatus</i> (Fabricius, 1787)	G ISD	Acanthoderini Acanthocinini

TABLE I contd.

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
Order Linales HUMIRIACEAE <i>Humiria balsamifera</i> (Aublet) Saint-Hilaire / M23461	<i>Ozodes infuscatus</i> Bates, 1870	G	Necydalopsini
<i>Vantanea parviflora</i> Lamarck / L706	<i>Jamesia globifera</i> (Fabricius, 1801)	G	Onciderini
Order Polygalales VOCHYSIACEAE <i>Qualea rosea</i> Aublet / L1610, L1835	<i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) (L1835) <i>Sympetasmus thoracicus</i> (White, 1855) (L1610) <i>Nyssodrysternum signiferum</i> (Bates, 1864) (L1610) <i>Toronaeus perforator</i> Bates, 1864 (L1610)	G G G G	Clytini Acanthoderini Acanthocinini Acanthocinini
<i>Vochysia neyratii</i> Normand / M23465, *S1483	<i>Ozodes infuscatus</i> Bates, 1870 (M23465, S1483) <i>Psapharochrus bivittis</i> (White, 1855) (M23465, S1483)	G S/GEN	Necydalopsini Acanthoderini
<i>V. tomentosa</i> (G.F W Meyer) de Candolle / *F2304	<i>Ozodes infuscatus</i> Bates, 1870 <i>Psapharochrus bivittis</i> (White, 1855) <i>Toronaeus perforator</i> Bates, 1864	G S/GEN G	Necydalopsini Acanthoderini Acanthocinini
Order Sapindales BURSERACEAE <i>Protium apiculatum</i> Swart / L1318	<i>Brasilianus lasiocerus</i> (Gahan, 1892) <i>Oreodera neglecta</i> Melzer, 1932 <i>Stenolis incisa</i> (Bates, 1864) <i>Toronaeus suavis</i> Bates, 1864	S/GEN S/FAM ISD S/FAM	Cerambycini Acanthoderini Acanthocinini Acanthocinini
<i>P. sp. aff. aracouchini</i> (Aublet) Marchand / *S1778, *S2368	<i>Nyssicus sp. 74</i> (S2368) <i>Oreodera neglecta</i> Melzer, 1932 (S2368) <i>Hylettus spilotus</i> Monné, 1982 (S1778) <i>Nyssodrysternum sp. 216</i> (S2368) <i>Nyssodrysternum sp. 969</i> (S2368)	ISD S/FAM S/FAM ISD ISD	Elaphidionini Acanthoderini Acanthocinini Acanthocinini Acanthocinini
<i>P. opacum</i> Swart var. <i>rabelianum</i> Daly / L1810, L1868, L1872	<i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) (L1810) <i>Oreodera neglecta</i> Melzer, 1932 (L1810) <i>Hylettus spilotus</i> Monné, 1982 (L1868, L1872) <i>Toronaeus similimus</i> Monné, 1974 (L1810)	G S/FAM S/FAM ISD	Clytini Acanthoderini Acanthocinini Acanthocinini

TABLE I contd.

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>P. subserratum</i> (Engler) Engler / L1753, L1773	<i>Nyssicus</i> sp. 69 (L1773) <i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) (L1753)	ISD G	Elaphidionini Clytini
<i>Protium</i> sp. / *F2308, L1544, L1859	<i>Brasilianus lasiocerus</i> (Gahan, 1892) (L1859) <i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) (L1859) <i>Hylettus spilotus</i> Monné, 1982 (F2308) <i>Nealcidion</i> sp. 1321 (L1544) <i>Toronaeus suavis</i> Bates, 1864 (F2308) <i>Tropidozineus argutulus</i> Monné, 1988 (L1859)	S/GEN G S/FAM ISD S/FAM ISD	Cerambycini Clytini Acanthocinini Acanthocinini Acanthocinini Acanthocinini
<i>Tetragastris panamensis</i> (Engler) Kuntze / M23543	<i>Nyssicus rosalesi</i> Joly & Martinez, 1981 <i>Mecometopus globicollis</i> (Castelnau & Gory, 1836)	ISD G	Elaphidionini Clytini
<i>Trattinnickia demerarae</i> Sandwith / L1389	<i>Brasilianus plicatus</i> (Olivier, 1790) <i>Nyssicus aureopilosus</i> Lacey, 1949 <i>Oreodera neglecta</i> Melzer, 1932 <i>Hylettus spilotus</i> Monné, 1982 <i>Toronaeus figuratus</i> Bates, 1864 <i>Toronaeus suavis</i> Bates, 1864	G ISD S/FAM S/FAM ISD S/FAM	Cerambycini Elaphidionini Acanthoderini Acanthocinini Acanthocinini Acanthocinini
* <i>T. rhoifolia</i> Willdenow	<i>Brasilianus plicatus</i> (Olivier, 1790) (in DUFFY) <i>Toronaeus figuratus</i> Bates, 1864 (in DUFFY)	G ISD	Cerambycini Acanthocinini
ANACARDIACEAE			
<i>Anacardium occidentale</i> Linnaeus / *Gérard TAVAKILIAN det.*	<i>Nyssicus conspicillatus</i> (Erichson, 1847) (in DUFFY) <i>Oncideres repandator</i> (Fabricius, 1792) (Gérard TAVAKILIAN det.*)	S/GEN S/FAM	Elaphidionini Onciderini
<i>A. spruceanum</i> Benthann ex Engler / L1808	<i>Nyssicus conspicillatus</i> (Erichson, 1847) <i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) <i>Onychocerus concentricus</i> Bates, 1862 <i>Macropophora trochlearis</i> (Linnaeus, 1758) <i>Nyssodrysternum signiferum</i> (Bates, 1864)	S/GEN G ISD G G	Elaphidionini Clytini Anisocerini Acrocinini Acanthocinini
<i>Anacardium</i> sp. / L1750	<i>Nyssicus conspicillatus</i> (Erichson, 1847) <i>Nyssodrysternum efflictum</i> (Bates, 1864) <i>N. propinquum</i> (Bates, 1864) <i>N. signiferum</i> (Bates, 1864)	S/GEN G G G	Elaphidionini Acanthocinini Acanthocinini Acanthocinini

TABLE I contd

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>Astronium ulei</i> Mattick / *P2161	<i>Brasilianus batus</i> (Linnaeus, 1758)	ISD	Cerambycini
<i>Mangifera indica</i> Linnaeus / *Gérard TAVAKILIAN det ⁺	<i>Chlorida festiva</i> (Linnaeus, 1758) (in DUFFY) <i>Oncideres repandator</i> (Fabricius, 1792) (Gérard TAVAKILIAN det ⁺)	G S/FAM	Bothriospilina Onciderini
* <i>Spondias mombin</i> Linnaeus	<i>Onychocerus crassus</i> (Voet, 1778) (in DUFFY) <i>Lagocheirus araneiformis fulvescens</i> Dillon, 1957 (in DUFFY)	G G	Anisocerini Acanthocinini
<i>Tapirira bethanniana</i> Mitchell / L1308, L1373. *S2362	<i>Brasilianus plicatus</i> (Olivier, 1790) (L1308, S2362) <i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) (L1308, L1373) <i>Nyssodrysternum efflictum</i> (Bates, 1864) (L1308)	G G G	Cerambycini Clytini
<i>T. guianensis</i> Aublet / *S1495	<i>Coremia plumipes</i> (Pallas, 1772) <i>Mecometopus globicollis</i> (Castelnau & Gory, 1836)	ISD G	Compsocerini Clytini
<i>T. obtusa</i> (Bentham) Mitchell / L1370	<i>Mecometopus globicollis</i> (Castelnau & Gory, 1836) <i>M. triangularis</i> (Castelnau & Gory, 1836)	G G	Clytini Clytini
<i>Tapirira</i> sp. / L1765	<i>Colobothea elongata</i> Gahan, 1889	G	Colobotherini
<i>Thyrsodium guianense</i> Sagot ex Marchand / M23642	<i>Mecometopus globicollis</i> (Castelnau & Gory, 1836) <i>Nyssodrysternum efflictum</i> (Bates, 1864)	G G	Clytini Acanthocinini
<i>T. puberulum</i> Mitchell / *S2357	<i>Nyssodrysternum signiferum</i> (Bates, 1864)	G	Acanthocinini
SIMAROUBACEAE			
<i>Simaba</i> sp. / *Christophe TARDY det ⁺ by wood structure	<i>Sympersasmus affinis</i> (Thomson, 1865)	S/FAM	Acanthoderini
<i>Simarouba amara</i> Aublet / *F1345, *F2375	<i>Psapharochrus lateralis</i> (Bates, 1861) (F2375) <i>Sympersasmus affinis</i> (Thomson, 1865) (F1345) <i>Lagocheirus araneiformis fulvescens</i> Dillon, 1957 (F2375) <i>Leptostylus plautus</i> Monné & Hoffmann, 1981 (F2375) <i>Nyssodrysternum signiferum</i> (Bates, 1864) (F2375) <i>Oedopeza ocellator</i> (Fabricius, 1801) (F2375) <i>Toronaeus perforator</i> Bates, 1864 (F1345)	G S/FAM G G G G	Acanthoderini Acanthoderini Acanthocinini Acanthocinini Acanthocinini Acanthocinini Acanthocinini
MELIACEAE			
<i>Carapa procera</i> A P de Candolle / *F2321, L1332, L1576, L1584, M23552	<i>Macropophora trochlearis</i> (Linnaeus, 1758) (F2321, L1332, L1576, L1584)	G	Acrociniini

TABLE I contd

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>Carapa procera</i> contd	<i>Oreodera bituberculata</i> Bates, 1861 (F2321, L1584) <i>Leptostylus plautus</i> Monné & Hoffmann, 1981 (F2321) <i>Nyssodrysternum propinquum</i> (Bates, 1864) (F2321) <i>Pattalinus vittulatus</i> (Gilmour, 1961) (F2321, M23552)	G G G S/SP	Acanthoderini Acanthocinini Acanthocinini Acanthocinini
RUTACEAE <i>Zanthoxylum rhoifolium</i> Lamarck / *Jean-Jacques de GRANVILLE det ⁺	<i>Listroptera tenebricosa</i> (Olivier, 1790)	ISD	Cleomenini
Order Apiales ARALIACEAE <i>Schefflera decaphylla</i> (Seemann) Harms / *F2312, L1755, M23529, M23600	<i>Mecometopus triangularis</i> (Castelnau & Gory, 1836) (M23529) <i>Macropophora trochlearis</i> (Linnaeus, 1758) (M23600) <i>Psapharochrus lateralis</i> (Bates, 1861) (L1755) <i>Anisopodus sparsus</i> Bates, 1863 (F2312, M23600) <i>Nyssodrysternum propinquum</i> (Bates, 1864) (F2312) <i>N. signiferum</i> (Bates, 1864) (F2312)	G G G S/GEN G G	Clytini Acrocini Acanthoderini Acanthocinini Acanthocinini Acanthocinini
<i>S. morototoni</i> (Aublet) Maguire, Steyermark & Frodin / *F1510	<i>Euthima rodens</i> (Bates, 1865) <i>Anisopodus sparsus</i> Bates, 1863 <i>Lagocheirus araneiformis fulvescens</i> Dillon, 1957	G S/GEN G	Onciderini Acanthocinini Acanthocinini
Subclass Asteridae Order Gentianales LOGANIACEAE			
<i>Strychnos jobertiana</i> Baillon / M23452	<i>Mecometopus globicollis</i> (Castelnau & Gory, 1836)	G	Clytini
<i>S. melinoniana</i> Baillon / L1349	<i>Acanthoderes</i> sp. 509	ISD	Acanthoderini
APOCYNACEAE <i>Allamanda cathartica</i> Linnaeus / *Georges CREMERS det ⁺ 1991	<i>Estola hirsuta</i> (Degeer, 1775)	G	Desmiphorini
<i>Aspidosperma album</i> (Vahl) R. Benoist ex Pichon / L1737	<i>Hemilissa opaca</i> Martins, 1976 <i>Lepturges (Chaeturges) serenus</i> Monné, 1977	G S/GEN	Piezocerni Acanthocinini
<i>A. cruentum</i> R.E. Woodson / L1682, L1695	<i>Hemilissa cornuta</i> Bates, 1870 (L1682, L1695) <i>H. opaca</i> Martins, 1976 (L1682)	S/GEN G	Piezocerini Piezocerini

TABLE I contd

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>A. cruentum</i> contd	<i>Lepturges (Chaeturges) serenus</i> Monné, 1977 (L1682) <i>Nyssodrysternum</i> sp. 838 (L1682)	S/GEN S/FAM	Acanthocini Acanthocini
<i>A. marcgravianum</i> R.E. Woodson / *CTFT 1150, L1344	<i>Hemilissa cornuta</i> Bates, 1870 (L1344, CTFT 1150) <i>H. opaca</i> Martins, 1976 (CTFT 1150, L1344) <i>Lepturges (Chaeturges) serenus</i> Monné, 1977 (CTFT 1150)	S/GEN G S/GEN	Piezocerini Piezocerini Acanthocini
<i>A. sandwithianum</i> Markgraf / L652	<i>Hemilissa cornuta</i> Bates, 1870	S/GEN	Piezocerini
<i>Condylocarpon amazonicum</i> (Markgraf) Ducke / M23517	<i>Colobothea geminata</i> Bates, 1865	S/FAM	Colobotheini
<i>Couma guianensis</i> Aublet / *F2311, *L1039, L1352, *S1792	<i>Jamesia globifera</i> (Fabricius, 1801) (L1039) <i>Acrocinus longimanus</i> (Linnaeus, 1758) (F2311) <i>Macropophora trochlearis</i> (Linnaeus, 1758) (L1352) <i>Oreodera bituberculata</i> Bates, 1861 (L1039) <i>Hylettus coenobita</i> (Erichson, 1847) (S1792) <i>Nealcidion triangulare</i> (Bates, 1863) (L1039) <i>Nyssodrysternum</i> sp. 838 (L1039) (F2311)	G S/LAT G G S/LAT S/LAT S/FAM	Onciderini Acrocini Acrocini Acanthoderini Acanthocini Acanthocini Acanthocini
<i>Forsteroma acouci</i> (Aublet) A.P. de Candolle / M23627	<i>Colobothea geminata</i> Bates, 1865	S/FAM	Colobotheini
<i>Forsteroma</i> sp. / M23639	<i>Colobothea geminata</i> Bates, 1865	S/FAM	Colobotheini
<i>Himatanthus articulatus</i> (Vahl) Woodson / M23546	<i>Oreodera bituberculata</i> Bates, 1861 <i>Leptostylus plautus</i> Monné & Hoffmann, 1981 <i>Nyssodrysternum propinquum</i> (Bates, 1864) <i>N. signiferum</i> (Bates, 1864)	G G G G	Acanthoderini Acanthocini Acanthocini Acanthocini
<i>H. bracteatus</i> (de Candolle) Woodson / L1732, M23489, M23516	<i>Oreodera bituberculata</i> Bates, 1861 (L1732) <i>Psapharochrus lateralis</i> (Bates, 1861) (M23516) <i>Nyssodrysinia pulchella</i> (Bates, 1863) (M23489) <i>Nyssodrysternum propinquum</i> (Bates, 1864) (M23489) <i>Toronaus virens</i> Bates, 1864 (L1732, M23516)	G G S/LAT G G	Acanthoderini Acanthoderini Acanthocini Acanthocini Acanthocini
<i>Lacmellea aculeata</i> (Ducke) Monachino / M23541, M23602	<i>Macropophora trochlearis</i> (Linnaeus, 1758) (M23602) <i>Nyssodrysternum propinquum</i> (Bates, 1864) (M23541)	G G	Acrocini Acanthocini
<i>L. floribunda</i> (Poeppig) Benthham & Hooker f. / L1369, L1754	<i>Macropophora trochlearis</i> (Linnaeus, 1758) (L1754) <i>Nyssodrysternum propinquum</i> (Bates, 1864) (L1369)	G G	Acrocini Acanthocini

TABLE I contd

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>Odontadenia perrottetii</i> (A. de Candolle) R. E. Woods / L1689	<i>Hemihssa opaca</i> Martins, 1976 <i>Jamesia globifera</i> (Fabricius, 1801)	G G	Piezocerini Onciderini
<i>Parahancornia fasciculata</i> (Poirlet) R. Benoist ex Pichon / *C11365, L561, L1814	<i>Acrocinus longimanus</i> (Linnaeus, 1758) (C11365, L561) <i>Nyssodrycina pulchella</i> (Bates, 1863) (L1814)	S/LAT S/LAT	Acrocini Acanthocinini
Order Solanales SOLANACEAE			
<i>Capsicum</i> sp. / *Jean-Francois MOLINO det.†	<i>Nealcidion deletum</i> (Bates, 1880)	S/FAM	Acanthocinini
<i>Solanum schomburgkii</i> Sendtner / *Marie-Francoise PREVOST det.†	<i>Nealcidion deletum</i> (Bates, 1880)	S/FAM	Acanthocinini
<i>S. melongena</i> Linnaeus / *Gérard TAVAKILIAN det.†	<i>Adetus pulchellus</i> (Thomson, 1868) <i>Hippopsis macrophthalma</i> Breuning, 1940 <i>Estola m-flava</i> Breuning, 1940 <i>Nealcidion deletum</i> (Bates, 1880)	ISD ISD ISD S/FAM	Apomecynini Agapanthini Desmiphorini Acanthocinini
CONVOLVULACEAE			
<i>Maripa</i> sp. / M23592	<i>Bisaltes buqueti</i> Thomson, 1868 <i>Colobothea hirtipes</i> (Degeer, 1775)	ISD G	Apomecynini Colobotheini
Order Lamiales BORAGINACEAE			
<i>Cordia exaltata</i> Lamarck / *F1509	<i>Desmiphora fasciculata</i> (Olivier, 1792)	ISD	Desmiphorini
VERBENACEAE			
<i>Avicennia germinans</i> (Linnaeus) Stearn / *Michel HOFF det.†	<i>Colobothea hirtipes</i> (Degeer, 1775)	G	Colobotheini
Order Scrophulariales BIGNONIACEAE			
<i>Jacaranda copata</i> (Aublet) D. Don / *F1346	<i>Gnomidolon melanosomum</i> Bates, 1870	ISD	Ibidionini
<i>Memora moringifolia</i> (A. P. d. C.) Sandwith / M23406	<i>Aneuthetochorus simplex</i> Martins, 1970	ISD	Callidiopini
Order Rubiales RUBIACEAE			
<i>Capirona decorticans</i> Spruce / *S&P 1947	<i>Haruspex lineolatus</i> Bates, 1870	ISD	Piezocerini

TABLE I contd.

Plant taxon / collection ^a	Cerambycid species emerged ^b	Host spec. ^c	Cerambycid tribe
<i>Faramea corymbosa</i> Aublet / *P2490	<i>Megacyllene angulata</i> (Fabricius, 1775) <i>Chrysoprasis chlorogaster</i> Aurvillius, 1910 <i>C. hypocrita</i> Erichson, 1847	ISD G ISD	Clytini Heteropsini Heteropsini
Subclass Arecidae Order Arecales ARECACEAE <i>Maximiliana maripa</i> (Correa de Serra) Drude / *Jean-Jacques de GRANVILLE det. ⁺ *Gérard TAVAKILIAN det. ⁺	<i>Macrodonia cervicornis</i> (Linnaeus, 1758) (Jean-Jacques de GRANVILLE det. ⁺) <i>Eusapia guyanensis</i> Hüdepohl, 1988 (Gérard TAVAKILIAN det. ⁺) <i>Tenthras obliteratus</i> Thomson, 1864 (Gérard TAVAKILIAN det. ⁺) <i>T. setosus</i> Monné & Tavakilian, 1990 (Gérard TAVAKILIAN det. ⁺)	ISD ISD ISD ISD	Macrodontini Hesperophanini Acanthocinini Acanthocinini

^a Plant specimens are listed with their collection voucher numbers. The letter preceding the number indicates the collector: Christian Feuillet (F), Denis Loubry (L), Scott Mori (M), Marie-Françoise Prévost (P) or Daniel Sabatier (S). Collections that did not originate in the Sinnamary River Basin are marked with an asterisk. Wood collections without vouchers are indicated by the name of the person who made the determination, followed by 'det.⁺'

^b Entries derived from the literature are thus noted

^c Beetle species are classified according to their host specificity as generalists (G) or specialists associated with a single plant species (S/SP), genus (S/GEN), family (S/FAM) order (S/ORD), or latex-producing families (S/LAT). There was insufficient data (ISD) to classify the many cerambycids represented by a single host record. When an emergence has been recorded for a cerambycid species primarily associated with an unrelated plant taxon, the classification refers to the primary host and is in parentheses. For this classification of host specificity, the legume tribe Swartzieae has been treated as part of the Fabaceae.

Voucher specimens were collected from the plants, identified by specialists, and deposited in major herbaria (NY, P, CAY). Collections in the 1991 and 1992 field seasons were made by Denis Loubry (collection numbers preceded by "L" in Table I), and collections in 1993 were made by Scott Mori (collection numbers preceded by "M" in Table I). Wood specimens were also collected and deposited at CTFT (the French research organization responsible for the study of wood) and the United States Forest Products Laboratory wood collection at Madison, Wisconsin. During the 1992 and 1993 field seasons, additional small wood samples were collected, preserved in methanol, and delivered to the laboratory of Barbara Meurer-Grimes (Lehman College, CUNY) for chemical analysis.

The felled trees were left on the forest floor for a period of about four months, and during this interval cerambycids had the opportunity to lay their eggs. Several site visits were made after each cut, to observe and collect cerambycid visitors. After four months the dead trees were surveyed for signs of insect attack, such as oviposition scars or piles of ejected frass. Sections of trunk or thick branch (80 cm long) were removed, along with some thin twigs, and placed into cages. The cages were monitored twice a week, newly emerged adult beetles were identified, and representatives were drymounted (see Hequet & Tavakilian, 1996, for the preparation protocol). The cerambycid specimens are deposited at ORSTOM, Cayenne.

C. ADDITIONAL DATA

Data from earlier experiments at Sinnamary and additional experiments in other parts of French Guiana are also included in Table I. These data bring the total number of plant families investigated to 48. Branches were collected by Christian Feuillet, Daniel Sabatier, and Marie-Françoise Prévost (abbreviated as "F," "S," and "P," respectively, in Table I), and rearing experiments were conducted as described above. Certain cerambycid host-plant associations described in Duffy, 1960, confirm or supplement results from the rearing experiments, and are therefore included in Table I.

IV. Results and Discussion

Table I provides a list of plant specimens yielding beetles, collection voucher numbers of the plants, associated species of cerambycids, and the tribes to which the beetles belong. Plant families are listed following the nomenclature and systematic concepts of Cronquist (1981). For each plant species, the associated cerambycid species are listed following Monné and Giesbert (1994), with tribes arranged to reflect presumed phylogeny, but with genera and species arranged alphabetically. Longicorn species that have not yet been described ($n = 90$, >25% of the species reared) are listed under their working numbers to facilitate identification for the analysis of host specificity. These species will be described in a forthcoming monograph (Tavakilian, in prep.). Collections that did not originate in the Sinnamary River Basin are marked with an asterisk, and entries derived from the literature are thus noted.

A. CLASSIFICATION OF HOST SPECIFICITY

An additional column in Table I proposes a hypothetical host utilization strategy for each cerambycid species. Herbivores may be broadly classified as generalists (those which attack numerous unrelated plant species) or specialists (those which attack a limited set of plants, usually taxonomically related, but also sometimes unrelated plants that produce similar chemicals). The terms "oligophagous" and "monophagous" have been used to describe specialists showing progressively greater fidelity in their choice of host plant(s), but unfortu-

nately these terms have been used with little consistency (see summary in May & Ahmad, 1983).

To facilitate the interpretation of the data in Table I, we have used an alternate list of emergences (Tavakilian, unpubl. data), which records all documented host plants of each cerambycid species, to classify the host fidelity of each longicorn species reared. Generalists are denoted "G," and specialists are categorized according to the taxonomic level of the host plant(s) utilized. "S/ORD" indicates that a beetle species is associated with plants belonging to a particular plant order, and "S/FAM," "S/GEN," and "S/SP" refer to beetle species reproductively restricted to a particular plant family, genus, or species, respectively. There is, in addition, a small group of longicorns which reproduce in trees that are not taxonomically related but that belong to families characterized by the production of milky latex. These beetles are considered chemical specialists, and classified "S/LAT."

A longicorn has been tentatively assigned to a particular category if there are at least two host-plant records directly derived from rearing experiments in French Guiana. When there are numerous host plant records, 90% of them must be in accord for a beetle to be retained in a category. For instance, if a cerambycid species has been reared from nine plant specimens belonging to the same genus and only once from an alternate genus, that species is considered "S/GEN," or a specialist associated with the first genus. However, if the cerambycid species has been reared from eight plant specimens belonging to a single genus and twice from an alternate genus in the same plant family, that beetle is considered "S/FAM." Should the cerambycid species be reared eight times from plant specimens belonging to a single genus and twice from specimens belonging to a different plant family, that beetle would be downgraded to "G." These classifications are considered hypothetical, because many of them are supported by very little data, but they nevertheless enable us to perceive meaningful trends in host-plant fidelity.

Many cerambycid species have not been classified as either generalists or specialists, because even after the intensive sampling in the Sinnamary River Basin, they are represented by a single host-plant record. In Table I these beetles are classified "ISD," for insufficient data. This is actually the largest class (see Fig. 1), because almost 47% ($n = 163$) of the cerambycid species reared are represented by a single host-plant record! These beetles might conceivably be rare specialists that are principally associated with plant taxa that were not sampled, or they might optimally reproduce in living wood, wood at a different stage of decomposition, or at a different time of the year.

Fewer than 13% ($n = 44$) of the cerambycid species were classified as generalists (Fig. 1). Many of the beetles in this category have numerous host-plant records confirming successful reproduction in trees belonging to many different unrelated plant families. Some examples are *Chlorida festiva* (Fig. 2c), *Macropophora trochlearis*, *Mecometopus triangularis*, *Nyssodrysternum signiferum*, *Oreodera bituberculata*, and *Toronaeus virens*. Some cerambycids classified as generalists are disproportionately represented in association with a particular plant taxon, but fewer than 90% of the records are from that taxon. Species such as *Macroneumus antennator* and *Oedopeza ocellator* are associated primarily with legumes, which have been extensively sampled, but also reproduce in some unrelated trees. Other longicorns, such as *Chrysopraxis chlorogaster*, are represented by only two host records from unrelated plants. Pending additional data, they are also provisionally classified as generalists.

The remaining cerambycid species reared (>40%; $n = 141$) display a higher degree of host specificity and usually reproduce in a group of taxonomically related plants. When all plant taxa are included, specialists outnumber generalists >3:1, but different plant taxa give rise to cerambycid faunas with quite different ratios of specialist to generalist (Fig. 1). In addition,

the highest taxonomic rank of the selected host plant(s) differs from one plant taxon to the next. When all plant taxa are included, more than one-half of the specialists are associated with a particular plant family, and fewer than one-quarter are associated with a particular plant genus. Specialist cerambycids regularly recognize only two groups of plants at the ordinal level: Fabales and Malvales. This might be an indication either of little chemical divergence among the families composing the order (not likely to be the case for the legumes but possible for Malvales) or of confusion in the current taxonomic concept. Other closely related pairs of plant families, such as Moraceae/Cecropiaceae and Burseraceae/Anacardiaceae, support longicorn guilds that are largely independent. Of all 348 cerambycid species reared, only 13 species (<4%) appear to be reproductively dependent on a single plant species. Eight of these associations are supported by only two host records, and might not be confirmed if sampling was continued!

B. BEETLE GUILDS OF ABUNDANTLY REPRESENTED PLANT TAXA

The plant taxa treated in Fig. 1 (Moraceae, Malvales, Lecythidaceae, Sapotaceae, Fabales, and Apocynaceae) were among those especially well represented in the Sinnamary River Basin, in terms of both numbers of species and individuals present. These and other abundant plant taxa were visited by large and often diverse beetle guilds (see Fig. 2 for representative cerambycids). These guilds are usually composed of numerous taxonomically unrelated cerambycids, although most guilds do include a few genera represented by several species. Cerambycid guilds associated with some of these plant taxa are discussed below.

1. *Moraceae*

The 36 plant specimens (approximately 16 spp., 8 genera) investigated gave rise to 32 cerambycid species. The host specificity of almost one-third of these species (31%) cannot be determined, due to insufficient data, and the remaining species are almost evenly divided between specialists (38%) and generalists (31%). Half of the specialists were associated with the genus *Brosimum*, represented by 21 plant specimens. These beetles were *Alphus malleri*, *Alphus* sp. 1366, *Nyssodrysternum caudatum*, *N. flavolineatum*, *N. simulatum*, and *Toronaeus magnificus*, all of which belong to the related tribes Acanthoderini and Acanthocinini in the subfamily Lamiinae. These large tribes are composed of small to medium-sized, cryptic, nocturnal beetles. Two beetle species were specialists at the family level, three species were associated with several plant families characterized by milky latex, and *Alphus aurivilli* was the sole species reared from both Moraceae and the closely related family Cecropiaceae. In the past, some authors have treated the Cecropiaceae as part of the Moraceae (e.g. Takhtajan, 1969), but in our study Cecropiaceae gave rise to an independent longicorn guild including two species of *Drycothaea*, *Anisopodus phalangodes*, and *Nyssodrycina binoculata*.

2. *Malvales*

The Malvacean families Eleocharpaeae, Tiliaceae, Sterculiaceae, Bombacaceae, and Malvaceae were represented by 29 plant specimens (at least 12 spp., 8 genera) which gave rise to 33 cerambycid species. Of the longicorns associated with this plant group, almost 24% of the species had only a single host record, and 53% were generalists. There were eight specialists, but half of these were associated with more than a single family in the order. Three specialists emerged solely from *Catostemma fragrans*, belonging to the Bombacaceae. This tree

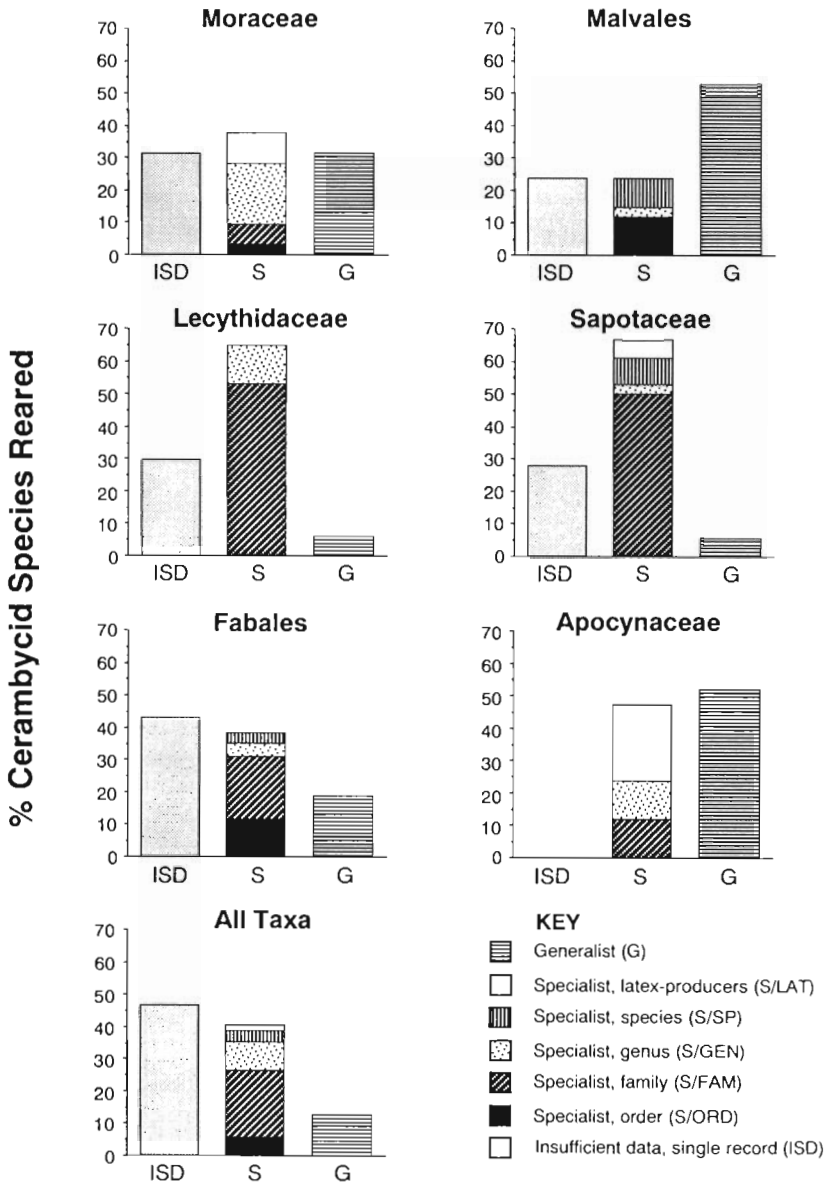


Fig. 1. Host specificity of cerambycid beetles associated with selected plant taxa in French Guiana.

species, represented by six specimens, not only is relatively common but, if the name is a clue, also may be particularly easy for the beetles to locate. Once again, the majority of the specialists belong to the tribes Acanthoderini or Acanthocinini.

We noted that *Steirastoma breve*, *S. melanogenys*, and *Lepturges* sp. 710 all emerged from trees belonging to both the Bombacaceae and the Sterculiaceae. There are, in addition, several

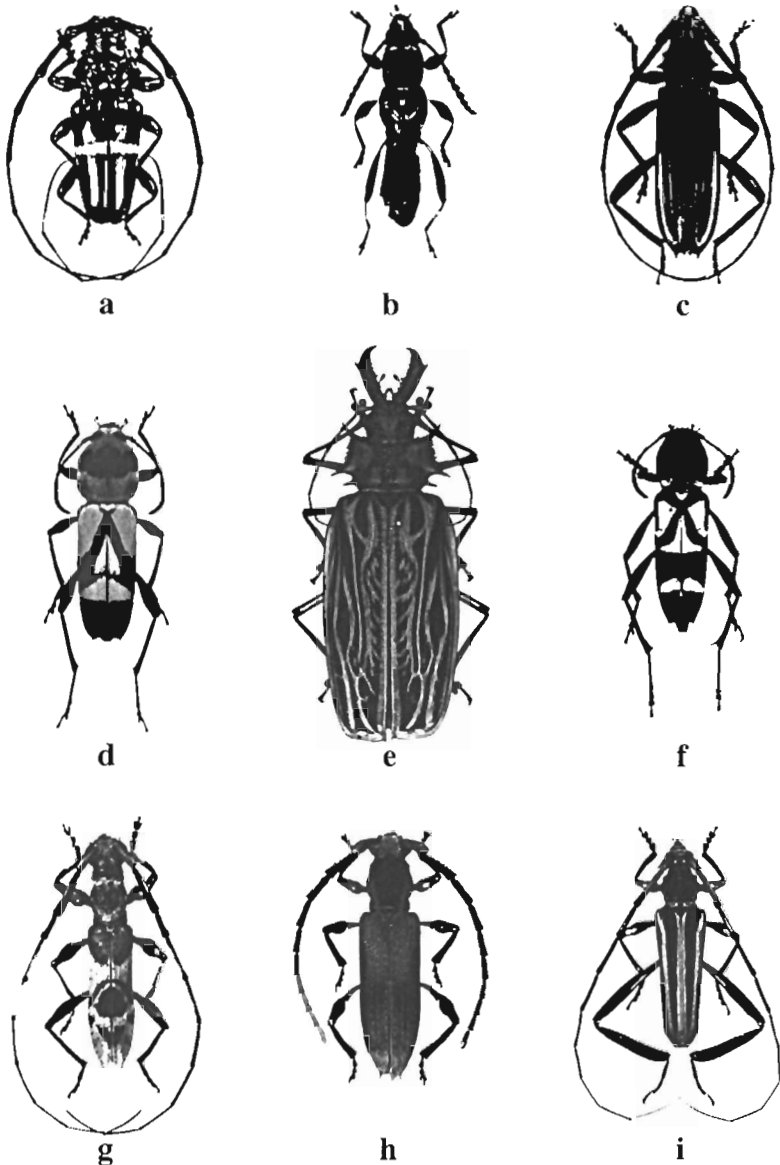


Fig. 2. Representative cerambycids reared in French Guiana. a. *Trachyderes succinctus* (Linnaeus, 1758): 10–35 mm, generalist, emerged from *Hymenaea courbaril* S&P3492, *Hymenolobium flavum* L1245, *Hevea brasiliensis* PINARD det., and *Psidium guajava* FEUILLET det. b. *Tomopterus obliquus* Bates, 1870: 7.4–8.2 mm, Sapotaceae specialist, emerged from *Ecclinusa guianensis* M23513, *Micropholis guyanensis* L1320 & M23440, *Pouteria bangii* L1314, *P. cayennensis* L1711 & L1723, *P. gonggrijpii* S1525, *P. guianensis* S1515, *P. oblanceolata* L1736, and *Pouteria* sp. M23395, M23396, M23405, M23487, M23653, M23663, M23666, and M23677. c. *Chlorida festiva* (Linnaeus, 1758): 9–35 mm, generalist, emerged from *Heterostemon* sp. M23409, *Hymenaea courbaril* S&P3492, *Diploptropis purpurea*

literature references (Duffy, 1960) reporting an association between *Steirastoma breve* and the Malvaceae. A fourth cerambycid species, *Oreodera undulata*, emerged from trees belonging to the Sterculiaceae and the Tiliaceae. Only Eleaocarpaceae, represented here by numerous undetermined trees belonging to the genus *Sloanea*, seemed to lack convincing evidence for a close relationship with the other families constituting the Malvales.

To our surprise, we recently learned that a two-step parsimony analysis on 125 *rbcL* sequences resulted in trees that strongly support the monophyly of the core malvalian families (Bombacaceae, Malvaceae, Sterculiaceae, and Tiliaceae), but that "Eleaocarpaceae, hypothesized by most authors as a sister group to the four core malvalean families, is shown to not fall close to these taxa" (Alverson et al., in press). It was gratifying to find the beetles and the molecules in accord!

3. *Lecythidaceae*

The 41 plant specimens investigated (19 spp., 4 genera) gave rise to 17 cerambycid species. Lecythidaceae was one of two plant families that not only gave rise to an unusually well-defined guild of specialists but also was conspicuously avoided by generalists. Five of the cerambycid species were represented by a single host record, although some of these longicorns are closely related to beetles that are clearly Lecythidaceae specialists. Of the remaining cerambycid species, only one was a generalist. Nine of the 11 specialist species emerged from two or more tree genera, including *Neoeutrypanus incertus*, *Oedopeza leucostigma*, *Palame* spp., *Periboeum pubescens*, *Xylergates elaineae*, and *Xylergatina pulchra*. All of these belong to the tribe Acanthociniini, with the exception of *P. pubescens*, which belongs to the tribe Elaphidionini in the subfamily Cerambycinae. The Lecythidaceae guild is currently the subject of a more detailed study (Berkov & Tavakilian, in prep.; Berkov et al., in prep.).

4. *Sapotaceae*

The 73 plant specimens investigated (at least 27 spp., 6 genera) gave rise to 36 cerambycid species. The beetle guild associated with Sapotaceae showed certain patterns reminiscent of the Lecythidaceae guild, although the species composition was totally different. The majority of cerambycids that emerged from Sapotaceae were also family-level specialists, and once again generalists were rare. Although several family-level specialists belong to the subfamily Lamiinae, the majority belong to the subfamily Cerambycinae. These include four species of *Tomopterus* (Fig. 2b), *Acorethra zischkai*, *Ischasia* sp. 926, and *Ommata* sp. 311 (all belong-

S&P3493, *Hymenobium excelsum* S1477, *Ormosia nobilis* M23611, and *Hevea guianensis* L1738 & M23418. d. *Mecometopus aurantisignatus* Zajciw, 1964: 8.5–13.5 mm, Euphorbiaceae specialist, emerged from *Glycydendron amazonicum* L1246, *Hevea brasiliensis* PINARD det., and *H. guianensis* L1738 & M23536. e. *Macrodonia cervicornis* (Linnaeus, 1758): 59–169 mm, Arecaceae, single host record, emerged from *Maximiliana maripa* de GRANVILLE det. f. *Mecometopus leprieurii* (Castelnau & Gory, 1836): 10.5–13.5 mm, Caesalpiniaceae, single host record, emerged from *Hymenaea courbaril* FOUQUET det. g. *Compsibidion charile* (Bates, 1870): 7.8–10.6 mm, Caesalpiniaceae, single host record, emerged from *Bauhinia guianensis* M23641. h. *Hemilissa cornuta* Bates, 1870: 10.6–14.8 mm, Aspidosperma (Apocynaceae) specialist, emerged from *Aspidosperma cruentum* L1682 & L1695, *A. marcgravianum* CTFT1150 & L1344, and *A. sandwithianum* L652. i. *Callichroma auricomum* (Linnaeus, 1758): 21–40 mm, Sapotaceae specialist, emerged from *Chrysophyllum sanguinolentum* M23437, *Ecclinusa guianensis* L1764 & S1475, *Manilkara bidentata* SABATIER det., *M. huberi* M23477, *Pouteria bangui* L1314, and *Pouteria* sp. L1842 & M23677.

ing to the tribe Rhinotragini), as well as *Callichroma auricomum* (Fig. 2i) and three species of *Miono chroma* (belonging to the tribe Callichromatini). In addition, *Callichroma velutinum* was reared from *Manilkara*, and three species of *Tomopterus* were associated with particular plant species. Two additional cerambycid species were associated with plant families characterized by the production of milky latex.

The tribes Rhinotragini and Callichromatini both comprise conspicuous diurnal species with flower-visiting adults. Many species belonging to Rhinotragini are brightly colored, but with reduced elytra, and mimic wasps or predatory flies. Callichromatini is composed of beautiful iridescent beetles, all of which emit a distinctive musky aroma. The Sapotaceae guild is composed largely of aposematic beetles, and the association between these longicorns and their chemically distinctive host plants certainly merits further attention.

5. Fabales

The legumes—including Caesalpiniaceae, Fabaceae, Mimosaceae, and the tribe Swartzieae (commonly treated as a member of either Caesalpiniaceae or Fabaceae, and treated as Fabaceae for the classification of host specificity in Table I)—are without doubt the most abundantly sampled plants. The 141 plant specimens (at least 73 species, 38 genera) gave rise to an astounding 123 cerambycid species. No host-utilization strategy can be proposed for the 43% of these species which were represented by a single host record. Almost 19% of the cerambycids reared were generalists. The remaining 38% of the cerambycid species were specialists.

The longicorns associated with the legumes have been the subject of additional study (Meurer-Grimes & Tavakilian, this issue). The legumes were the second plant group with a substantial number of specialists (14 out of 47) that reproduced in the trees of more than one family. In addition to these less demanding species, it has been determined that there are actually a number of different longicorn guilds, each associated with only a few plant genera.

The tribe Swartzieae has its own distinct beetle guild, including *Agaone notabilis*, *Cycnidolon approximatum*, and *Odontocera molorchoides*. Considering the disputed taxonomic status of the tribe Swartzieae, it is interesting to note that its longicorn guild shows some resemblance to guilds associated with both the Caesalpiniaceae and the Fabaceae. *Odontocera* sp. 1018 was regularly associated with trees belonging to the Swartzieae but also emerged from several trees belonging to the Caesalpiniaceae. Additional beetles belonging to the genus *Odontocera* emerged in abundance from trees belonging to the tribe Dipteryxae (Fabaceae). The generalist cerambycid *Colobothea hirtipes* has a broad host range, but within the Fabales it emerged from trees belonging to the Swartzieae and the tribe Dalbergieae (Fabaceae).

Several distinct guilds can be recognized within Caesalpiniaceae and Fabaceae. Only the Mimosaceae appears to serve a more or less consistent guild of longicorns, including *Chrysoprasis moerens*, *Hemilissa catapotia*, *Thoracibidion ruficaudatum*, and *T. striatocolle*.

Legume specialists belong to a great diversity of cerambycid tribes. The subfamily Cerambycinae is represented by tribes including Eburini, Elaphidionini, Piezocerini, Ibidionini, Rhinotragini, and Heteropsini. The subfamily Lamiinae is represented by tribes including Onciderini, Desmiphorini, Polyraphidini, Acanthoderini, Acanthocinini, and Colobotheini. There is a predictable mix of diurnal and nocturnal, cryptic and aposematic species.

6. Apocynaceae

The 26 plant specimens investigated (15 spp., 9 genera) gave rise to 17 cerambycid species. The guild was almost evenly divided between generalists and specialists, but in this case four of the specialists were cerambycids associated with various families producing milky latex, and only four longicorn species were restricted to Apocynaceae. The specialist which generated the most host records was *Hemilissa cornuta* (Fig. 2h), belonging to the tribe Piezocerini and associated with the plant genus *Aspidosperma*. Although the congener *H. opaca* was classified as a generalist, it was also most frequently associated with *Aspidosperma*.

7. Latex-Producing Plants

Three of the plant families discussed above are characterized by the production of milky latex: Moraceae, Sapotaceae, and Apocynaceae. Euphorbiaceae, another latex-producing family, was also investigated for its cerambycid fauna. An ecological study of the forest of La Fumée Mountain in central French Guiana revealed that 42.7% of the trees had a distinctive latex, resin, or sap (Mori & Boom, 1987). Given the number of specimens collected from latex-producing taxa at Sinnamary, they must also have been quite abundant at the project site.

There was a small guild of longicorns which utilized hosts from two or more of the above families. *Acrocinus longimanus* was associated most frequently with various Moraceae but was also reared from Apocynaceae. *Hylettus coenobita* was associated primarily with Moraceae but was also reared from Apocynaceae and Euphorbiaceae. *Nealcidion triangulare* had one host record from Euphorbiaceae and a second from Apocynaceae. *Nyssodrysin pulchella* emerged from Moraceae, Euphorbiaceae, and Apocynaceae. *Oreodera albata* and *O. basiradiata* emerged from both Sapotaceae and Euphorbiaceae. These beetle species were associated with no other plant families. Although the chemical constituents of the latices produced by the plants in the above families may be variable (Cronquist, 1981), they apparently provide the requisite cues to longicorns seeking oviposition sites.

Specialization on latex-producing plants does not appear to be restricted to cerambycids. Caterpillars belonging to 17 species were documented feeding on the leaves of *Manilkara chicle*, a tree belonging to the Sapotaceae which is commonly found in the Santa Rosa National Park in Costa Rica. Although this appeared to be the sole host plant of most of the caterpillars, the sphingid *Erinnyis ello* was reported to feed upon three or more latex-rich tree species (Janzen, 1988).

V. Conclusions

It has been suggested that cerambycids, as wood-boring beetles, would not be especially prone to develop host-specific relationships with plants (Bassett, 1992; Bassett et al., 1996). The longicorns investigated in this study lay their eggs in freshly fallen wood, and the longest and most vulnerable part of the life cycle is spent, as larvae, in intimate contact with host tissues. When a host-utilization strategy can be determined, specialists outnumber generalists by more than 3:1, although this ratio is very different from one plant taxon to the next. Specialists are, however, seldom associated with a single plant species; rather, they are most frequently able to locate and successfully reproduce in the wood of related species. Extreme specialism might be a more reliable strategy in temperate ecosystems, typically dominated by

fewer species represented by more individuals (Bassett, 1992, and references therein; Beaver, 1979; Hammond, 1992).

The fact that some longicorn species are associated with unrelated latex-producing plants suggests that plant chemistry plays an important role in determining the range of suitable host plants for cerambycids. Intrafamilial variability in plant chemistry also appears to have a profound influence on beetle attack. For instance, certain members of the Lecythidaceae produce putrid-smelling compounds which appear to act as oviposition deterrents to Lecythidaceae specialists. The possible influence of chemical characteristics on host specificity in longicorns is the subject of two additional studies (Berkov et al., in prep.; Meurer-Grimes & Tavakilian, this issue). Abundantly represented plant taxa are associated with cerambycid guilds composed of both related and unrelated cerambycid species, indicating that, in most cases, specialization on a particular plant group has arisen repeatedly. These guilds are sometimes extremely well defined, and on at least one occasion the beetles reared from a log provided the clues required to identify a sterile herbarium voucher! Careful analysis of the longicorn guilds could also provide useful data for taxonomic and phylogenetic studies of tropical plants at both the intra- and interfamilial levels.

This study supported the observation that when insects are sampled, relatively few insect species are abundantly represented and most insect species are quite sparsely represented (Elton, 1975). The implication is that there are many insect species that we simply haven't learned how to locate, or that many species are able to persist at what seem to be impossibly low population densities.

Forest fragments left in the wake of tropical deforestation are unlikely to retain a full complement of the species present within intact forests. Relict populations within isolated tracts of forest would face increased competition for dwindling resources. These populations, which could not be replenished via recolonization from adjacent forest, would find it difficult to rebound from periods of adverse conditions. Tropical insects with narrow host ranges would be at a particular disadvantage. Those dependent on a single host plant would face local extinction if their host was eliminated or its abundance too drastically reduced. Most tropical cerambycids do not appear to have the excessively narrow reproductive/larval feeding niches that might make them particularly vulnerable to disruption and habitat loss.

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