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A PRELIMINARY CHECKLIST OF THE VASCULAR PLANTS OF THE CHIQUIBUL FOREST, BELIZE

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Covering an area of 177,000 hectares, the region known within Belize as the Chiquibul Forest comprises the country's largest forest reserve and includes the Chiquibul Forest Reserve, the Chiquibul National Park and the Caracol Archaeological Reserve. Based on 7047 herbarium and live collections, a checklist of 1355 species of vascular plant is presented for this area, of which 87 species are believed to be new records for the country. Of the 41 species of plant known to be endemic to Belize, four have been recorded within the Chiquibul, and 12 species are listed in The World Conservation Union (IUCN) 2006 Red List of Threatened Species. Although the Chiquibul Forest has been relatively well collected, there are geographical biases in botanical sampling which have focused historically primarily on the limestone forests of the Chiquibul Forest Reserve. A brief review of the collecting history of the Chiquibul is provided, and recommendations are given on where future collecting efforts may best be focused. The Chiquibul Forest is shown to be a significant regional centre of plant diversity and an important component of the Mesoamerican Biological Corridor.

Keywords. Belize, Chiquibul, conservation, flora, species checklist.

INTRODUCTION

This work provides a preliminary species list of the vascular plants of the Chiquibul Forest (CF), Cayo District, Belize. It is based primarily on the herbarium collections of botanists who have focused their floristic studies on the area between 1938 and 2005, using data compiled from collections held in the herbaria of Belmopan, Belize (BRH), the Natural History Museum, London (BM), the Missouri Botanical Garden (MO), the Royal Botanic Garden Edinburgh (E), The New York Botanical Garden (NY) and Marie Selby Botanical Gardens (SEL). Although the list is based largely on botanical collections made within the Chiquibul Forest Reserve (CFR), it also includes collections from within the Chiquibul National Park and the adjacent Caracol Archaeological Reserve. As there are many different species in this paper, authors of species names are not given in the text, but are provided in Appendix 1.

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Reserve area and use

The Chiquibul Forest Reserve is situated within a region known as the Greater Maya Mountains (Penn *et al.*, 2004), and originally covered an area of 184,925 hectares when first designated a Forest Reserve in 1956. In 1991, part of the reserve was re-classified as a National Park and the CFR's current area comprises 59,822 hectares. Considered together with the Chiquibul National Park and the Caracol Archaeological Reserve, the reserve is contiguous with the forests of Bladen Nature Reserve, Cockscomb Basin Wildlife Sanctuary, Columbia River Forest Reserve in Belize, and the Petén region of Guatemala. The Chiquibul region of Belize forms part of Mesoamerica's regional 'Maya Forest'. It lies adjacent to the Rio Chiquibul-Montañas Maya Biosphere Reserve in the Petén (created in 1995) and forms part of the Chiquibul/Maya Mountains Key Biodiversity Area, a priority area for conservation recognized by Conservation International. Considered together with neighbouring protected areas, the Chiquibul Forest of Belize comprises one of the largest remaining tracts of tropical forest in Central America.

As a forest reserve, the CFR is currently managed for timber production and conservation, with logging operations dating back to the 1920s (Johnson & Chaffey, 1973; Bird, 1998). Mahogany (*Swietenia macrophylla*) and cedar (*Cedrela odorata*) have been the primary species extracted from the area, with smaller amounts of other secondary hardwoods such as Santa Maria (*Calophyllum brasiliense*) and nargusta (*Terminalia amazonia*) also harvested. In addition, the CFR is historically renowned for a number of non-timber forest products (NTFPs) which were once the basis of sizeable industries. Chicle, tapped from the tree *Manilkara zapota*, was harvested for many decades and exported to the USA, where it was used in the production of chewing gum, and the name 'Chiquibul' is derived from the association of this forest with the chicle tree (also known as 'sapodilla'). The fruits of allspice (*Pimenta dioica*) have also been collected and exported as a culinary flavouring. However, these two products have not been extracted in significant quantities from the CFR since the 1950s, although they continue to be harvested in the neighbouring Petén region of Guatemala. From the late 1990s until the present, the Chiquibul has been the focus of illegal trade in harvested leaves (xaté) of the understorey palm *Chamaedorea ernesti-augustii*. These leaves are collected primarily by Guatemalan xateros (leaf cutters) for export to the USA and Europe for the floriculture industry (Bridgewater *et al.*, 2006).

Forest use in the CFR dates back at least to the early Maya civilization (c.300 BC), and much of the area now supporting forest was almost certainly under agriculture during the height of the early Maya civilization prior to AD 1000 (Furley, 1998). The Chiquibul Forest is rich in Maya ruins, and it is not unusual to come across these whilst working in the forest. For example, there are residential settlements scattered across the region, and many hill slopes now thick with forest clearly show the remains of ancient agricultural terracing. The use of

terracing to maximize land productivity in hilly areas was a common agricultural technique of the Maya (Beach, 1998). The large and internationally famous Caracol Mayan archaeological site is located adjacent to the CFR, within the Caracol Archaeological Reserve. By the close of the 7th century AD this settlement had become one of the most populous cities in the Pre-Columbian world. Stretching over 65 square miles, it was home to more than 120,000 people (Chase & Chase, 1996). In more recent times, the Chiquibul region has attracted widespread attention due to an international campaign which attempted to halt the building of a controversial dam for the production of hydroelectric power at Chalillo on the Macal River. One of the premises of the campaign was that the dam would flood and destroy a significant proportion of a rare riverine habitat, critical to many endangered species such as Baird's tapir and Morelet's crocodile (Minty *et al.*, 2001; Barnett, 2002). The dam has now been completed and the resulting reservoir has had a significant and irreversible negative impact on the biodiversity of the rare riparian habitat along the Macal and Raspaculo Rivers. Other human activities within the area include exploratory drilling for nickel in the 1970s and 1990s, gold extraction (from the 1990s), hunting and agricultural incursions.

Geology and soils

The present-day landforms of the Chiquibul reflect the underlying geology. The geology of the Chiquibul area has been described by Ower (1928), Dixon (1956), Wright *et al.* (1959) and Bateson & Hall (1977). The CFR lies on the western slopes of the up-faulted block of Palaeozoic rocks which form the Maya Mountains. The area is largely underlain by metamorphosed sedimentary mudstones and shales which have been intruded in some parts by granite. During the Cretaceous period, limestone was formed over much of the area, although much has since been eroded. Rolling karst (500–700 m altitude) is situated in the west of the reserve, and sloping mountainous terrain underlain by sedimentary and metamorphic bedrock of the Santa Rosa group (700–1000 m) lies to the east.

Climate

Belize lies between 15° and 19°N, and the CFR has a strongly seasonal climate, with a marked dry season between February and June. Annual precipitation is c.1500 mm in the northern part of the reserve (Johnson & Chaffey, 1973), although there is considerable variation over the region. The climate is strongly influenced by the Maya Mountains which comprise the south and eastern borders of the reserve. Moisture-laden eastern trade winds are forced to rise as they pass over the Maya Mountains, provoking high orographic rainfall in the mountains (i.e. rain condenses from rising cloud due to the expansion and cooling effect of uplift), with punctuated

rain shadows to the west of the range. Belize lies within the hurricane belt and the CFR was strongly affected by Hurricane Hattie which passed directly through it in 1961 (Johnson & Chaffey, 1973). This caused severe ecological disturbance, flattening large areas of the forest. The forest is currently in a state of recovery from this hurricane, and throughout its history the Chiquibul has probably been periodically affected by such catastrophic episodes.

Vegetation types

A review of the history of classification of vegetation types across the Chiquibul Forest can be found in Penn *et al.* (2004). This work also provides a detailed vegetation classification scheme for the Greater Maya Mountains comprising 32 different vegetation classes. An alternative classification is suggested by Meerman & Sabido (2001). The latter comprises part of a nationwide ecosystems map, and this can be accessed via the Biodiversity and Environment Resource Data System of Belize (http://www.biodiversity.bz). These classifications should be consulted when undertaking botanical inventory studies within the CFR. Both draw heavily on remote sensing techniques and have modified the earlier vegetation classifications for the region prepared by Wright *et al.* (1959) and Iremonger & Brokaw (1995).

Wright's 1959 classification recognized nine vegetation subclasses, comprising evergreen, deciduous and semi-deciduous forest. Iremonger and Brokaw's classification, published 35 years later, recognized seven. For the most part these all comprise what can be considered as variations of generic 'lowland' and 'submontane' broadleaf subtropical moist forest (Holdridge, 1967). Following Penn's most recent classification, the primary vegetation types within the CFR are: (1) broadleaf deciduous forest, (2) broadleaf seasonal forest, (3) broadleaf high evergreen forest, (4) semi-evergreen forest, (5) riparian forests, (6) gallery forests, and (7) savanna.

The *Broadleaf deciduous* and *Broadleaf seasonal forest* classifications of Penn *et al.* (2004) cover much of the central and western areas of the CFR and roughly correspond to the *Broadleaved forests rich in lime loving species* of Wright, the *Broadleaved hill forests over limestone terrain* of Iremonger & Brokaw (1995), and the *Tropical evergreen seasonal broad-leaved forest over karstic terrain* of Meerman & Sabido (2001). The topography of this region comprises rolling hills, sometimes with steep slopes, and the bedrock is limestone, the soils therefore being alkaline. Many of the broadleaved tree species (such as *Schizolobium parahyba* and *Cedrela odorata*) lose their leaves during the dry season. Deciduousness is especially pronounced on exposed hilltops.

Following Penn *et al.* (2004), the eastern CFR region comprises altitudinal varieties of *Broadleaf semi-evergreen forest*. This equates to the *Tropical evergreen seasonal broad-leaved submontane forests* of Meerman & Sabido (2001). This region rises eastwards towards the Maya Mountains (Maya Divide), as the limestone

is replaced by mudstones and sandstones. Riparian forests follow the main watercourses throughout the reserve. The main rivers of note running through the region are the Raspaculo River, the Macal River, the Chiquibul River, the Ceibo Grande River and the Ceibo Chico River. A large patch of savanna at San Pastor overlying an area of sandstone and slate is also worthy of note (Johnson & Chaffey, 1973).

History of collection

The history of botanical studies in Belize has been presented in detail by Spellman *et al.* (1975), Balick *et al.* (2000) and Brokaw (2001). In short, there were relatively few botanical collections made in Belize prior to the 20th century. Significant collections began with the efforts of Morton Peck of the Yale University School of Forestry (1905–1907), and continued with Cyrus Longworth Lundell (1928–1936), William Schipp (1929–1941) and Percival Gentle (1931–1958). Since the 1960s botanical collections have continued to increase throughout Belize and numerous Belizean and foreign collectors have focused their studies on the country. Relatively few, however, have collected within the confines of the Chiquibul Forest Reserve.

Significant concentrated botanical studies within the Chiquibul began with the Belizean Percival Gentle (BRH, MO; 1938), continuing with Cyrus Lundell (MICH; 1937–1984), Bassett Maguire (NY; 1967), George Proctor (IJ; 1968–1969), David Spellman (MO; 1970), John Dwyer (MO; 1972–1974), Thomas Croat (MO; 1973), Al Gentry (MO; 1973) and Michael Balick (NY; 1990–1992). The construction of the Las Cuevas Research Station by the Belize Forest Department and the Natural History Museum (London) in 1991 resulted in a significant increase in collections over the following decade. Between this time and the present day over 4000 numbers have been collected, the majority by Caroline Whitefoord (BM; 1980–2000), Alex Monro (BM; 1994–2000), Steve Cafferty (BM; 1998–2000), Mamen Peña (BM; 2000) and David Sutton (BM; 1980–2005; including on Victoria Peak). In addition MSc students from the Royal Botanic Garden Edinburgh (E) have collected extensively within the Chiquibul Forest Reserve between 2000 and 2005. Other significant collectors include Sandy Knapp (BM; 1997–2001), Lillis Urban (E; 2003), Alicia Ibáñez García (E; 1996), Rosita Arviga (MO; 1989), Stephen Ingram (SEL; 1993), Thomas Hawkins (MO; 1996), Bruce Holst (SEL; 1996–2001; including from the Maya Divide), Jan Meerman (BRH; 1992–2006), Gerrit Davidse (MO; 1997; including from the Maya Divide) and Doug Holland (MO; 1997; including from the Maya Divide). In addition, Brendan Sayer from the National Botanic Gardens, Glasnevin, Ireland, and Brett Adams and Ken DuPlooy from the Belize Botanic Gardens have made live collections from the Chiquibul, mostly of orchids, and Steven Brewer (WNC; 2004), Samuel Bridgewater (BM; 2004) and Bruce Allen (MO; 1993) have made over 700 collections from Doyle's Delight in the Maya Mountains, which lies on the boundary of the Chiquibul National Park.

METHODS

Information that was available electronically of all known recent and historical botanical collections from the Chiquibul Forest was collated. The greater part is housed at the following herbaria: Natural History Museum, London (BM), Royal Botanic Garden Edinburgh (E), Missouri Botanical Garden (MO), The New York Botanical Garden (NY), Selby Botanic Gardens (SEL) and Belize Forest Department, Belmopan, Belize (BRH). Collections from these herbaria form the basis of the accompanying checklist (Appendix 1). The list was checked and corrected for synonymy using the International Plant Names Index, Tropicos and available monographs and floras. Family specialists were also consulted. In many cases a species has been collected more than once, and by different collectors. In such cases only one representative specimen is cited for each species. Where possible, fertile specimens identified by specialists have been cited preferentially. Herbaria information was subsequently supplemented with determinations of live orchid collections collected within the CFR and held by the Belize Botanic Gardens and the National Botanic Gardens, Glasnevin, Ireland. In total, 7047 herbarium and live collections records were consulted. In addition, a number of species known to exist in the CFR but not collected for whatever reason (such as the CITES-listed cycad *Ceratozamia robusta*, for example), have also been included where the authors have seen the species growing in the wild. Species listed in the checklist that are not linked to known herbarium specimens are clearly indicated. Information submitted by a few specialists has also been included where they have vouched for the occurrence of a species within the area under consideration. These are listed as such in the accompanying list. For a few taxa, site localities from historical collections have not been exact enough to enable the collection to be placed within the CFR. For example, it is common for older collections to list the locality simply as Cayo District. Where there is sufficient evidence to believe that this species may have been collected within the CFR, it has been included.

RESULTS

A total of 1355 species of vascular plants is recorded here for the Chiquibul Forest (Appendix 1). A list of the 100 most frequently observed trees, together with their common names (if known), is provided in Appendix 2. Families follow Angiosperm Phylogeny Group II (2003), although *Capparis* and *Forchhammeria* are maintained within the *Capparaceae* rather than being transferred to the *Brassicaceae* as this family has recently been re-recognized (Stevens, 2006). Included are 320 species which are found as trees, 246 species of shrub, 452 terrestrial or epiphytic herbs (including 109 species of orchid, three saprophytes and two parasites), 182 species of vine, 20 palms, four cacti, two cycads, 107 ferns (including six tree ferns and 26 epiphytic ferns), 14 woody parasites and 10 lycopods. This represents 40% of the flora of Belize as recognized by Balick *et al.*

(2000). In addition, the list includes a number of aquatics, parasites and saprophytes. The checklist presents 87 taxa not listed in Balick *et al.* (2000) (highlighted by bold face type in Appendix 1). These are therefore proposed as new records for the country. Of the 41 species of plants known to be endemic to Belize (Balick *et al.*, 2000), four have been recorded within the Chiquibul. These are *Neurolaena schippii* (*Asteraceae*; *Hawkins* 1275; MO), *Gymnanthes belizensis* (*Euphorbiaceae*; *Gentle* 2619; MO), *Scutellaria lundellii* (*Lamiaceae*; *Whitefoord* 9375; BM), and *Calyptranthes bartlettii* (*Myrtaceae*; *Urban* 14; E). In addition, 12 species are listed in the 2006 IUCN Red List of Threatened Species (Table 1). Although botanical collecting has been scattered across the Chiquibul Forest Reserve, it is concentrated at 44 main locations (Fig. 1; Table 2). However, of these, only 17 locations have more than 100 collections (Las Cuevas, Doyle's Delight, Monkey Tail, Guacamallo Bridge, 8.5–10.5 km east of Guacamallo Bridge on the Macal River, confluence of the Macal and Raspaculo Rivers, Chalillo, Smokey Branch, Ceibo Chico, Ceibo Grande, Ceibo Grande (Main Divide track), Ceibo Grande (old repeater site), Millionario, San Pastor, Grano de Oro, La Flor and New Maria), and only four sites have more than 500 collections (Las Cuevas, Monkey Tail, Guacamallo Bridge and Doyle's Delight).

DISCUSSION

Belize forms part of Mesoamerica that, despite having less than 0.5% of the world's land area, is believed to support between 7 and 10% of all known species, and 17% of

TABLE 1. Species occurring in the Chiquibul and listed in The World Conservation Union (IUCN) 2006 Red Data List of Threatened Species. EN = endangered; NT = near threatened; VU = vulnerable; LR = low risk; DD = data deficient

Species	IUCN category	Status in Chiquibul
Aegiphila monstrosa	VU	Present, but no abundance data
Aspidosperma megalocarpon	LR/NT	Common
Cedrela odorata	VU	Common
Ceratozamia robusta	VU	Present; population numbers small
Gaussia maya	VU	Present, but no abundance data
Magnolia yoroconte	VU	Present, but no abundance data (found at altitude)
Podocarpus guatemalensis	DD	Present, but no abundance data (found at altitude)
Pouteria amygdalina	VU	Present, but no abundance data
Sideroxylon stevensonii	VU	Present, but no abundance data
Swietenia macrophylla	VU	Occasional/common
Vitex gaumeri	EN	Common
Zamia polymorpha	NT	Present, but no abundance data

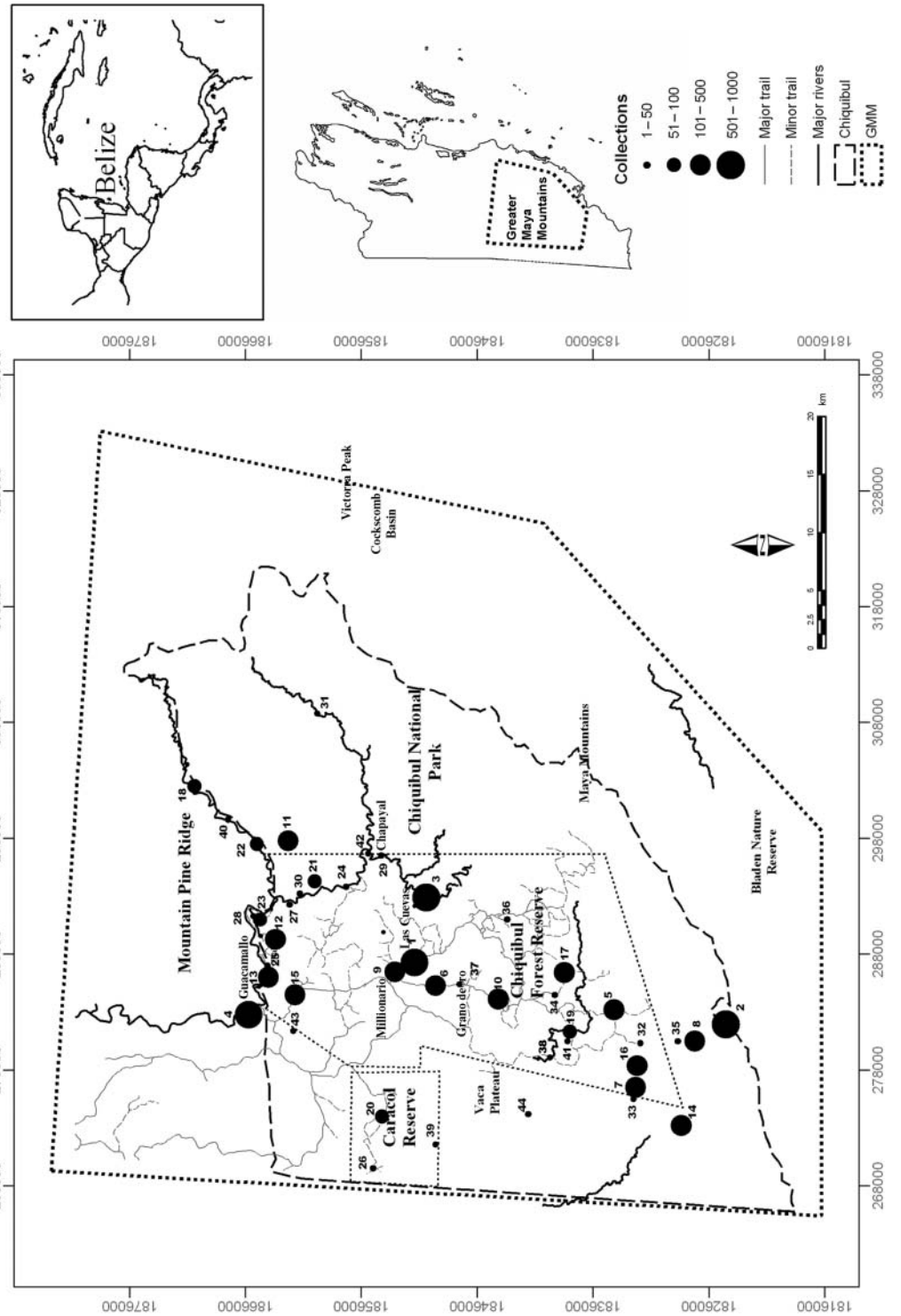

FIG. 1. Collecting locations in the Chiquibul Forest Reserve, Belize.

TABLE 2. Primary plant collecting localities within the Chiquibul Forest (see Fig. 1 for locations) (*Cont'd on p. 278*)

	Locality	UTM Coordinates EW	UTM Coordinates NS	No. of collections
A	**More than 500 collections**			
1	Las Cuevas	287300	1851400	843
2	Doyle's Delight	281938	1824544	761
3	Monkey Tail Branch	292900	1850400	747
4	Guacamallo Bridge	282800	1865700	684
B	**Between 101 and 500 collections**			
5	Smokey Branch	283200	1834200	370
6	San Pastor	285300	1849600	299
7	Ceibo Grande	276500	1832300	208
8	Ceibo Grande to Main Divide track, towards Main Divide	280500	1827200	178
9	Millionario	286500	1853100	174
10	Grano de Oro	284100	1844200	167
11	8.5–10.5 km E of Chalillo	297800	1863200	165
12	Confluence of Raspaculo and Macal Rivers	289290	1863400	164
13	Chalillo	286000	1864000	133
14	Ceibo Chico drill site	273200	1828400	129
15	New Maria Camp	284500	1861700	111
16	Ceibo Grande to Main Divide track, by old repeater site	278400	1832200	104
17	La Flor (Rio de la Flor)	286400	1838500	104
C	**Between 51 and 100 collections**			
18	Francelia	302500	1870400	87
19	Natural Arch	281300	1838000	79
20	Caracol	274000	1854200	74
21	3.5–4 km SSE of Macal/Raspaculo River confluence	294300	1860000	67
22	Blossom Berry Creek	297500	1865000	62
23	1.5–2 km NW of Macal/Raspaculo River confluence	291000	1864750	53
24	Blue Hole	293800	1857300	50
D	**1–50 collections**			
25	1 km E of Chalillo	287000	1864100	
26	Valentin	269500	1855000	
27	1–1.5 km SW of Macal/Raspaculo River confluence	292300	1862200	
28	4 km ENE of Chalillo	291300	1865300	
29	1.5 km SSW of Raspaculo/Monkey Tail River confluence	296500	1854300	
30	2.25 km S of Macal/Raspaculo River confluence	293200	1861300	
31	Cuxti Bani	308800	1859800	

TABLE 2. (*Cont'd*).

	Locality	UTM Coordinates EW	UTM Coordinates NS	No. of collections
32	Palmar	280300	1831900	
33	Cotton Tree Creek	275500	1832500	
34	Union Camp	284500	1839300	
35	Engineer's Camp	280500	1828700	
36	Champas Camada	291000	1843400	
37	Los Lirios	279100	1839700	
38	Resumadeiro	279100	1839700	
39	Retiro	271600	1849600	
40	Kinlocks	299600	1867500	
41	Arabato Camp	280500	1838200	
42	Chapayal	296700	1855400	
43	Cubetas	281365	1861846	
44	Sink Hole	274200	1841600	

Note. Many localities have had only one collection made from them. These sites have not been listed. Therefore, the numbers of collections above do not add up to 7047.

all terrestrial species. Mesoamerica is considered to be the second most important of 25 globally identified hotspots, when a combination of threat, species diversity and endemism are taken into account (Conservation International, 2004). The Selva Maya, of which the Chiquibul contributes a significant part, is one of the largest continuous expanses of neotropical rainforest outside Amazonia, and forms a key component of the Mesoamerican Biological Corridor. Within Mesoamerica 284 species of plants are considered to be Globally Threatened, with 28 of these stated as occurring in Belize (The World Conservation Union, 2006). Of these, 12 species from the Chiquibul are recorded as being vulnerable (Table 1). However, the IUCN Red List of Threatened Species applies its categories over an entire region and a number of the species listed as vulnerable are actually fairly abundant within the Chiquibul. These include *Cedrela odorata*, *Vitex gaumeri*, *Swietenia macrophylla* and *Aspidosperma megalocarpon*. Two of the species are found only at higher elevations (*Magnolia yoroconte* and *Podocarpus guatemalensis*).

The majority of collections have been made within the limestone broadleaf forests of the Chiquibul Forest Reserve (CFR). However, collecting intensity, even within the floristically well-known areas, needs to be significantly increased as only seven localities within the Chiquibul Forest have had over 200 collections (Table 2). The forest of much of the CFR covers low lying hills, often above 500 m altitude (although below 1000 m), and can be classified as either lowland or submontane in nature. Different authors recognize different numbers of forest subtypes for the region, but for the most part, the same basic tree floristic matrix dominates throughout. Particularly characteristic tree species of the lime-rich soils of the CFR include *Brosimum alicastrum*, *Protium copal*, *Manilkara zapota*, *Vitex gaumeri*,

Cedrela odorata, *Pseudolmedia spuria*, *Drypetes brownii*, *Dialium guianense*, *Schizolobium parahyba*, *Pouteria campechiana*, *P. reticulata*, *Trichilia minutiflora*, *T. pallida*, *T. erythrocarpa*, *Guarea glabra*, *Zanthoxylum riedelianum*, *Astronium graveolens, Swietenia macrophylla*, *Sebastiania tuerckheimiana*, *Dendropanax arboreus*, *Cojoba arborea*, *Cordia alliodora*, *Calophyllum brasiliense*, *Terminalia amazonia*, *Spondias radlkoferi*, *Stemmadenia donnell-smithii* and *Pimenta dioica*. The majority of these species are regionally widespread, and the flora of the Chiquibul Forest is similar to those occurring in other karstic regions within Belize and the Petén of Guatemala. Forest on the steeper karstic terrain is prone to considerable seasonal drought, and Penn *et al.* (2004) note that characteristic species of these hilltop forests include *Beaucarnea pliabilis* and *Plumeria obtusa*. The current authors have noted that some species (e.g. *Chamaedorea schippii*) are apparently confined to hill summits.

Not all the bedrock of the Chiquibul is limestone, and in areas of metamorphic shales and mudstones, most notably in the eastern portions of the CFR and the Chiquibul National Park (CNP), the forest flora, whilst maintaining many of the species elements of the limestone areas, is likely to be significantly different. Other than floristic work conducted by David Sutton (BM) at Cuxti Bani on the upper Raspaculo (Rogers *et al.*, 2000), little research has yet been done in these areas. It would therefore be most worthwhile to focus future collecting efforts on the vegetation types classified by Meerman & Sabido (2001) as *Tropical evergreen seasonal broad-leaf submontane forest* (*Simarouba-Terminalia* variant) and *Tropical evergreen seasonal broad-leaf submontane forest* (*Virola-Terminalia* variant), and by Penn *et al.* (2004) as *Semi-evergreen forest* and *Transitional semi-evergreen forest*. Species noted as characterizing these vegetation types over (relatively) nutrient poor soils include *Terminalia amazonia*, *Vochysia hondurensis*, *Simarouba glauca*, *Virola koschnyi* and species of the *Melastomataceae*.

At higher elevations the forest flora changes significantly, with the palms *Colpothrinax cookii*, *Euterpe precatoria* and *Synechanthus fibrosus* common in many areas. Other (relatively) high altitude woody species of note include *Hedyosmum mexicanum*, *Cyrilla racemiflora*, *Pinus oocarpa*, *Liquidambar styraciflua*, *Podocarpus guatemalensis*, *Quercus cortesii*, *Ilex guianensis*, *Magnolia yoroconte*, *Zapoteca tetragona* and *Randia matudae*. The high altitude vegetation of the Chiquibul (i.e. that occurring at a height of around 1000 m) is still very poorly known due to its inaccessible nature. Within the Chiquibul, floristic work at higher elevations on various sections of the Maya Divide has been conducted by Monro, Cafferty and Peña (2000), Bruce Holst (1996) and Gerrit Davidse and Doug Holland (1997). In addition, over 700 collections have been made at Doyle's Delight by Bruce Allen (1993), and Steven Brewer and Samuel Bridgewater (2004). Collections have also been made at Victoria Peak by David Sutton and Malcolm Penn (2003, 2005). Increasing the concentration of collections from these and other montane areas is certainly a priority for future research. Scientifically, such work would be well worth the effort, most likely

yielding a number of new species records for Belize. For example, a 10-day expedition to Doyle's Delight in 2004 by Brewer and Bridgewater yielded 400 collections, comprising 151 species, eight of which were new for Belize (Brewer & Bridgewater, 2004).

Over 100 species are recorded here as being particularly associated with riverine habitats. Although the most conspicuous woody elements of riverine vegetation are well known, the floristic assemblages making up such vegetation within the Chiquibul region are still relatively poorly understood. Intensive botanical collecting has been conducted only on the Macal River at Guacamallo Bridge, and on the Monkey Tail Branch adjacent to Monkey Tail Camp. Collecting has also occurred on the Macal River upstream from Guacamallo Bridge, Ceibo Chico and Ceibo Grande, Natural Arch, on the upper Raspaculo at Cuxti Bani and Chapayal, and on the lower Raspaculo between Chapayal and Chalillo. To our knowledge, only one published floristic survey of riverine vegetation in this region exists (Urban *et al.*, 2006). This work cites *Inga vera* subsp. *vera*, *Cuphea calophylla*, *C. utriculosa*, *Calyptranthes bartlettii*, *Augusta rivalis*, *Symphyotrichum expansum*, *Ludwigia octovalvis* and *Spermacoce verticillata* as amongst the most frequent species of this habitat. The primary aquatic plant growing in fast flowing streams is *Marathrum oxycarpum* (*Podostemaceae*). The dense fringing riverine vegetation itself was noted by the authors as being characterized by *Inga vera* subsp. *vera* (dominant), *Calyptranthes lindeniana*, *Pleuranthodendron lindenii*, *Nectandra salicifolia*, *Cojoba graciliflora* and *Calliandra tergemina* var. *emarginata.* In addition, there are often frequent emergent trees scattered along river banks, including *Schizolobium parahyba*, *Ceiba pentandra*, *Lonchocarpus guatemalensis* and *Spondias radlkoferi*. In heavily disturbed areas, the grass *Tripsacum latifolium* is often dominant, and the palm *Attalea cohune* is widespread where soils are deep. There is still much to be learnt about the riverine flora, and Natural Arch (Chiquibul River), Ceibo Grande and Ceibo Chico and the upper Raspaculo River would all make ideal future study sites. The loss of over 18 km of riverine habitat on the Macal and 15 km of the same vegetation on the lower Raspaculo on completion of the dam at Chalillo in 2005 makes it particularly important that this rare and threatened habitat type is studied in more detail in the future.

Although the majority of the Chiquibul region is covered by forest, a number of patches of pine savanna do occur, most notably at San Pastor. Botanical collections within this formation are few. A detailed floristic survey would be most useful to allow this formation (classified as open savanna with *Pinus oocarpa* by Penn *et al.* (2004), and as submontane pine forest by Meerman & Sabido (2001)) to be described and compared with other savanna areas within Belize. Although *Pinus caribaea* var. *hondurensis* dominates this community, *Pinus oocarpa* is also present together with species such as *Ilex guianensis* and *Quercus* spp. No published species list exists for this formation. This patch of savanna is easily reached, being less than an hour's walk from the Las Cuevas Research Station, and describing its flora would make an ideal research project.

In general, it would be most useful for future specific collecting endeavours to be concentrated within a specific vegetation type identified by either Meerman & Sabido (2001) or Penn *et al*. (2004), and for detailed species lists to be compiled to allow comparisons to be made between different vegetation types. Although the present contribution provides a preliminary composite checklist of the Chiquibul flora, ecological patterns of diversity within the forest, and between the Chiquibul and other regional forest areas, remain obscure. In addition to improving general collections, it would be useful for such work to adopt the quantitative methodology of Brewer *et al.* (2003) which has successfully used 2 × 500 m transects to clarify patterns of tree diversity in southern Belize. This would enable comparative studies to be undertaken between the flora of forest areas both north and south of the Maya Divide. The main quantitative forest work that has been done in the Chiquibul has been related to forest inventory work, the three primary studies of significance being those of Johnson & Chaffey (1973), Bird (1998) and Rogers *et al.* (2000). In addition, botanical work of a phytogeographic nature should focus on key taxonomic groups where good taxonomic capacity exists (e.g. grasses, ferns, legumes, etc.), whilst general collecting is required for under-collected groups such as mosses and lichens. It is hoped that this preliminary checklist and associated notes will assist forest botanical researchers working in the Chiquibul Forest to maximize the useful impact of their collecting endeavours and aid conservation planners and future managers by providing reliable, and verifiable, information on its vascular plant diversity. Undoubtedly, as this list represents only a first attempt to collate the floristic information available, many species will be added to the list in the future and some species currently included may be later removed if proven to be misidentifications. However, it serves as a starting point for discussion and illustrates that the Chiquibul is a significant centre of regional plant diversity worthy of its conservation status. Indeed it is now recognized as one of 24 Key Biodiversity Areas within northern Mesoamerica by Conservation International (2004). The facilities provided by the Las Cuevas Research Station make it an excellent centre for exploring the Chiquibul and it is hoped that its presence, with the support of a new international consortium of partners, including the Conservation Management Institution, Acadia University, the Royal Botanic Garden Edinburgh and the Belize Forest Department, will encourage more botanical collectors to improve our knowledge of the area.

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APPENDIX 1

Preliminary checklist of the vascular plants of the Chiquibul Forest, Belize

New species records for Belize are in bold.

Habit codes (H). h = herb; s = shrub; t = tree; v = vine; ss = scandent shrub; e = epiphyte; a = aquatic; sa = saprophyte; p = woody parasite; he = hemiepiphyte; f = fern; tf = tree fern; pa = palm.
Habitat codes (Ha). a = aquatic; f = forest; r = riverine; ps = pine savanna; cult. = cultivated.
Voucher information. All vouchers cited are herbarium or spirit collections, except the orchid collections of B. Sayer (Glasnevin) and the Belize Botanic Gardens (BBG) which are live collections held at the National Botanic Gardens, Glasnevin, Ireland, and the Belize Botanic Gardens.
Herbarium codes. BM = Natural History Museum, London; E = Royal Botanic Garden Edinburgh; MO = Missouri Botanical Garden; NY = The New York Botanical Garden; MICH = University of Michigan; BRH = Belize Herbarium, Belmopan; SEL = Marie Selby Botanical Gardens; WNC = University of North Carolina, Wilmington. SC – Spirit collection.

Notes
1. + = species collected only at Doyle's Delight (1124 m) on the highest point of the Maya Divide, or on the ridge of the Divide itself. These collections occur on the boundary of the Chiquibul.
2. Names in parentheses following some taxa are synonyms.
3. Families follow Angiosperm Phylogeny Group II (2003). Under this new classification scheme a number of genera have been transferred from one family

to another, with some families (e.g. *Flacourtiaceae*) being disbanded altogether. As APG II may not be familiar to some, in an attempt to assist those trying to find a genus under its new family name, a suggestion is placed at the start of families where changes have been made of where to look. For example, all *Flacourtiaceae* are now listed under *Salicaceae*, *Cochlospermum* has been moved from *Cochlospermaceae* to *Bixaceae*, and *Anagallis* from *Primulaceae* to *Myrsinaceae*.

Taxon	H	Ha	Voucher
MAGNOLIOPHYTA			
Acanthaceae			
Aphelandra aurantiaca (Scheidw.) Lindl.	h/s	f	*A. Monro* 763 (BM)
Aphelandra scabra (Vahl) Sm.	h/s	f/r	*C. Whitefoord* 10014 (BM)
Blechum pyramidatum (Lam.) Urb.	h	f	*C. Whitefoord* 9142 (BM)
Dicliptera sexangularis (L.) Juss.	h	f/r	*L. Urban* 83 (E)
Dicliptera sumichrastii Lindau	h/s	f/r	*C. Whitefoord* 10065 (BM)
Hygrophila costata Nees (= *H. guianensis* Nees)	h	r	*M. Peña* 1072 (BM)
Justicia aurea Schltdl.	h/s	f/r	*T. Hawkins* 1178 (MO)
Justicia bartlettii (Leonard) D.N.Gibson	s	f	*T. Hawkins* 1219 (MO)
Justicia breviflora (Nees) Rusby	h/s	f/r	*L. Seed* 7 (E)
Justicia pectoralis Jacq.	h	f/r	*C. Whitefoord* 10043 (BM)
Justicia spicigera Schltdl.	s	f/r	*L. Urban* 388 (E)
Louteridium donnell-smithii S.Watson	s	f	*D. Harris* 7888 (E)
Mendoncia retusa Turrill	v	f	*A. Monro* 2630 (BM)
Odontonema albiflorum Leonard	h	f	*A. Monro* 3161 (BM)
Odontonema callistachyum (Schltdl. & Cham.) Kuntze	h/s	f/r	*A. Monro* 1722 (BM)
Odontonema hondurensis (Lindau) D.N.Gibson	s	f/r	*C. Whitefoord* 10343 (BM)
Odontonema tubaeforme (Bertol.) Kuntze	s	f	*L. Urban* 291 (E)
Ruellia geminiflora Kunth	h	f/r	*J. Milton* 23 (E)
Ruellia harveyana Stapf	h	f	*A. Monro* 2654 (BM)
Ruellia matagalpae Lindau	h/s	f	*K. Armstrong* 504 (E)
Ruellia pereducta Standl. ex Lundell	s	f	*C. Whitefoord* 10122 (BM)
Actinidiaceae			
Saurauia yasicae Loes.	t	f/r	*A. Monro* 2653 (BM)
Agavaceae			
Beaucarnea pliabilis (Baker) Rose	t	f	*C. Whitefoord* 2811 (BM)
Alstroemeriaceae			
Bomarea edulis (Tussac) Herb.	v	f	*C. Whitefoord* 2252 (BM)
Amaryllidaceae			
Hymenocallis littoralis (Jacq.) Salisb.	h	r	*C. Whitefoord* 10341 (BM)
Zephyranthes lindleyana Herb.	h	r	*J. Dwyer* 10196 (BRH)
Anacardiaceae			
Astronium graveolens Jacq.	t	f	*S. Bridgewater* pers. obs.
Metopium brownei (Jacq.) Urb.	t	f	*A. Ibáñez García* 79 (BM)
Mosquitoxylum jamaicense Krug & Urb.	t	f	*S. Cafferty* 38 (BM)
Spondias radlkoferi Donn.Sm.	t	f	*A. Gentry* 7783 (MO)

Annonaceae			
Annona primigenia Standl. & Steyerm.	t	f	*C. Whitefoord* 9554 (BM)
Annona squamosa L.	t	f	*A. Monro* 3192 (BM)
Annona reticulata L.	t	f	*A. Monro* 2660 (BM)
Cymbopetalum mayanum Lundell	t	f	*A. Gentry* 7816 (MO)
Guatteria amplifolia Triana & Planch. (= *G. diospyroides* Baill.) +	t	f	*S. Brewer* 1721 (WNC)
Guatteria diospyroides Baill.	t	f	*C. Whitefoord* 9332 (BM)
Mosannona depressa (Baill.) Chatrou subsp. *depressa* (= *Malmea depressa* (Baill.) R.E.Fr.)	t	f	*J. Dwyer* 10768 (MO)
Sapranthus campechianus (Kunth) Standl.	t	f	*T. Croat* 23556 (MO)
Xylopia frutescens Aubl.	t	f	*L. Urban* 346 (E)
Apiaceae			
Unknown	h	r	*B. Holst* 8013 (SEL)
Apocynaceae			
Allamanda cathartica L.	s	r	*J. Dwyer* 12283 (MO)
Asclepias curassavica L.	h	f	*C. Whitefoord* 9477 (BM)
Aspidosperma desmanthum Benth. ex Müll.Arg.	t	f	*C. Lundell* 6326 (MO)
Aspidosperma megalocarpon Müll.Arg.	t	f	*C. Lundell* 6220 (MO)
Blepharodon mucronatum (Schltdl.) Decne.	v	f	*A. Gentry* 7773 (MO)
Fischeria scandens DC.	v	f	*A. Gentry* 7748 (MO)
Forsteronia myriantha Donn.Sm.	v	f	*C. Whitefoord* 9170 (BM)
Forsteronia peninsularis Woodson	v	f	*J.D. Dwyer* 10789 (BRH)
Gonolobus leianthus Donn.Sm.	v	f	*C. Whitefoord* 10403 (BM)
Lacmellea standleyi (Woodson) Monach.	t	r	*C. Whitefoord* 9416 (BM)
Mandevilla subsagittata (Ruiz & Pav.) Woodson	v	f	*C. Whitefoord* 9509 (BM)
Marsdenia mayana Lundell	v	f	*C. Lundell* 6192 (MO)
Matelea gentlei (Lundell & Standl.) Woodson	v	f	*K. Armstrong* 503 (E)
Matelea lanceolata (Decne.) Woodson	v	f	*A. Ibáñez García* 56 (BM)
Matelea magnifolia (Pittier) Woodson	v	f	*M. Binder* 6 (E)
Metastelma sp.	v	f	*P. Gentle* 2157 (NY)
Plumeria obtusa L. (C.Wright ex Griseb.) Woodson	t/s	f	*M. Penn* pers. obs.
Prestonia mexicana A.DC.	v	f	*A. Gentry* 7660 (MO)
Stemmadenia donnell-smithii (Rose) Woodson	t	f	*C. Gantz* 4 (E)
Tabernaemontana alba Mill.	t	f	*A. Ibáñez García* 66 (BM)
Tabernaemontana amygdalifolia Jacq.	t	f	*S. Gulliver* 12 (E)
Thevetia ahouai (L.) A.DC.	s	f	*L. Seed* 8 (E)
Aquifoliaceae			
Ilex belizensis Lundell	t	f	*A. Monro* 1886 (BM)
Ilex guianensis (Aubl.) Kuntze	t	f	*A. Monro* 1735 (BM)
Araceae			
Anthurium huixtlense Matuda	h/e	f	*T. Croat* 23784 (MO)
Anthurium lucens Standl.	h/e	f	*A. Monro* 2612 (BM)
Anthurium microspadix Schott +	h/e	f	*S. Brewer* 1791 (WNC)
Anthurium pentaphyllum G.Don var. *bombacifolium* (Schott) Madison	h/e	f	*J. Dwyer* 11560 (MO)
Anthurium scandens (Aubl.) Engl.	h/e	f	*C. Lundell* 6214 (MO)
Anthurium schlechtendalii Kunth	h/e	f	*T. Croat* 23811 (MO)

Anthurium verapazense Engl.	h/e	f	*A. Gentry* 7833 (MO)
Monstera acuminata K.Koch	h/e	f	*C. Whitefoord* 9260 (MO)
Monstera tuberculata Lundell	h/e	f	*C. Lundell* 6337 (MO)
***Philodendron advena* Schott**	h/e	f	*M. Peña* 962 (BM)
Philodendron dwyeri Croat	h/e	r	*C. Whitefoord* 2837a (BM)
Philodendron hederaceum (Jacq.) Schott	h/v	f	*C. Whitefoord* 2837 (BM)
Philodendron radiatum Schott	h/v	f	*M. Peña* 957 (BM)
Philodendron sagittifolium Liebm.	h/v	f	*T. Croat* 23497 (MO)
Philodendron tripartitum (Jacq.) Schott	h/v	f	*T. Croat* 23670 (MO)
Rhodospathe wendlandii Schott +	h	f	*S. Brewer* 1762 (WNC)
Spathiphyllum blandum Schott	h	r	*C. Whitefoord* 9440 (BM)
Spathiphyllum phryniifolium Schott	h	f	*D. Sutton* 289 (BM)
Syngonium angustatum Schott	h/v	f	*S. Ingram* 1941 (SEL)
Syngonium macrophyllum Engl.	h/e	f	*M. Peña* 1071 (BM)
Syngonium podophyllum Schott	h/e	f	*S. Ingram* 1937 (SEL)
***Xanthosoma robustum* Schott**	h	r	*C. Whitefoord* 9351 (BM)
Araliaceae			
Dendropanax arboreus (L.) Decne. & Planch.	t	f	*T. Lai* 17 (E)
Oreopanax obtusifolius L.O.Williams	he/t	f	*S. Bridgewater* 2775 (E)
Arecaceae			
Acrocomia aculeata (Jacq.) Lodd. ex Mart.	pa	f	*S. Bridgewater* pers. obs.
Astrocaryum mexicanum Liebm. ex Mart.	pa	f	*A. Gentry* 7853 (MO)
Attalea cohune Mart.	pa	f	*S. Bridgewater* pers. obs.
Bactris mexicana Mart.	pa	f	*D. Sutton* 50 (BM)
Bactris major Jacq.	pa	f/r	*J. Meerman* pers. obs.
Calyptrogyne ghiesbreghtiana (Linden & H.Wendl.) H.Wendl.	pa	f	*A. Monro* 2661 (BM)
Chamaedorea elegans Mart.	pa	f	*S. Bridgewater* pers. obs.
Chamaedorea ernesti-augustii H.Wendl.	pa	f	*A. Monro* 3163 (BM)
Chamaedorea neurochlamys Burret	pa	f	*C. Whitefoord* 2096 (BM)
Chamaedorea oblongata Mart.	pa	f	*A. Monro* 602 (BM)
Chamaedorea schippii Burret (= *C. graminifolia* H.Wendl.)	pa	f	*M. Baden* 2005 (E)
Chamaedorea tepejilote Liebm. ex Mart.	pa	f	*A. Monro* 2659 (BM)
Colpothrinax cookii Read	pa	f	*M. Peña* 996 (BM)
Cryosophila stauracantha (Heynh.) R.Evans	pa	f	*C. Whitefoord* 2083 (BM)
Desmoncus orthacanthos Mart.	pa	f	*L. Urban* 394 (E)
Euterpe precatoria Mart.	pa	f	*S. Cafferty* 19 (BM)
Gaussia maya (O.F.Cook) Quero & R.W.Read	pa	f	*S. Bridgewater* pers. obs.
Geonoma interrupta (Ruiz & Pav.) Mart.	pa	f	*A. Monro* 2672 (BM)
Sabal mauritiiformis (H.Karst.) Griseb. & H.Wendl. ex Griseb.	pa	f	*S. Bridgewater* pers. obs.
Synechanthus fibrosus (H.Wendl.) H.Wendl.	pa	f	*M. Peña* 990 (BM)
Aristolochiaceae			
***Aristolochia leuconeura* Linden**	v	f	*R. Rees* 40 (MO)
Aristolochia maxima Jacq.	v	f	*J. Meerman* pers. obs.
Aristolochia ovalifolia Duch.	v	f	*A. Monro* 1862 (BM)
Aristolochia pilosa Kunth			*J. Meerman* pers. obs.
Aristolochia schippii Standl.	v	f	*A. Monro* 1393 (BM)

Aristolochia trilobata L.	v	f	*C. Whitefoord* 9410 (BM)
***Aristolochia veracruzana* J.F.Ortega**	v	f	*J. Meerman* pers. obs.
Asteraceae			
Acmella filipes (Greenm.) R.K.Jansen var. *cayensis* R.K.Jansen	h	f	*J. Dwyer* 10165 (MO)
Acmella pilosa R.K.Jansen	h	f	*C. Whitefoord* 9526 (BM)
Ageratum houstonianum Mill.	h	f	*C. Whitefoord* 10045 (BM)
Ageratum peckii B.L.Rob.	h	f	*J. Dwyer* 12318 (MO)
Baccharis trinervis Pers.	h/s	f	*C. Whitefoord* 9040 (BM)
Bidens pilosa L.	h	f	*T. Croat* 23795 (MO)
Bidens squarrosa Kunth	ss	f	*C. Whitefoord* 10081 (BM)
Calea jamaicensis (L.) L.	s	f	*C. Whitefoord* 10150 (BM)
Calea ternifolia Kunth	s	f/r	*T. Hawkins* 1319 (MO)
Calea urticifolia (Mill.) DC.	ss	f	*C. Whitefoord* 10023 (BM)
Chromolaena glaberrima (DC.) R.M.King & H.Rob.	s	f	*L. Urban* 409 (E)
Chromolaena odorata (L.) R.M.King & H.Rob.	s	f	*C. Whitefoord* 10009 (BM)
Cirsium mexicanum DC.	h	f	*C. Whitefoord* 2800 (BM)
Clibadium arboreum Donn.Sm.	s	f	*D. Sutton* 36 (BM)
Conyza apurensis Kunth	h	f	*C. Whitefoord* 9311 (BM)
Cosmos caudatus Kunth	h	f	*A. Gentry* 7803 (MO)
Critonia bartlettii (B.L.Rob.) R.M.King & H.Rob.	v	f	*C. Whitefoord* 10221 (BM)
Critonia billbergiana (Beurl.) R.M.King & H.Rob.	ss	f	*A. Gentry* 7669 (MO)
Critonia morifolia (Mill.) R.M.King & H.Rob.	s	f	*C. Whitefoord* 10042 (BM)
Critonia sexangularis (Klatt) R.M.King & H.Rob.	h	f	*A. Monro* 1717 (BM)
Egletes liebmannii (Sch.Bip.) Klatt	h	f	*C. Whitefoord* 9467 (BM)
Elephantopus mollis Kunth	h	f	*J. Dwyer* 10809 (MO)
Gnaphalium attenuatum DC.	h	f	*S. Cafferty* 142A (BM)
Hebeclinium macrophyllum (L.) DC.	h	f	*G. Proctor* 30166 (BRH)
Koanophyllon galeottii (B.L.Rob.) R.M.King & H.Rob.	s	f	*C. Whitefoord* 10024 (BM)
Koanophyllon solidaginoides (Kunth) R.M.King & H.Rob.	h	f	*J. Dwyer* 12299 (MO)
Lasianthaea fruticosa (L.) K.M.Becker	h/s	f	*L. Urban* 257 (E)
Lepidaploa tortuosa (L.) H.Rob.	ss	f	*M. Peña* 951 (BM)
Melampodium costaricense Stuessy	h	f	*C. Whitefoord* 2017 (BM)
Melampodium divaricatum (Rich.) DC.	h	r	*D. Spellman* 1386 (MO)
Melanthera nivea (L.) Small	h	f	*T. Hawkins* 1076 (MO)
Mikania houstoniana (L.) B.L.Rob.	ss	f	*S. Cafferty* 71 (BM)
Montanoa atriplicifolia (Pers.) Sch.Bip.	v	f	*A. Ibáñez García* 3 (BM)
Neomirandea araliifolia (Less.) R.M.King & H.Rob.	s	r	*T. Hawkins* 1201 (MO)
Neurolaena lobata (L.) R.Br. ex Cass.	h/s	f	*A. Gentry* 7754 (MO)
Neurolaena schippii B.L.Rob.	h	r	*T. Hawkins* 1275 (MO)
Onoseris onoseroides (Kunth) B.L.Rob.	h	f	*C. Whitefoord* 2815 (BM)
Otopappus curviflorus (R.Br.) Hemsl.	s	f	*C. Whitefoord* 10073 (BM)
Otopappus verbesinoides Benth.	v	f	*C. Whitefoord* 10014 (BM)

Perymenium gymnolomoides (Less.) DC.	h	f	*C. Whitefoord* 10015 (BM)
Pluchea carolinensis (Jacq.) G.Don	h	f	*C. Whitefoord* 10087(BM)
Podachaenium eminens (Lag.) Sch.Bip.	s	f	*C. Whitefoord* 10143 (BM)
Polymnia maculata Cav. (= *Smallanthus maculatus* (Cav.) H.Rob.)	s	f	*C. Whitefoord* 9306 (BM)
Pseudelephantopus spicatus (B.Juss. ex Aubl.) C.F.Baker	h/s	f	*C. Whitefoord* 10057 (BM)
Salmea scandens (L.) DC.	v	f	*C. Whitefoord* 10248 (BM)
Schistocarpha eupatorioides (Frenzel) Kuntze	h	f	*A. Gentry* 7747 (MO)
Sinclairia deamii (B.L.Rob. & Bartlett) Rydb.	v	f	*C. Whitefoord* 9058 (BM)
Sinclairia discolor Hook. & Arn. +	s	f	*S. Brewer* 1706 (WNC)
Sinclairia polyantha (Klatt) Rydb.	s	f	*C. Whitefoord* 10078 (BM)
Smallanthus uvedalius (L.) Mack. ex Small	s	r	*L. Urban* 86 (E)
Sphagneticola trilobata (L.) Pruski	h	f	*L. Urban* 49 (E)
Symphyotrichum bullatum (Klatt) G.L.Nesom	h	f	*C. Whitefoord* 2070 (BM)
Symphyotrichum expansum (Poepp. ex Spreng.) G.L.Nesom	h	f	*L. Urban* 358 (E)
Synedrella nodiflora (L.) Gaertn.	h	f	*T. Hawkins* 1129 (MO)
Telanthophora cobanensis (J.M.Coult.) H.Rob. & Brettell	s	f	*A. Monro* 410 (BM)
Verbesina oerstediana Benth.	s/t	f	*T. Hawkins* 1033 (MO)
Vernonanthura patens (Kunth) H.Rob.	s	f	*C. Whitefoord* 9293 (BM)
Zexmenia serrata La Llave	ss	f	*C. Whitefoord* 10089 (BM)
Balanophoraceae			
Helosis cayennensis (Sw.) Spreng.	h/p	f	*A. Monro* 786 (BM)
Begoniaceae			
***Begonia fischeri* Schrank**	h	f	*S. Perez Espona* 12 (E)
Begonia glabra Aubl.	h/e	f	*S. Perez Espona* 17 (E)
Begonia sericoneura Liebm.	h	f	*A. Forrest* 49 (E)
Bignoniaceae			
Amphilophium paniculatum (L.) Kunth	v	f	*L. Urban* 239 (E)
Amphitecna breedlovei A.H.Gentry	s/t	f	*P. Gentle* 2506 (MO)
Arrabidaea chica (Humb. & Bonpl.) B.Verl.	v	f	*C. Whitefoord* 9322 (BM)
Arrabidaea corallina (Jacq.) Sandwith	v	f	*A. Gentry* 7766 (MO)
Arrabidaea patellifera (Schltdl.) Sandwith	v	f	*A. Gentry* 7712 (MO)
Arrabidaea podopogon (DC.) A.H.Gentry	v	f	*A. Gentry* 7752 (MO)
Cydista heterophylla Seibert	v	f	*M. Balick* 3152 (NY)
Godmania aesculifolia (Kunth) Standl.	t	f	*A. Gentry* 7611 (NY)
Martinella obovata (Kunth) Bureau & K.Schum.	v	f	*C. Whitefoord* 9452 (BM)
Mussatia hyacinthina (Standl.) Sandwith	v	f	*A. Gentry* 7807 (MO)
Paragonia pyramidata (Rich.) Bureau	v	f	*L. Urban* 396 (E)
Parmentiera aculeata (Kunth) Seem.	t	f	*P. Gentle* 2433 (MICH)
Pithecoctenium crucigerum (L.) A.H.Gentry	v	f	*A. Gentry* 7666 (MO)
Pseudocatalpa caudiculata (Standl.) A.H.Gentry	v	f	*C. Whitefoord* 9231 (BM)
Stizophyllum riparium (Kunth) Sandwith	v	f	*A. Gentry* 7763 (MO)
Tabebuia chrysantha (Jacq.) G.Nicholson	t	f	*A. Gentry* 7716 (MO)
Tabebuia guayacan (Seem.) Hemsl.	t	f	*P. Gentle* 2532 (MICH)
Tabebuia rosea (Bertol.) A.DC.	t	f	*A. Monro* 961 (BM)
Tynanthus guatemalensis Donn.Sm.	v	f	*C. Whitefoord* 9499 (BM)

Xylophragma seemannianum (Kuntze) Sandwith	v	f	*C. Whitefoord* 2773 (BM)
Bixaceae			
Cochlospermum vitifolium (Willd.) Spreng.	t	f	*L. Urban* 235 (E)
Bombacaceae (see *Malvaceae*)			
Boraginaceae			
Cordia alliodora (Ruiz & Pav.) Oken	t	f	*C. Whitefoord* 2866 (BM)
Cordia bicolor A.DC.	t	f	*A. Monro* 2729 (BM)
Cordia diversifolia Pav. ex A.DC.	t	f	*D. Sutton* 65 (BM)
Cordia spinescens L.	ss	f	*M. Peña* 1021 (BM)
Cordia stellifera I.M.Johnst.	t	f	*C. Whitefoord* 9095 (BM)
Ehretia sp.	t	f	*A. Monro* 3252 (BM)
Rochefortia lundellii Camp	v	f	*C. Lundell* 6167 (MO)
Tournefortia glabra L.	ss	f	*C. Whitefoord* 9312 (BM)
Tournefortia hirsutissima L.	ss	f	*H. Irvins* 181 (E)
Tournefortia umbellata Kunth	ss	f	*T. Croat* 23406 (MO)
Tournefortia volubilis L.	v	f	*J. Dwyer* 11587 (MO)
Bromeliaceae			
Aechmea bracteata (Sw.) Griseb.	h/e	f	*B. Holst* 7563 (BRH)
Aechmea lueddemanniana (K.Koch) Brongn. ex Mez	h/e	f	*C. Whitefoord* 9393 (BM)
Aechmea magdalenae (André) André ex Baker	h/e	f	*B. Holst* 7963 (SEL)
Androlepis skinneri Brongn. ex Houllet	h/e	f	*T. Croat* 23658 (MO)
Bromelia plumieri (E.Morren) L.B.Sm.	h	f	*B. Holst* 8003 (SEL-live)
Bromelia pinguin L.	h/e	f	*J. Meerman* pers. obs.
Catopsis berteroniana (Schult.f.) Mez	h/e	f	*B. Holst* 7939 (SEL-live)
Catopsis floribunda L.B.Sm.	h/e	f	*B. Holst* 7938 (SEL)
Catopsis juncifolia Mez & Wercklé ex Mez	h/e	f	*B. Holst* 7701 (BRH)
Catopsis morreniana Mez	h/e	f	*A. Monro* 1854 (BM)
Catopsis sessiliflora (Ruiz & Pav.) Mez	h/e	f	*A. Gentry* 7822 (MO)
Guzmania lingulata (L.) Mez	h/e	f	*T. Croat* 23768 (MO)
Guzmania nicaraguensis Mez & Baker ex Mez +	h/e	f	*B. Holst* 5223 (SEL)
Pitcairnia imbricata (Brongn.) Regel	h	f	*B. Holst* 7933 (SEL)
***Pitcairnia wendlandii* Baker**	h	f	*A. Monro* 1719 (BM)
Tillandsia balbisiana Schult. & Schult.f.	h/e	f	*B. Holst* 7997 (SEL-live)
Tillandsia brachycaulos Schltdl.	h/e	f	*B. Holst* 7559 (SEL)
Tillandsia bulbosa Hook.	h/e	f	*A. Monro* 3247 (BM)
Tillandsia excelsa Griseb. +	h/e	f	*B. Holst* 5226 (SEL)
Tillandsia fasciculata Sw.	h/e	f	*B. Holst* 7997 (SEL)
Tillandsia festucoides Brongn. ex Mez	h/e	f	*A. Gentry* 7788 (MO)
Tillandsia filifolia Schltdl. & Cham.	h/e	f	*C. Lundell* 6226 (NY)
Tillandsia juncea (Ruiz & Pav.) Poir.	h/e	f	*B. Holst* 7516 (SEL)
Tillandsia monadelpha (E.Morren) Baker	h/e	f	*T. Hawkins* 1209 (MO)
Tillandsia multicaulis Steud. +	h/e	f	*B. Holst* 5217 (SEL)
Tillandsia pruinosa Sw.	h/e	f	*B. Holst* 7993 (SEL)
Tillandsia schiedeana Steud.	h/e	f	*C. Whitefoord* 2772 (BM)
Tillandsia streptophylla Scheidw. ex E.Morren	h/e	f	*J. Dwyer* 10875a (MO)
Tillandsia usneoides (L.) L.	h/e	f	*S. Ingram* 1929 (MO)
Tillandsia utriculata L.	h/e	f	*B. Holst* 7856 (SEL-live)
Tillandsia variabilis Schltdl.	h/e	f	*B. Holst* 7775 (SEL)

Vriesea heliconioides (Kunth) Hook. ex Walp.	h/e	f	*C. Cafferty* 121 (BM)
***Vriesea werckleana* Mez** +	h/e	f	*B. Holst* 5310 (SEL)
Brunelliaceae			
Brunellia mexicana Standl.	t	f	*S. Cafferty* 41 (BM)
Buddlejaceae (see *Scrophulariaceae*)			
Burmanniaceae			
Dictyostega orobanchoides (Hook.) Miers +	h	f	*B. Allen* 15168 (MO)
Burseraceae			
Bursera simaruba (L.) Sarg.	t	f	*A. Monro* 3288 (BM)
Protium copal (Schltdl. & Cham.) Engl.	t	f	*C. Whitefoord* 10159 (BM)
Protium glabrum (Rose) Engl.	t	f	*T. Hawkins* 1284 (MO)
Protium multiramiflorum Lundell	t	f	*T. Croat* 23597 (MO)
Protium schippii Lundell	t	f	*C. Whitefoord* 10345 (BM)
Buxaceae			
Buxus bartlettii Standl.	s	r	*L. Urban* 45 (E)
Cactaceae			
Epiphyllum phyllanthus (L.) Haw.	e	f	*S. Cafferty* 20 (BM)
Pseudorhipsalis ramulosa (Salm-Dyck) Barthlott	e	f	*C. Whitefoord* 2341 (BM)
Rhipsalis baccifera (J.S.Muell.) Stearn	e	f	*S. Ingram* 1924 (MO)
Selenicereus testudo (Karw. ex Zucc.) Buxb.	e	f	*T. Croat* 2359 (MO)
Campanulaceae			
Lobelia cardinalis L.	h	f	*C. Whitefoord* 10404 (BM)
Lobelia xalapensis Kunth	h	f	*C. Whitefoord* 9059 (BM)
Cannabaceae			
Celtis iguanaea (Jacq.) Sarg.	t	f	*C. Whitefoord* 10332 (BM)
Trema micrantha (L.) Blume	s	f	*A. Monro* 1197 (BM)
Cannaceae			
Canna indica L.	h	f	*C. Whitefoord* 9389 (BM)
Canna tuerckheimii Kraenzl.	h	f	*C. Whitefoord* 10404 (BM)
Capparaceae			
Capparis frondosa Jacq.	s	f	*J. Meerman* pers. obs.
Forchhammeria trifoliata Radlk.	s	f	*J. Dwyer* 12302 (MO)
Caprifoliaceae			
***Viburnum* sp.**	s	f	*A. Monro* 3252 (BM)
Caryophyllaceae			
Unknown genus	h	r	*B. Holst* 8026 (BRH)
Cecropiaceae (see *Urticaceae*)			
Celastraceae			
Cheiloclinium belizense (Standl.) A.C.Sm.	t	f	*C. Whitefoord* 9324 (BM)
Crossopetalum eucymosum (Loes. & Pittier) Lundell	t	f	*C. Whitefoord* 10297 (BM)
Crossopetalum gaumeri (Loes.) Lundell	s	f	*A. Monro* 1465 (BM)
Hippocratea volubilis L.	v	f	*C. Whitefoord* 9148 (BM)
***Salacia* sp.**	v	f	*C. Whitefoord* 10274 (BM)
***Semialarium mexicanum* (Miers) Mennega**	t	f	*A. Ibáñez García* 86 (BM)

Wimmeria bartlettii Lundell	s/t	f	*C. Whitefoord* 10354 (BM)
Zinowiewia pallida Lundell +	t	f	*S. Brewer* 1677 (WNC)
Ceratophyllaceae			
Ceratophyllum sp.	h	a	*A. Russell* 24 (E)
Chenopodiaceae			
Alternanthera flavogrisea (Urb.) Urb.	h	f	*C. Whitefoord* 9486 (BM)
Amaranthus viridis L.	h	f	*C. Whitefoord* 9476 (BM)
Chamissoa altissima (Jacq.) Kunth	ss	f	*C. Whitefoord* 10052 (BM)
Chenopodium ambrosioides L.	h	f	*C. Whitefoord* 9480 (BM)
Hebanthe grandiflora (Hook.) T.Borsch. & Pedersen	s	f	*K. Armstrong* 511 (E)
Iresine diffusa Humb. & Bonpl. ex Willd.	h	f	*A. Monro* 1160 (BM)
Iresine nigra Uline & W.L.Bray	s/t	f	*A. Monro* 1241 (BM)
Chloranthaceae			
Hedyosmum mexicanum C.Cordem.	t	f	*M. Peña* 1049 (BM)
Chrysobalanaceae			
Hirtella americana L.	t	f	*A. Monro* 1003 (BM)
Hirtella racemosa Lam.	t	f	*A. Monro* 3218 (BM)
Licania hypoleuca Benth.	t	f	*B. Holst* 7636 (SEL)
Clethraceae			
Clethra mexicana DC.	t	f	*A. Monro* 2631 (BM)
Clethra occidentalis (L.) Kuntze	t	f	*A. Monro* 2631 (BM)
Clusiaceae			
Calophyllum brasiliense Cambess.	t	f	*A. Monro* 953 (BM)
Clusia flava Jacq.	s	f	*J. Meerman* pers. obs.
Clusia lundellii Standl.	he/t	f	*C. Lundell* 6366 (MO)
Clusia massoniana Lundell	he/t	f	*M. Peña* 942 (BM)
Clusia minor L.	he/t	f	*T. Croat* 23648 (MO)
Clusia quadrangula Bartlett	he/t	f	*T. Hawkins* 1218 (MO)
***Clusia stenophylla* Standl.** +	s/e	f	*B. Holst* 7636 (MO)
Garcinia sp.	t	f	*M. Short* 241 (BM)
Hypericum terrae-firmae Sprague & L.Riley	s	ps	*A. Monro* 1741 (BM)
Symphonia globulifera L.f.	t	f	*A. Monro* 246 (BM)
Vismia camparaguey Sprague & L.Riley	s/t	f	*T. Croat* 23508 (BM)
Cochlospermaceae (see *Bixaceae*)			
Combretaceae			
Bucida buceras L.	t	f	*L. Urban* 194 (E)
Combretum fruticosum (Loefl.) Stuntz	v	f	*A. Monro* 1727 (BM)
Combretum laxum Jacq.	ss	f	*C. Whitefoord* 9160 (BM)
Terminalia amazonia (J.F.Gmel.) Exell	t	f	*C. Whitefoord* 10377 (BM)
Commelinaceae			
Callisia multiflora (M.Martens & Galeotti) Standl.	h	f	*C. Whitefoord* 10239 (BM)
Commelina diffusa Burm.f.	h	f	*C. Whitefoord* 9482 (BM)
Commelina erecta L.	h	f	*T. Croat* 23801 (MO)
Tradescantia poelliae D.R.Hunt	h	f	*C. Whitefoord* 10059 (BM)
Tradescantia spathacea Sw.	h	f	*D. Sutton* 51 (BM)

Tradescantia zanonia (L.) Sw.	h	f	*L. Urban* 303 (E)
Tripogandra grandiflora (Donn.Sm.) Woodson	h	f	*C. Whitefoord* 10027 (BM)
Tripogandra serrulata (Vahl) Handlos	h	f	*C. Whitefoord* 9354 (BM)
Connaraceae			
Cnestidium rufescens Planch.	v	f	*C. Whitefoord* 9013 (BM)
Rourea glabra Kunth	v	f	*C. Whitefoord* 9323 (BM)
Rourea schippii Standl. +	v	f	*B. Holst* 5295 (MO)
Convolvulaceae			
Convolvulus aff. *nodiflorus* Desr.	v	f	*C. Whitefoord* 9529 (BM)
Ipomoea alba L.	v	f	*T. Hawkins* 1323 (MO)
***Ipomoea aristolochifolia* (Kunth) G.Don**	v	f	*C. Whitefoord* 10029 (BM)
Ipomoea indica (Burm.f.) Merr.	v	f	*C. Whitefoord* 9145 (BM)
Ipomoea philomega (Vell.) House	v	r	*C. Whitefoord* 9067 (BM)
Ipomoea ramosissia (Poir.) Choisy	v	f	*A. Monro* 1123 (BM)
Ipomoea sepacuitensis Donn.Sm.	v	f	*A. Gentry* 7787 (MO)
Ipomoea triloba L.	v	f	*M. Short* 225 (BM)
Jacquemontia sphaerostigma (Cav.) Rusby	v	f	*A. Gentry* 7718 (MO)
Maripa nicaraguensis Hemsl.	v	f	*C. Whitefoord* 9388 (BM)
Merremia cissoides (Lam.) Hallier f.	v	f	*L. Urban* 275 (E)
Merremia tuberosa (L.) Rendle	v	f	*T. Hawkins* 1106 (BM)
Merremia umbellata (L.) Hallier f.	v	f	*C. Whitefoord* 2996 (BM)
Costaceae			
Costus pictus D.Don	h	f	*A. Monro* 687 (BM)
Costus pulverulentus C.Presl	h	f	*A. Forrest* 56 (E)
Cucurbitaceae			
Cayaponia racemosa (Mill.) Cogn.	v	f	*A. Monro* 1198 (BM)
Cionosicys excisus (Griseb.) C.Jeffrey	v	f	*C. Whitefoord* 10074 (BM)
Echinopepon racemosus (Steud.) C.Jeffrey	v	f	*A. Monro* 1259 (BM)
Gurania makoyana Cogn.	v	f	*C. Whitefoord* 9464 (BM)
Melothria pendula L.	v	f	*C. Whitefoord* 9347 (BM)
Momordica charantia L.	v	f	*L. Urban* 66 (E)
Psiguria triphylla (Miq.) C.Jeffrey	v	f	*C. Whitefoord* 9376 (BM)
Psiguria warscewiczii (Hook.f.) Wunderlin	v	f	*C. Whitefoord* 9345 (BM)
Cyclanthaceae			
Asplundia sp.	h	r	*L. Urban* 74 (E)
Cyperaceae			
Calyptrocarya glomerulata (Brongn.) Urb.	h	f	*A. Monro* 3153 (BM)
Carex polystachya Sw. ex Wahlenb.	h	f	*P. Gentle* 2321 (MO)
Cyperus haspan L.	h	r	*T. Hawkins* 1187 (MO)
Cyperus hermaphroditus (Jacq.) Standl.	h	f	*D. Sutton* 86 (BM)
Cyperus humilis Kunth	h	f	*C. Whitefoord* 10063 (BM)
Cyperus luzulae (L.) Retz.	h	f	*A. Monro* 3237 (BM)
Cyperus ochraceus Vahl	h	r	*T. Hawkins* 1280 *(MO*
Eleocharis elegans (Kunth) Roem. & Schult.	h	r	*J. Dwyer* 12328 (MO)
Eleocharis geniculata (L.) Roem. & Schult.	h	r	*T. Hawkins* 1299 (MO)
Eleocharis interstincta (Vahl) Roem. & Schult.	h	r	*L. Urban* 98 (E)
Fimbristylis complanata (Retz.) Link	h	f	*C. Whitefoord* 2796 (BM)
Fuirena camptotricha C.Wright	h	f	*T. Hawkins* 1282 (MO)

Rhynchospora barbata (Vahl) Kunth	h	f	*J. Dwyer* 10912A (MO)
Rhynchospora cephalotes (L.) Vahl	h	f	*T. Croat* 23516 (MO)
Rhynchospora exaltata Kunth	h	f	*A. Monro* 3234 (BM)
Rhynchospora holoschoenoides (Rich.) Herter	h	f	*T. Croat* 23341 (MO)
Rhynchospora nervosa (Vahl) Boeck. subsp. *ciliate*	h	r	*T. Croat* 23532 (MO)
Rhynchospora polyphylla Vahl	h	f	*S. Cafferty* 54 (BM)
Rhynchospora radicans (Schltdl. & Cham.) H.Pfeiff.	h	f	*C. Whitefoord* 2079 (BM)
Scleria latifolia Sw.	h	f	*M. Short* 205 (BM)
Scleria melaleuca Rchb. ex Schltdl. & Cham.	h	f	*T. Croat* 23672 (MO)
Scleria secans (L.) Urb. +	h	f	*B. Holst* 5220 (SEL)
Torulinium macrocephalum (Liebm.) C.B.Clarke	h	f	*C. Whitefoord* 2120 (BM)
Torulinium odoratum (L.) S.S.Hooper	h	f	*T. Croat* 23370 (MO)
Cyrillaceae			
Cyrilla racemiflora L.	s/t	f	*A. Monro* 3235 (BM)
Purdiaea belizensis (A.C.Sm. & Standl.) J.L.Thomas	t	f	*A. Monro* 2615 (BM)
Dichapetalaceae			
Dichapetalum donnell-smithii Engl.	v	f	*A. Ibáñez García* 48 (BM)
Dilleniaceae			
Davilla kunthii A.St.-Hil.	v	f	*C. Whitefoord* 9427 (BM)
Doliocarpus dentatus (Aubl.) Standl.	v	f	*C. Whitefoord* 10191 (BM)
Tetracera volubilis L. subsp. *mollis* (Standl.) Kubitski	v	f	*J. Dwyer* 10182 (MO)
Dioscoreaceae			
Dioscorea alata L.	v	f	*C. Whitefoord* 2256 (BM)
Dioscorea bartlettii C.V.Morton	v	f	*A. Gentry* 7677 (MO)
Dioscorea convolvulacea Schltdl. & Cham.	v	f	*T. Hawkins* 1262 (MO)
Dioscorea densiflora Hemsl.	v	f	*P. Gentle* 2210 (MO)
Dracaenaceae (see *Ruscaceae*)			
Ebenaceae			
Diospyros sp.	s	f	*C. Whitefoord* 10379 (BM)
Elaeocarpaceae			
Sloanea meianthera Donn.Sm. +	t	f	*S. Bridgewater* 3901 (BM)
Sloanea tuerckheimii Donn.Sm.	t	f	*A. Monro* 365 (BM)
Ericaceae			
Agarista mexicana (Hemsl.) Judd var. *pinetorum* (Standl. & Williams) Judd	s/t	f	*M. Peña* 1010 (BM)
Bejaria aestuans Mutis ex L.	t	f	*A. Monro* 2613 (BM)
Satyria warszewiczii Klotzsch +	s/e	f	*B. Allen* 15167 (MO)
Sphyrospermum cordifolium Benth.	s/e	f	*A. Monro* 2618 (BM)
Erythroxylaceae			
Erythroxylum guatemalense Lundell	s	f/ps	*A. Ibáñez García* 112 (E)
Erythroxylum rotundifolium Lunan	s	r	*L. Urban* 144 (E)
Euphorbiaceae			
Acalypha alopecuroides Jacq.	h	f	*C. Whitefoord* 2104 (BM)
Acalypha arvensis Poepp.	s	f	*T. Croat* 23378 (MO)

Acalypha costaricensis (Kuntze) Knobl. ex Pax & K.Hoffm.	s/t	f	*A. Ibáñez García* 46 (MO)
Acalypha diversifolia Jacq.	t	f	*A. Monro* 3203 (BM)
Acalypha gummifera Lundell	s	f	*C. Whitefoord* 10134 (BM)
Acalypha leptopoda Müll.Arg.	s	f	*C. Whitefoord* 10264 (BM)
Acalypha macrostachya Jacq.	s	f	*C. Whitefoord* 10236 (BM)
Acalypha mortoniana Lundell	s	f	*J. Milton* 25 (E)
Acalypha setosa A.Rich.	h	f	*C. Whitefoord* 9562 (BM)
***Acalypha skutchii* I.M.Johnst.**	s/t	f	*R. Rees* 176 (MO)
Acalypha villosa Jacq.	s	r	*T. Croat* 23524 (MO)
Adelia barbinervis Schltdl. & Cham.	s/t	f/r	*A. Monro* 1152 (BM)
Alchornea latifolia Sw.	t	f	*M. Peña* 985 (BM)
***Alchorneopsis floribunda* (Benth.) Müll.Arg.** +	t	f	*S. Brewer* pers. obs.
***Bernardia dodecandra* (Sessé ex Cavagnaro, David) McVaugh**	s/t	f	*A. Gentry* 7841 (MO)
Chamaesyce hirta (L.) Millsp.	h	f	*D. Spellman* 1393 (MO)
Chamaesyce hypericifolia (L.) Millsp.	h	f	*J. Dwyer* 10759 (MO)
Chamaesyce thymifolia (L.) Millsp.	h	f	*D. Spellman* 1390 (MO)
Cleidion castaneifolium Müll.Arg.	t	f	*L. Ronse de Craene* 1140 (E)
Cnidoscolus multilobus (Pax) I.M.Johnst.	s	f	*C. Whitefoord* 2084 (MO)
Cnidoscolus souzae McVaugh	s	f	*T. Croat* 23660 (MO)
Croton billbergianus Müll.Arg.	t	f	*A. Monro* 2686 (BM)
***Croton lundellii* Standl.**	v	f	*C. Whitefoord* 10311 (BM)
Croton schiedeanus Schltdl.	s	f	*T. Heller* 13 (E)
Croton xalapensis Kunth	t	f	*J. Dwyer* 11556 (MO)
Dalechampia heteromorpha Pax & K.Hoffm.	v	f	*A. Chapman* 10 (E)
Dalechampia laevigata Standl.	v	f	*A. Gentry* 7780 (MO)
Dalechampia schippii Standl.	v	r	*L. Urban* 334 (E)
Euphorbia graminea Jacq.	h	f	*J. Dwyer* 11565 (MO)
Euphorbia heterophylla L.	h	f	*C. Whitefoord* 2113 (BM)
Gymnanthes belizensis G.L.Webster	t	f	*P. Gentle* 2619 (MO)
***Hieronyma oblonga* (Tul.) Müll.Arg.** +	t	f	*S. Brewer* 1742 (WNC)
Margaritaria nobilis L.f.	t	f	*J. Meerman* pers. obs.
Pedilanthus tithymaloides (L.) Poit.	h	f	*C. Whitefoord* 10128 (BM)
Ricinus communis L.	s	f	*T. Croat* 23359 (MO)
Sapium glandulosum (L.) Morong	t	f	*T. Lai* 20 (E)
Sebastiana tuerckheimiana (Pax & K.Hoffm.) Lundell	t	f	*A. Gentry* 7678 (MO)
Tragia mexicana Müll.Arg.	v	f	*M. Peña* 1029 (BM)
Fabaceae: Mimosoideae			
Abarema idiopoda (S.F.Blake) Barneby & J.W.Grimes	t	f	*S. Bridgewater* 2756 (E)
Acacia angustissima (Mill.) Kuntze	t	r	*L. Urban* 130 (E)
Acacia cookii Saff.	t	f	*M. Short* 239 (BM)
Acacia gentlei Standl.	t	f	*C. Gantz* 12 (E)
Acacia polyphylla DC.	t	f	*S. Bridgewater* pers. obs.
Calliandra houstoniana (Mill.) Standl.	s	f	*C. Gantz* 10 (E)
Calliandra tergemina (L.) Benth. var. *emarginata* (Willd.) Barneby	s	r	*L. Urban* 8 (E)
Cojoba arborea (L.) Britton & Rose	t	f	*A. Smith* 13 (E)

Cojoba graciliflora (S.F.Blake) Britton & Rose	s	f/r	*A. Chapman* 20 (E)
***Cojoba sophorocarpa* (Benth.) Britton & Rose**	t	f	*A. Monro* 1253 (BM)
Enterolobium cyclocarpon (Jacq.) Griseb.	t	f	*N. Bol* pers. obs.
***Inga acrocephala* Steud.**	t	f	*M. Short* 246 (MO)
Inga affinis DC.	t	r	*J. Meerman* pers. obs.
Inga cocleensis Pittier	t	f	*A. Monro* 2730 (BM)
Inga davidsei M.Sousa	t	f	*M. Peña* 988 (BM)
Inga pinetorum Pittier	t	r	*L. Urban* 380 (E)
Inga punctata Willd.	t	f	*A. Monro* 1420 (BM)
***Inga sapindoides* Willd.**	t	f	*C. Whitefoord* 10090 (BM)
Inga thibaudiana DC.	t	f	*L. Ronse de Craene* 1436 (E)
Inga vera subsp. *vera* Willd.	s/t	f/r	*L. Urban* 370 (E)
Lysiloma acapulcense (Kunth) Benth.	t	f	*C. Whitefoord* 9157 (BM)
Mimosa albida Humb. & Bonpl. ex Willd.	s	f/r	*C. Whitefoord* 10199 (BM)
Mimosa bahamensis Benth.	s	r	*J. Meerman* pers. obs.
Mimosa hondurana Britton	v	f	*C. Whitefoord* 10137 (BM)
Mimosa pellita Humb. & Bonpl. ex Willd.	s	r	*L. Urban* 94 (E)
Mimosa pudica L.	s	f	*M. Short* 188 (BM)
Mimosa somnians Humb. & Bonpl. ex Willd.	s	r	*J. Dwyer* 12321 (MO)
Mimosa tarda Barneby	s	r	*T. Hawkins* 1244 (MO)
Mimosa watsonii B.L.Rob.	v	f	*T. Croat* 23518 (BM)
Pithecellobium lanceolatum (Humb. & Bonpl.) ex Willd.	s	f	*C. Whitefoord* 9302 (BM)
Pithecellobium macrandrium Donn.Sm.	s	f	*J. Dwyer* 11570 (MO)
Zapoteca tetragona (Willd.) H.M.Hern.	s	f	*M. Peña* 1074 (BM)
Fabaceae: Caesalpinioideae			
Bauhinia dipetala Hemsl.	s	r	*B. Holst* 7374 (SEL)
Bauhinia divaricata L.	t	f	*C. Whitefoord* 9080 (BM)
Bauhinia ungulata L.	s	r	*J. Dwyer* 12285 (MO)
Cynometra retusa Britton & Rose	t	f	*A. Monro* 2740 (BM)
Dialium guianense (Aubl.) Sandwith	t	f	*A. Ibáñez García* 122 (MO)
Schizolobium parahyba (Vell.) S.F.Blake	t	f	*A. Monro* 2862 (BM)
Senna atomaria (L.) H.S.Irwin & Barneby	v	f	*C. Whitefoord* 9497 (BM)
Senna cobanensis (Britton & Rose) H.S.Irwin & Barneby	h	f	*T. Croat* 23382 (MO)
***Senna fruticosa* (Mill.) H.S.Irwin & Barneby**	s	f	*M. Peña* 1019 (BM)
Senna hayesiana (Britton & Rose) H.S.Irwin & Barneby	s	f	*J. Dwyer* 12339 (MO)
Senna obtusifolia (L.) H.S.Irwin & Barneby	h	f	*T. Croat* 23699 (MO)
Senna occidentalis (L.) Link	h	f	*M. Peña* 1026 (BM)
Senna peralteana (Kunth) H.S.Irwin & Barneby	v	f	*A. Monro* 1473 (BM)
Senna undulata (Benth.) H.S.Irwin & Barneby	s	f	*C. Whitefoord* 2825 (BM)
Senna uniflora (Mill.) H.S.Irwin & Barneby	s	f	*C. Whitefoord* 9036 (BM)
Fabaceae: Papilionoideae			
Abrus precatorius L.	v	f	*J. Meerman* pers. obs.
Acosmium panamense (Benth.) Yakovlev	t	f	*L. Urban* 349 (E)
Aeschynomene sp.	h	f	*C. Aubrey* 10 (E)
Andira inermis (W.Wright) DC.	t	f	*L. Urban* 113 (E)
Ateleia gummifera (DC.) D.Dietr.	t	r	*L. Urban* 236 (E)
Canavalia villosa Benth.	v	f	*I. Holmes-Smith* 5 (E)

Centrosema pubescens Benth.	v	f	*A. Monro* 1170 (BM)
Centrosema virginianum (L.) Benth.	v	f	*C. Whitefoord* 10405 (BM)
***Clitoria mexicana* Link**	v	f	*M. Peña* 1059 (BM)
Crotalaria acapulcensis Hook. & Arn.	s	f	*C. Whitefoord* 10216 (BM)
Crotalaria cajanifolia Kunth	h	r	*L. Urban* 85 (E)
Crotalaria pumila Ortega	s	f	*C. Whitefoord* 10095 (BM)
Dalbergia cubilquitzensis (Donn.Sm.) Pittier	t	f	*A. Monro* 1822 (BM)
Dalbergia glabra (Mill.) Standl.	t	f	*C. Whitefoord* 9215 (BM)
Dalbergia stevensonii Standl.	t	f	*C. Whitefoord* 9274 (BM)
Desmodium incanum DC.	h	r	*L. Urban* 143 (E)
Desmodium infractum DC.	v	f	*M. Short* 238 (BM)
Desmodium intortum (Mill.) Urb.	h	f	*J. Dwyer* 12315 (MO)
Desmodium macrodesmum (S.F.Blake) Standl. & Steyerm.	v	f	*C. Whitefoord* 9201 (BM)
Erythrina folkersii Krukoff & Moldenke	t	f	*A. Monro* 2657 (BM)
***Erythrina mexicana* Krukoff**	t	f	*C. Whitefoord* 10245 (BM)
Galactia striata (Jacq.) Urb.	h	r	*C. Whitefoord* 10256 (BM)
Gliricidia sepium (Jacq.) Steud.	t	f	*A. Monro* 1181 (BM)
Indigofera suffruticosa Mill.	s	f	*T. Hawkins* 1085 (MO)
Indigofera trita L. subsp. *scabra* (Roth) de Kort & Tjisse	v	f	*P. Gentle* 2337 (MO)
Lonchocarpus castilloi Standl.	t	f	*C. Whitefoord* 2870 (BM)
Lonchocarpus guatemalensis Benth.	t	f	*A. Monro* 952 (BM)
Lonchocarpus luteomaculatus Pittier	t	f	*A. Ibáñez García* 98 (BM)
Lonchocarpus rugosus Benth.	t	r	*L. Urban* 167 (E)
Machaerium floribundum Benth. +	t/s	f	*S. Brewer* 1786 (WNC)
Machaerium kegelii Meisn.	v	f	*S. Bridgewater* 2790 (E)
Machaerium seemannii Benth.	v	f	*C. Whitefoord* 9530 (BM)
Macroptilium atropurpureum (DC.) Urb.	v	f	*C. Brown* 17 (E)
Mucuna argyrophylla Standl.	v	f	*M. Short* 254 (BM)
Mucuna rostrata Benth.	v	r	*L. Urban* 73 (E)
Ormosia isthmensis Sw. +	t	f	*S. Bridgewater* 3913 (BM)
Ormosia schippii Pierce ex Standl. & Steyerm.	t	f	*C. Whitefoord* 2893 (BM)
***Oxyrhynchus trinervius* (Donn.Sm.) Rudd**	v	f	*M. Short* 250 (MO)
Pachyrhizus erosus (L.) Urb.	v	f	*A. Monro* 939 (BM)
Platymiscium dimorphandrum Donn.Sm.	t	f	*A. Monro* 1798 (BM)
Pterocarpus rohrii Vahl	t	f	*A. Monro* 1001 (BM)
Rhynchosia longiracemosa M.Martens & Galeotti	v	f	*C. Whitefoord* 10372 (BM)
Rhynchosia minima (L.) DC.	v	f	*C. Whitefoord* 9537 (BM)
Stylosanthes sp.	s	r	*S. Suksuwan* 5 (E)
Swartzia cubensis (Britton & P.Wilson) Standl.	t	f	*C. Whitefoord* 9514 (BM)
***Swartzia phaneroptera* Standl.** +	t	f	*S. Brewer* 1673 (WNC)
Tephrosia belizensis Lundell	h	f	*S. Cafferty* 143 (BM)
Tephrosia nitens Benth.	h	f	*M. Balick* 3342 (NY)
Vatairea lundellii (Standl.) Killip ex Record	t	f	*C. Whitefoord* 9263 (BM)
Vigna luteola (Jacq.) Benth.	v	r	*L. Urban* 84 (E)
Zornia reticulata Sm.	h	f	*C. Whitefoord* 10288 (BM)
Fagaceae			
***Quercus acutifolia* Née**	t	f	*C. Whitefoord* 9239 (BM)
Quercus corrugata Hook.	t	f	*S. Cafferty* 2629 (BM)

Quercus cortesii Liebm. +	t	f	*S. Brewer* 1687 (WNC)
Quercus insignis M.Martens & Galeotti +	t	f	*S. Brewer* 1701 (WNC)
Quercus oleoides Schltdl. & Cham.	t	ps	*L. Urban* 333 (BM)
Quercus sapotifolia Liebm.	t	ps	*A. Monro* 1733 (BM)
Quercus segoviensis Née	t	f	*C. Whitefoord* 9284 (BM)
Flacourtiaceae (see *Salicaceae*)			
Gelsemiaceae			
***Gelsemium sempervirens* (L.) A.St.-Hil.**	v	f	*S. Cafferty* 147 (BM)
Gentianaceae			
***Lisianthius skinneri* (Hemsl.) Kuntze**	h	f	*C. Whitefoord* 9339 (BM)
Schultesia lisianthoides (Griseb.) Benth. & Hook.f. ex Hemsl.	h	r	*L. Urban* 191 (E)
Voyria flavescens Griseb. +	h/sa	f	*S. Brewer* 1678 (WNC)
Voyria parasitica (Schltdl. & Cham.) Ruyters & Maas	h/sa	f	*C. Whitefoord* 9245 (BM)
Voyria tenella Hook.	h/sa	f	*A. Monro* 1743 (BM)
***Zeltnera quitensis* (Kunth) G.Mans.**	h	f	*C. Whitefoord* 10183 (BM)
Gesneriaceae			
***Achimenes admirabilis* Wiehler**	h	r	*T. Hawkins* 1204 (MO)
Achimenes erecta (Lam.) H.P.Fuchs	h	r	*J. Dwyer* 12324 (MO)
Besleria laxiflora Benth.	h	f	*S. Bridgewater* 3998 (BM)
Columnea sulfurea Donn.Sm. +	h/e	f	*B. Holst* 5209 (SEL)
Kohleria spicata (Kunth) Oerst.	h	f	*T. Hawkins* 1207 (MO)
Hamamelidaceae			
Liquidambar styraciflua L.	t	f	*A. Monro* 2626 (BM)
Heliconiaceae			
Heliconia aurantiaca Ghiesbr.	h	f	*T. Lai* 1 (E)
Heliconia hirsuta L.f.	h	f	*C. Whitefoord* 9462 (BM)
Heliconia latispatha Benth.	h	r	*C. Whitefoord* 9437 (BM)
Heliconia spissa Griggs	h	f	*S.H. Khaw* 772 (E)
Hydrocharitaceae			
Najas wrightiana A.Braun	h/a	r	*L. Urban* 192 (E)
Icacinaceae			
Calatola costaricensis Standl. +	t	f	*S. Brewer* 1754 (WNC)
Iridaceae			
Cipura campanulata Ravenna	h	ps	*A. Monro* 1014 (BM)
Neomarica variegata (M.Martens & Galeotti) Henrich & Goldblatt	h	f	*C. Whitefoord* 9237 (BM)
Sisyrinchium subcernuum (E.P.Bicknell) Henrich & Goldblatt	h	f	*A. Gentry* 7694 (MO)
Sisyrinchium tinctorium Kunth	h	f	*C. Whitefoord* 9177 (BM)
Juncaceae			
Juncus marginatus Rostk.	h	r	*C. Whitefoord* 9435 (BM)
Lacistemataceae			
Lacistema aggregatum (P.J.Bergius) Rusby	t	f	*A. Monro* 1167 (BM)

Lamiaceae			
Aegiphila monstrosa Moldenke	t	f	*C. Whitefoord* 9221 (BM)
Aegiphila cf. *pauciflora* Standl.	t	f	*C. Whitefoord* 9453 (BM)
Callicarpa acuminata Kunth	s	f	*J. Dwyer* 11569 (MO)
Cornutia pyramidata L.	t	f	*J. Dwyer* 11580 (MO)
***Hyptis umbrosa* Salzm. ex Benth.**	h	r	*L. Urban* 273 (E)
Hyptis urticoides Kunth	h	f	*T. Croat* 2371 (MO)
Marsypianthes chamaedrys (Vahl) Kuntze	h	r	*J. Meerman* pers. obs.
Ocimum campechianum Mill.	h	f	*T. Croat* 23632 (MO)
***Salvia excelsa* Benth.**	h	f	*J. Dwyer* 10897 (MO)
Salvia miniata Fernald	h	f	*C. Whitefoord* 9140 (BM)
Salvia urica Epling	h	r	*L. Urban* 242 (E)
Scutellaria longifolia Benth.	h	f	*C. Whitefoord* 9375 (BM)
Scutellaria lundellii Epling	h	f	*C. Whitefoord* 9375 (BM)
Scutellaria orichalcea Donn.Sm.	h	r	*K. Wangchuck* 19 (E)
***Scutellaria whitefoordii* Klitgaard**	h	f	*C. Whitefoord* 91100 (BM)
Teucrium vesicarium Mill.	h	f	*C. Whitefoord* 10054 (BM)
Vitex gaumeri Greenm.	t	f	*S. Queensborough* 39 (E)
Lauraceae			
Cassytha filiformis L.	h	f/ps	*L. Urban* 340 (E)
Cinnamomum areolatum (Lundell) Kosterm. +	t	f	*S. Brewer* 1668 (WNC)
Licaria capitata (Cham. & Schltdl.) Kosterm.	t	f	*A. Monro* 1296 (BM)
Licaria misantlae (Brandegee) Kosterm.	t	f	*C. Whitefoord* 10362 (BM)
Licaria peckii (I.M.Johnst.) Kosterm.	t	f	*C. Whitefoord* 10370 (BM)
Nectandra colorata Lundell	t	f	*C. Whitefoord* 9072 (BM)
Nectandra cuspidata Nees +	s/t	f	*S. Brewer* 1712 (WNC)
Nectandra longicaudata (Lundell) C.K.Allen	t	f	*A. Monro* 936 (BM)
Nectandra nitida Mez	t	f	*A. Youngson* 8 (E)
Nectandra salicifolia (Kunth) Nees	t	f	*C. Whitefoord* 10012 (BM)
Ocotea cernua (Nees) Mez	t	f	*H. Irving* 190 (E)
Ocotea effusa (Meisn.) Hemsl. +	s/t	f	*S. Brewer* 1710 (WNC)
Ocotea helicterifolia (Meisn.) Hemsl. +	s/t	f	*S. Brewer* 1653 (WNC)
Ocotea leucoxylon (Sw.) Laness. +	t	f	*S. Brewer* 1684 (WNC)
***Ocotea veraguensis* (Meisn.) Mez** +	t	f	*S. Brewer* pers. obs.
Persea schiedeana Nees +	t	f	*S. Brewer* 1756 (WNC)
Loganiaceae (see also *Gelsemiaceae*)			
Spigelia anthelmia L.	h	f	*C. Whitefoord* 2106 (BM)
Spigelia humboldtiana Cham. & Schltdl.	h	f	*C. Whitefoord* 9544 (BM)
***Spigelia palmeri* Rose**	h	f	*J. Dwyer* 10881 (MO)
Strychnos brachistantha Standl.	v	f	*A. Gentry* 7717 (MO)
Strychnos panamensis Seem.	v	f	*C. Whitefoord* 9398 (BM)
Strychnos peckii B.L.Rob.	v	f	*A. Monro* 2609 (BM)
Loranthaceae			
Oryctanthus cordifolius (C.Presl) Urb.	p	f	*C. Whitefoord* 10369 (BM)
Phthirusa pyrifolia (Kunth) Eichler	p	r	*L. Urban* 220 (E)
Psittacanthus pinicola Kuijt	p	f	*A. Monro* 2625 (BM)
Struthanthus cassythoides Millsp. ex Standl.	p	f	*A. Monro* 1002 (BM)
Struthanthus interruptus (Kunth) G.Don	p	f	*C. Whitefoord* 10281 (BM)
Struthanthus orbicularis (Kunth) Blume	p	f	*A. Monro* 9011 (BM)

Lythraceae			
Cuphea appendiculata Benth.	s	f	*A. Monro* 1074 (BM)
Cuphea calophylla Cham. & Schltdl.	s	f/r	*L. Urban* 25 (E)
Cuphea carthagenensis (Jacq.) J.F.Macbr.	s	f	*T. Croat* 23498 (MO)
Cuphea decandra Aiton var. *purpusii* (Brandegee) Bacig.	s	r	*J. Dwyer* 10750 (MO)
Cuphea hyssopifolia Kunth	s	r	*T. Hawkins* 1077 (MO)
Cuphea utriculosa Koehne	s	r	*L. Urban* 21 (E)
Magnoliaceae			
Magnolia yoroconte Dandy	t	f	*S. Cafferty* 139 (BM)
Malpighiaceae			
Bunchosia lindeniana A.Juss.	s/t	f	*M. Balick* 3150 (NY)
Byrsonima crassifolia (L.) Kunth	t	f	*C. Whitefoord* 9510 (BM)
Heteropterys brachiata (L.) DC.	v	r	*J. Dwyer* 12327 (MO)
Heteropterys laurifolia (L.) A.Juss.	v	f/r	*L. Urban* 425 (E)
Heteropterys lindeniana A.Juss.	v	r	*C. Whitefoord* 9415 (BM)
Hiraea reclinata Jacq.	v	f	*C. Whitefoord* 10356 (BM)
Hiraea smilacina Standl. +	v	f	*B. Allen* 15184 (MO)
Malpighia glabra L.	s/t	f	*S. Queensborough* 322 (E)
Mascagnia sp.	v	f	*C. Whitefoord* 9228 (BM)
Stigmaphyllon ellipticum (Kunth) A.Juss.	v	f	*C. Whitefoord* 9017 (BM)
Stigmaphyllon lindenianum A.Juss.	v	f	*C. Whitefoord* 9513 (BM)
Tetrapterys arcana C.V.Morton	v	f	*C. Whitefoord* 9380 (BM)
Tetrapterys schiedeana Schltdl. & Cham.	v	f	*A. Ibáñez García* 110 (MO)
Malvaceae			
Allosidastrum pyramidatum (Cav.) Krapov., Fryxell & D.M.Bates	s	f	*C. Whitefoord* 10007 (BM)
Bernoullia flammea Oliv.	t	f	*C. Whitefoord* 9147 (BM)
Byttneria aculeata (Jacq.) Jacq.	ss	f	*K. Armstrong* 506 (E)
Byttneria catalpifolia Jacq.	ss	f	*M. Short* 249 (BM)
Ceiba pentandra (L.) Gaertn.	t	f	*C. Lundell* 6320 (MO)
Corchorus siliquosus L.	h/s	f	*T. Croat* 23669 (MO)
Guazuma ulmifolia Lam.	t	f	*A. Gentry* 7792 (MO)
Hampea stipitata S.Watson	t	f	*I. Holmes-Smith* 3 (E)
Hampea trilobata Standl.	s/t	f	*L. Urban* 268 (E)
Helicteres guazumifolia Kunth	s	f	*A. Monro* 1174 (BM)
Heliocarpus americanus L.	t	f	*C. Whitefoord* 10031 (BM)
Herissantia crispa (L.) Brizicky	h	r	*L. Urban* 229 (E)
Hibiscus costatus A.Rich.	s	f	*J. Dwyer* 10787 (MO)
Hibiscus trilobus Aubl. subsp. *hirsutus* O.J.Blanch. & Fryxell	h	f	*G. Proctor* 30054 (MO)
Luehea speciosa Willd.	t	f	*L. Urban* 338 (E)
Malachra alceifolia Jacq.	h	f	*D. Spellman* 1375 (MO)
Malachra fasciata Jacq.	h	f	*C. Whitefoord* 9035 (BM)
Malvastrum coromandelianum (L.) Garcke	h/s	f	*T. Croat* 23381 (MO)
Malvaviscus arboreus Cav.	s	f	*T. Hawkins* 1052 (MO)
Melochia lupulina Sw.	s	f	*C. Whitefoord* 10140 (BM)
Melochia pyramidata L.	h	f	*C. Whitefoord* 9566 (BM)
Ochroma pyramidale (Lam.) Urb.	t	f	*A. Monro* 1194 (MO)
Pavonia paniculata Cav.	h	f	*J. Dwyer* 12308 (MO)

Pavonia schiedeana Steud.	s	f	*C. Whitefoord* 2097 (BM)
Petenaea cordata Lundell	t	f	*M. Peña* 1009 (BM)
Quararibea funebris (La Llave) Vischer	t	f	*A. Monro* 1575 (MO)
Sida acuta Burm.f.	s	f	*D. Sutton* 33 (BM)
Sida rhombifolia L.	s	f	*T. Croat* 23377 (MO)
Trichospermum grewiifolium (A.Rich.) Kosterm.	t	f	*C. Whitefoord* 9229 (BM)
Triumfetta bogotensis DC.	s	f	*T. Croat* 23681 (MO)
Triumfetta semitriloba Jacq.	s	f	*T. Hawkins* 1310 (MO)
Waltheria indica L.	h	f	*L. Urban* 68 (E)
Wissadula excelsior (Cav.) C.Presl	s	f	*C. Whitefoord* 9340 (BM)
Marantaceae			
Calathea crotalifera S.Watson	h	f	*A. Monro* 10258 (BM)
Calathea lutea (Aubl.) G.Mey.	h	r	*C. Whitefoord* 10257 (BM)
Maranta arundinacea L.	h	f	*A. Gentry* 7835 (MO)
Maranta gibba Sm.	h	f/r	*L. Urban* 99 (E)
Pleiostachya pruinosa (Regel) K.Schum.	h	f	*S. Khaw* 777 (E)
Stromanthe hjalmarssonii (Körn.) Petersen	h	f	*C. Whitefoord* 9420 (BM)
***Stromanthe tonckat* (Aubl.) Eichler** +	h	f	*S. Bridgewater* 3924 (BM)
Marcgraviaceae			
Marcgravia schippii Standl. +	v	f	*S. Brewer* 1753B (WNC)
Ruyschia enervia Lundell	s/e	f	*C. Lundell* 6308 (MO)
Souroubea loczyi (V.A.Richt.) de Roon +	s	f	*S. Brewer* 1667 (WNC)
Melastomataceae			
Arthrostemma ciliatum Pav. ex D.Don	h	f	*A. Monro* 787 (BM)
Arthrostemma parvifolium Cogn.	h	f	*J. Dwyer* 10859 (MO)
Blakea cuneata Standl. +	s/e	f	*S. Bridgewater* 3936 (BM)
Clidemia capitellata (Bonpl.) D.Don	s	ps	*C. Whitefoord* 9180 (BM)
Clidemia involucrata DC. +	s	f	*S. Bridgewater* 3968 (BM)
Clidemia petiolaris (Schltdl. & Cham.) Schltdl. ex Triana	s	f	*C. Whitefoord* 10197 (BM)
Clidemia sericea D.Don	s	ps	*C. Whitefoord* 9188 (BM)
Conostegia icosandra (Sw. ex Wikstr.) Urb.	t	f	*A. Monro* 2644 (BM)
***Conostegia montana* (Sw.) D.Don ex DC.** +	s	f	*S. Bridgewater* 3898 (BM)
Conostegia plumosa L.O.Williams	s	r	*M. Balick* 3104 (MO)
Conostegia xalapensis D.Don	s	f	*C. Whitefoord* 10365 (BM)
Graffenrieda galeotti (Naudin) L.O.Williams +	s	f	*B. Allen* 15211 (MO)
Henriettea fascicularis (Sw.) M.Gómez	t	r	*C. Whitefoord* 9417 (BM)
Heterocentron subtriplinervium (Link & Otto.) A.Braun & C.D.Bouché	s	f/ps	*C. Whitefoord* 9506 (BM)
Miconia affinis DC.	s	f	*K. Wangchuck* 17 (E)
Miconia albicans (Sw.) Triana	s	f	*A. Ibáñez García* 170 (E)
Miconia argentea (Sw.) DC.	t	f	*P. Gentle* 2485 (MO)
Miconia centrodesma Naudin	s	f	*A. Monro* 2671 (BM)
Miconia desmantha Benth.	s	f/ps	*T. Croat* 23389 (MO)
Miconia fulvostellata L.O.Williams	s	f	*C. Whitefoord* 3002 (BM)
***Miconia glaberrima* (Schltdl.) Naudin** +	s	f	*S. Bridgewater* 3974 (BM)
***Miconia gracilis* Triana** +	s	f	*B. Allen* 15277 (MO)
Miconia holosericea (L.) DC.	t	f	*C. Whitefoord* 9364 (BM)
Miconia ibaguensis (Bonpl.) Triana	s	f	*T. Croat* 23339 (MO)
Miconia impetiolaris (Sw.) D.Don ex DC.	s	f	*C. Whitefoord* 10333 (BM)

Miconia lacera (Bonpl.) Naudin	s	f/ps	*C. Whitefoord* 9190 (BM)
Miconia laevigata (L.) D.Don	s	f/ps	*J. Dwyer* 10184 (MO)
Miconia matthaei Naudin	t	f	*C. Whitefoord* 9343 (BM)
***Miconia nutans* Donn.Sm.** +	h	f	*B. Allen* 15212 (MO)
Miconia oinochrophylla Donn.Sm.	s	f	*A. Monro* 220 (BM)
Miconia prasina (Sw.) DC.	s	r	*L. Urban* 193 (E)
Miconia punctata (Desr.) D.Don ex DC. +	s	f	*S. Brewer* 1662 (WNC)
Miconia reducens Triana	s/t	f	*A. Monro* 2616 (BM)
Miconia schlimii Triana	t	f	*J. Dwyer* 10904 (MO)
Miconia serrulata (DC.) Naudin	s	f	*C. Whitefoord* 9335 (BM)
Miconia stenostachya DC.	s	f	*L. Urban* 408 (E)
Pterolepis stenophylla Gleason	h	r	*D. Spellman* 1392 (MO)
Meliaceae			
Cedrela odorata L.	t	f	*A. Monro* 682 (BM)
Guarea glabra Vahl	t	f	*S. Queensborough* 145 (E)
Guarea grandifola DC.	t	f	*A. Monro* 1400 (BM)
Swietenia macrophylla King	t	f	*C. Whitefoord* 9149 (BM)
Trichilia erythrocarpa Lundell	t	f	*H. Irving* 178 (E)
Trichilia havanensis Jacq.	t	f	*C. Whitefoord* 10174 (BM)
Trichilia minutiflora Standl.	t	f	*C. Whitefoord* 10313 (BM)
Trichilia moschata Sw.	t	f	*A. Monro* 677 (BM)
Trichilia pallida Sw.	t	f	*A. Gentry* 7709 (MO)
Memecylaceae			
Mouriri exilis Gleason	t	f	*C. Whitefoord* 9397 (BM)
Mouriri myrtilloides (Sw.) Poir.	t	f	*H. Irving* 177 (E)
Menispermaceae			
Abuta panamensis (Standl.) Krukoff & Barneby +	v	f	*S. Brewer* pers. obs.
Abuta steyermarkii (Standl.) Standl.	v	f	*A. Gentry* 7705 (MO)
Cissampelos pareira L.	v	f	*A. Chapman* 16 (E)
Disciphania calocarpa Standl.	v	r	*J. Meerman* pers. obs.
Monimiaceae			
Mollinedia guatemalensis Perkins	s	f	*C. Whitefoord* 9122 (BM)
Siparuna thecaphora (Poepp. & Endl.) A.DC.	t	f	*A. Monro* 1489 (BM)
Moraceae			
Brosimum alicastrum Sw.	t	f	*A. Monro* 1012 (BM)
Brosimum lactescens (S.Moore) C.C.Berg +	t	f	*S. Brewer* 1782 (WNC)
Castilla elastica Sessé	t	f	*L. Urban* 314 (E)
***Clarisia* sp.**	h	f	*A. Monro* 3193 (BM)
Dorstenia belizensis C.C.Berg	h	f	*J. Meerman* pers. obs.
Dorstenia contrajerva L.	h	f	*T. Hawkins* 1124 (MO)
Dorstenia lindeniana Bureau	h	f	*A. Monro* 3193 (BM)
Ficus colubrinae Standl.	t	f	*C. Whitefoord* 2801 (BM)
Ficus crassiuscula Warb. ex Standl. +	t	f	*B. Holst* 5278 (SEL)
Ficus insipida Willd.	t	f	*L. Urban* 117 (E)
Ficus maxima Mill.	t	f	*C. Whitefoord* 2997 (BM)
Ficus pertusa L.f.	t	f	*A. Monro* 1165 (BM)
Ficus popenoei Standl.	t	f	*A. Monro* 990 (BM)
Ficus trigonata L.	t	f	*A. Ibáñez García* 91 (MO)

Ficus turrialbana W.C.Burger	t	f	*T. Hawkins* 1089 (MO)
Maclura tinctoria (L.) D.Don ex Steud.	t	f	*J. Meerman* pers. obs.
Pseudolmedia spuria (Sw.) Griseb.	t	f	*C. Whitefoord* 9150 (BM)
Trophis mexicana (Liebm.) Bureau	t	f	*A. Monro* 1458 (BM)
Trophis racemosa (L.) Urb.	t	f	*C. Whitefoord* 9045 (BM)
Myricaceae			
Myrica cerifera L.	s/t	ps	*S. Cafferty* 1 (BM)
Myristacaceae			
Virola sp.	t	f	*S. Bridgewater* pers. obs.
Myrsinaceae			
Anagallis pumila Sw.	h	r	*J. Dwyer* 12330 (MO)
Ardisia compressa Kunth	t	r	*C. Whitefoord* 9418 (BM)
Ardisia densiflora Krug & Urb.	s	f	*A. Gentry* 7672 (MO)
Ardisia nigrescens Oerst.	s	f	*A. Monro* 2699 (BM)
Ardisia nigropunctata Oerst.	s	f	*A. Monro* 3201 (BM)
Ardisia paschalis Donn.Sm.	s	f	*A. Monro* 790 (BM)
Parathesis cubana (A.DC.) Molinet & Gómez	s	f	*C. Whitefoord* 10048 (BM)
Parathesis donnell-smithii Mez	s	f	*P. Gentle* 2615 (MO)
Parathesis membranacea Lundell	s/t	f	*J. Dwyer* 10909A (BRH)
Parathesis oblanceolata Lundell	t	r	*T. Hawkins* 1248 (MO)
Parathesis sessilifolia Donn.Sm.	s	f	*C. Whitefoord* 9448 (BM)
Myrtaceae			
Calyptranthes bartlettii Standl.	s	r	*L. Urban* 14 (E)
Calyptranthes chytraculia (L.) Sw.	s	r	*M. Peña* 1004 (BM)
Calyptranthes lindeniana O.Berg	s	r	*L. Urban* 112 (E)
Eugenia capuli (Schltdl. & Cham.) O.Berg	s	f	*C. Whitefoord* 10049 (BM)
Eugenia oerstediana O.Berg	s	f	*P. Gentle* 2533 (MO)
Eugenia rhombea (O.Berg) Krug & Urb.	s	f	*G. Proctor* 29831 (BM)
Eugenia vacana Lundell	s	f/r	*C. Whitefoord* 2807 (BM)
***Eugenia venezuelensis* O.Berg**	s	f	*T. Croat* 23628 (MO)
Myrcia splendens (Sw.) DC.	t	f	*A. Ibáñez García* 62 (MO)
Myrcianthes fragrans (Sw.) McVaugh	t	f	*A. Ibáñez García* 84 (MO)
Pimenta dioica (L.) Merr.	t	f	*R. Linares-Palomino* 15 (E)
Psidium guajava L.	t	cult.	*D. Spellman* 1389 (MO)
Najadaceae (see *Hydrocharitaceae*)			
Nyctaginaceae			
Guapira linearibracteata (Heimerl) Lundell	s	r	*L. Urban* 322 (E)
Mirabilis jalapa L.	h	f	*T. Croat* 23794 (MO)
Neea psychotrioides Donn.Sm.	t	f	*C. Whitefoord* 9271 (BM)
Pisonia aculeata L.	v	f	*S. Perez Espona* 11 (E)
Ochnaceae			
Elvasia bisepala Sastre & C.Whitefoord +	t	f	*S. Bridgewater* 3987 (BM)
Ouratea lucens (Kunth) Engl.	t	f	*S. Queensborough* 36 (E)
Ouratea nitida (Sw.) Engl.	t	f/r	*L. Urban* 188 (E)
Olacaceae			
Heisteria media S.F.Blake	t	f	*G. Proctor* 30100 (MO)
Schoepfia schreberi J.F.Gmel.	s/t	f	*G. Proctor* 29858 (MO)

Oleaceae			
Chionanthus oblanceolatus (B.L.Rob.) P.S. Green	s	f/r	*A. Monro* 1799 (BM)
Onagraceae			
Hauya elegans DC. subsp. *lucida* (Donn.Sm. & Rose) P.H.Raven & Breedlove	t	f	*C. Lundell* 6318 (MO)
Ludwigia octovalvis (Jacq.) P.H.Raven	h	f/r	*C. Whitefoord* 10141 (BM)
Ludwigia peruviana (L.) H.Hara	h	f	*C. Whitefoord* 9307 (BM)
Orchidaceae			
Anathallis sertularioides (Sw.) Pridgeon & M.W.Chase (= *Pleurothallis sertularioides* (Sw.) Spreng.)	h/e	f	*B. Say*ers 97/290
Arpophyllum giganteum Lindl.	h/e	f	BBG1997-0101
Brassia maculata R.Br.	h	f	*B. Holst* 7853 (SEL)
Bulbophyllum aristatum (Rchb.f.) Hemsl.	h/e	f	*B. Sayers* 97/342
Bulbophyllum oerstedii (Rchb.f.) Hemsl.	h/e	f	*B. Sayers* 97/305
Campylocentrum micranthum (Lindl.) Rolfe	h/e	f	*B. Sayers* 97/267
Cattleya bowringiana Veitch	h/e	ps	BBG2003-0233
Chysis bractescens Lindl.	h/e	f	BBG2003-0249
Coelia bella (Lem.) Rchb.f.	h	f	*T. Hawkins* 1233 (MO)
Cyclopogon sp.	h	f	*A. Monro* 1350 (BM)
Cycnoches ventricosum Bateman	h/e	f	*T. Hawkins* 1172 (MO)
Dichaea glauca (Sw.) Lindl.	h/e	f	*B. Sayers* 97/281
Dichaea muricatoides Hamer & Garay	h/e	f	*B. Sayers* (sight record)
Dichaea panamensis Lindl.	h/e	f	BBG2003-0242
Dimerandra emarginata (G.Mey.) Hoehne	h/e	f	*P. Gentle* 2541 (MO)
Dryadella linearifolia (Ames) Luer	h/e	f	*B. Sayers* 97/240
Elleanthus caricoides Nash	h/e	f	*B. Sayers* 97/228
Elleanthus linifolius C.Presl	h/e	f	BBG1997-0096
Encyclia asperula Dressler & G.E.Pollard	h/e	f	*B. Holst* 7582 (SEL; SC)
Encyclia belizensis (Rchb.f.) Schltr. subsp. *belizensis*	h	ps	*B. Sayers* (sight record)
Encyclia polybulbon (Sw.) Dressler	h/e	f	*B. Sayers* (sight record)
Encyclia porrecta B.R.Adams & P.J.Cribb	h/e	f	*B. Sayers* 00/817
Epidendrum ciliare L.	h/e	f	*B. Sayers* 97/201
Epidendrum cristatum Ruiz & Pav.	h/e	f	*B. Holst* 7575 (SEL; SC)
Epidendrum diffusum Sw.	h/e	f	*B. Sayers* 97/343
Epidendrum ibaguense Kunth	h	f	*C. Whitefoord* 10284 (BM)
Epidendrum imatophyllum Lindl.	h	f	*B. Adams* pers. obs.
Epidendrum nocturnum Jacq.	h/e	f	BBG2004-0434
Epidendrum paranthicum Rchb.f. (= *Epidanthus paranthicus* (Rchb.f.) L.O.Williams) +	h/e	f	*B. Holst* 5199 (SEL)
Epidendrum paniculatum Ruiz & Pav.	h/e	f	BBG1997-0037
Epidendrum polyanthum Lindl.	h/e	f	*B. Sayers* 97/484
Epidendrum rigidum Jacq.	h/e	f/r	BBG1997-0037
Epidendrum stamfordianum Bateman	h/e	f	*B. Holst* 7995 (SEL; SC)
Epidendrum verrucosa (Sw.) (= *Oerstedella verrucosa* (Sw.) Hágsater)	h/e	f	*C. Whitefoord* 10207 (BM)
Erycina pusilla (L.) N.H.Williams & M.W.Chase (= *Psygmorchis pusilla* (L.) Dodson & Dressler)	h/e	f	BBG2003-0240

Galeandra batemanii Rolfe	h/e	ps	BBG2004-0428
Galeottia grandiflora A.Rich. & Galeotti	h/e	f	*B. Sayers* 00/818
Gongora cassidea Rchb.f.	h/e	f	*B. Sayers* 00/820
Gongora truncata Lindl.	h/e	f	*M. Short* 233 (BM)
Gongora unicolor Schltr.	h/e	f	*T. Hawkins* 1269 (MO)
***Goodyera* sp.** +	h/e	f	*B. Allen* 15176 (MO)
Habenaria monorrhiza (Sw.) Rchb.f.	h	f	*J. Dwyer* 12279 (MO)
Ionopsis urticularioides (Sw.) Lindl.	h/e	f	*B. Sayers* 97/277
Isochilus carnosiflorus Lindl.	h	f	*T. Hawkins* 1225 (MO)
Jacquiniella globosa (Jacq.) Schltr.	h/e	f	BBG2004-0436
Jacquiniella teretifolia (Sw.) Britton & Wilson	h/e	f	*B. Sayers* 97/372
Kraenzlinella erinacea (Rchb.f.) Ames (= *Pleurothallis erinacea* Rchb.f.)	h/e	f	*T. Croat* 23747 (MO)
***Lepanthes arachnion* Luer & Dressler**	h/e	f	*B. Sayers* 97/768
***Lepathopsis floripecten* (Rchb.f.) Ames**	h/e	f	*B. Sayers* 00/801
Lycaste cochleata Lindl.	h/e	f	*B. Sayers* 97/292
Malaxis sp.	h	f	*A. Monro* 684 (BM)
Masdevallia floribunda Lindl.	h	f	*T. Hawkins* 1200 (MO)
Maxillaria aciantha Rchb.f.	h/e	f	*T. Hawkins* 1223 (MO)
Maxillaria crassifolia (Lindl.) Rchb.f.	h/e	f	*B. Sayers* pers. obs.
Maxillaria densa Lindl.	h/e	f	*T. Croat* 23614 (MO)
Maxillaria elatior Rchb.f.	h/e	f	BBG1997-0006
Maxillaria friedrichsthalii Rchb.f.	h/e	f	BBG2003-0237
Maxillaria hedwigae Hamer & Dodson	h/e	f	*T. Hawkins* 1228 (MO)
Maxillaria rufescens Lindl.	h/e	f	BBG1997-0050
Maxillaria tenuifolia Lindl.	h/e	f	*B. Sayers* 97/300
Maxillaria uncata Lindl.	h/e	f	*T. Croat* 23746 (MO)
Maxillaria variabilis Bateman ex Lindl.	h/e	f	*T. Hawkins* 1067 (MO)
***Mesadenus polyanthus* (Rchb.f.) Schltr.**	h/e	f	*B. Sayers* 97/379
Mormolyca ringens (Lindl.) Schltr.	h/e	f	*T. Hawkins* 1056 (MO)
Nidema boothii (Lindl.) Schltr.	h/e	f	*C. Lundell* 6413 (MO)
Oncidium sphacelatum Lindl.	h/e	f	*C. Whitefoord* 10207 (BM)
Ornithocephalus gladiatus Hook.	h/e	f	*A. Gentry* 7823 (MO)
Pelexia adnata (Sw.) Spreng.	h	f	*B. Holst* 7389 (SEL; SC)
***Platystele minimiflora* (Schltr.) Garay**	h/e	f	*B. Sayers* 97/304 (BS)
Platystele stenostachya (Rchb.f.) Garay	h/e	f	*S. Ingram* 1915 (MO)
Platythelys querceticola (Lindl.) Garay	h	f	*B. Sayers* 00/825
Pleurothallis angustifolia Lindl.	h/e	f	*B. Sayers* 00/813
Pleurothallis cardiothallis Rchb.f.	h/e	f	*B. Sayers* 00/823
Pleurothallis lewisae Ames	h/e	f	*B. Sayers* 97/357
Polystachya foliosa (Hook.) Rchb.f.	h/e	f	*B. Sayers* 97/198
Ponera striata Lindl.	h	f	*B. Sayers* 97/406
Prescottia stachyodes (Sw.) Lindl.	h	f	*B. Sayers* 00/814
Prosthechea baculus (Rchb.f.) W.E.Higgins	h/e	f	BBG1997-0003
Prosthechea chacaoensis (Rchb.f.) W.E.Higgins	h/e	f	*T. Croat* 23786 (MO)
Prosthechea cochleata (L.) W.E.Higgins (= *Encyclia cochleata* L.Lemée)	h/e	f	*A. Gentry* 7818 (MO)
Prosthechea michuacana (La Llave & Lex.) W.E.Higgins (= *Encyclia michuacana* (La Llave & Lex.) Schltr.)	h	ps	BBG2005-0009

Prosthechea pygmaea (Hook.) W.E.Higgins (= *Encyclia pygmaea* (Hook.) W.E.Higgins)	h/e	f	*S. Ingram* 1942 (MO)
Psilochilus sp. +	h/e	f	*B. Allen* 15276 (MO)
Sarcoglottis rosulata (Lindl.) P.N.Don	h	f	*B. Holst* 7905 (SEL; SC)
Sarcoglottis sceptrodes (Rchb.f.) Schltr.	h	f	BBG1997-0119
Scaphyglottis lindeniana (A.Rich. & Galeotti) L.O.Williams	h/e	f	*P. Catling* B60.5 (MO)
Scaphyglottis prolifera Cogn.	h/e	f	*J. Dwyer* 10915 (MO)
Sobralia decora Bateman	h/e	f	BBG1997-0116
Sobralia fragrans Lindl.	h/e	f	BBG2003-0241
Sobralia macrantha Lindl.	h	f	BBG2004-0498
Specklinia brighamii (S.Watson) Pridgeon & M.W.Chase (= *Pleurothallis brighamii* S.Watson)	h/e	f	*C. Whitefoord* 10316 (BM)
Specklinia grobyi (Bateman ex Lindl.) F.Barros (= *Pleurothallis grobyi* Bateman ex Lindl.)	h/e	f	BBG2003-0245
Specklinia setosa (C.Schweinf.) Pridgeon & M.W.Chase (= *Pleurothallis setosa* C.Schweinf.)	h/e	f	*T. Croat* 23622 (MO)
Specklinia tribuloides (Sw.) Lindl. (= *Pleurothallis setosa* C.Schweinf.)	h/e	f	*B. Sayers* 97/338
Stanhopea oculata (Lodd.) Lindl.	h/e	f	*B. Holst* 7831 (SEL; SC)
Stelis ciliaris Lindl.	h/e	f	*A. Gentry* 7827 (MO)
Stelis gelida (Lindl.) Pridgeon & M.W.Chase	h/e	f	*T. Hawkins* 1212 (MO)
Stelis gracilis Ames	h/e	f	*B. Allen* 15286 (MO)
Stelis quadrifida (La Llave & Lex.) Lindl.	h/e	f	*B. Sayers* 97/254
Teuscheria pickiana (Schltr.) Garay	h/e	f	*B. Sayers* 97/239
Trichocentrum ascendens (Lindl.) M.W.Chase & N.H.Williams (= *Oncidium ascendens* Lindl.)	h/e	f	BBG2004-0437
Trichocentrum carthagenense (Jacq.) M.W.Chase & N.H.Williams (= *Oncidium carthagenense* (Jacq.) Sw.)	h/e	f	BBG2003-0245
Trichocentrum cebolleta (Jacq.) M.W.Chase & N.H.Williams (= *Oncidium cebolleta* (Jacq.) Sw.)	h/e	f	*C. Whitefoord* 10125 (BM)
Trichocentrum lindenii (Brongn.) M.W.Chase & N.H.Williams (= *Oncidium lindenii* Brongn.)	h/e	f	*B. Holst* 7411 (SEL; SC)
***Trichocentrum undulatum* (Sw.) Ackerman & M.W.Chase**	h/e	f	*B. Holst* 7411 (SEL; SC)
Trichosalpinx blaisdellii (S.Watson) Luer	h/e	f	*B. Sayers* 97/219
Trichosalpinx ciliaris (Lindl.) Luer	h/e	f	*B. Sayers* 97/499
Trigonidium egertonianum Bateman ex Lindl.	h/e	f	*T. Hawkins* 1242 (MO)
Vanilla hartii Rolfe	h/e	f	BBG2005-0056
Vanilla planifolia G.Jackson	h/v	f	*B. Sayers* 97/319
Orobanchaceae			
***Castilleja arvensis* Schltdl. & Cham.**	h/p	f	*C. Whitefoord* 10168 (BM)
Oxalidaceae			
Biophytum dendroides (Kunth) DC.	h	r	*C. Whitefoord* 2067 (BM)
Oxalis frutescens L.	h	f	*C. Whitefoord* 10039 (BM)

Oxalis latifolia s.l. Kunth	h	r	*C. Whitefoord* 10420 (BM)
Papaveraceae			
Argemone mexicana L.	h	r	*L. Urban* 39 (E)
Bocconia frutescens L.	s	f	*T. Croat* 23792 (MO)
Passifloraceae			
Passiflora adenopoda DC.	v	f	*M. Peña* 1031 (BM)
Passiflora ambigua Hemsl.	v	f	*C. Whitefoord* 9064 (BM)
Passiflora biflora Lam.	v	f	*T. Croat* 23564 (MO)
Passiflora foetida L.	v	f	*L. Urban* 5 (E)
Passiflora guatemalensis S.Watson	v	f	*A. Gentry* 7742 (MO)
Passiflora helleri Peyr.	v	f	*S. Cafferty* 167 (BM)
Passiflora mayarum J.M.MacDougal	v	f	*A. Gentry* 7733 (MO)
Passiflora oerstedii Mast. var. *choconiana* (S.Watson) Killip	v	f	*J. Dwyer* 11558 (MO)
Passiflora serratifolia L.	v	f	*L. Seed* 10 (E)
Passiflora sexflora Juss.	v	f	*M. Short* 236 (BM)
Passiflora xiizodz J.M.MacDougal	v	f	*A. Smith* 8 (E)
Pentaphylaceae			
Ternstroemia tepezapote Schltdl. & Cham.	t	f/r	*C. Whitefoord* 10266 (BM)
Phyllanthaceae			
Astrocasia tremula (Griseb.) G.L.Webster	t	f	*P. Gentle* 2179 (MO)
Phyllanthus liebmannianus Müll.Arg.	h	f	*C. Whitefoord* 10276 (BM)
Phytolaccaceae			
Phytolacca rivinoides Kunth & C.D.Bouché	s	f	*A. Monro* 1226 (BM)
***Phytolacca thyrsiflora* Fenzl ex J.A.Schmidt**	h	f	*A. Monro* 754 (BM)
Rivina humilis L.	h	f	*C. Sharp* 6 (E)
Piperaceae			
Peperomia alata Ruiz & Pav.	h/e	f	*A. Gentry* 7832 (MO)
***Peperomia angustata* Kunth**	h/e	r	*T. Hawkins* 1313 (MO)
Peperomia deppeana Schltdl. & Cham.	h/e	f	*C. Whitefoord* 10026 (BM)
Peperomia hirta C.DC. (= *P. costaricensis* C.DC.)	h/e	f	*T. Hawkins* 1208 (MO)
Peperomia obtusifolia (L.) A.Dietr.	h/e	f	*A. Monro* 1130 (BM)
***Peperomia matlalucaensis* C.DC.**	h/e	f	*B. Holst* 5191 (MO)
***Peperomia petrophila* C.DC.**	h/e	f	*M. Pena* 991 (MO)
***Peperomia portobellensis* Beurl.**	h/e	f	*T. Croat* 23326 (MO)
Peperomia rhombea Ruiz & Pav.	h/e	f	*T. Croat* 23755 (MO)
Peperomia aff. *tetraphylla* (G.Forst.) Hook. & Arn.	h/e	f	*C. Whitefoord* 9105 (BM)
***Peperomia versicolor* Trel.** +	h/e	f	*B. Holst* 5251 (MO)
Piper aduncum L.	t	f	*C. Whitefoord* 9292 (BM)
Piper aequale Vahl	s	f	*A. Monro* 1446 (BM)
Piper amalago L.	s	f	*L. Urban* 107 (E)
Piper auritum Kunth	h/s	f	*A. Gentry* 7746 (MO)
Piper hispidum Sw.	s	r	*L. Urban* 309 (E)
Piper jacquemontianum Kunth	s	f	*K. Armstrong* 505 (E)
Piper marginatum Jacq.	s	f	*C. Whitefoord* 2049 (BM)
Piper pseudofuligineum C.DC.	s	f	*A. Gentry* 7798 (MO)

Piper pseudolindenii C.DC.	s	f	*R. Arvigo* 247 (MO)
Piper psilorhachis C.DC.	s	f	*A. Gentry* 7665 (MO)
Piper sancti-felicis Trel.	s	f	*A. Monro* 716 (BM)
Piper tuberculatum Jacq.	s	f	*P. Gentle* 2472 (MO)
Piper villiramulum C.DC.	s	f	*C. Whitefoord* 9077 (BM)
Piper yucatanense C.DC.	s	f	*A. Gentry* 7830 (MO)
Plantaginaceae			
Angelonia ciliaris B.L.Rob.	h	f	*A. Monro* 1236 (BM)
Bacopa lacertosa Standl.	h	f	*C. Whitefoord* 10186 (BM)
Mecardonia procumbens (Mill.) Small	h	f/r	*C. Whitefoord* 10185 (BM)
Russelia campechiana Standl.	s	f	*C. Whitefoord* 10020 (BM)
***Russelia parvifolia* Carlson**	h	r	*T. Hawkins* 1023 (MO)
Russelia sarmentosa Jacq.	s	f	*M. Short* 217 (BM)
Scoparia dulcis L.	h	f	*J. Dwyer* 10761 (MO)
Stemodia durantifolia (L.) Sw.	h	f	*C. Whitefoord* 9060 (BM)
Stemodia fruticosa Lundell	h	f	*P. Gentle* 2252 (MO)
***Stemodia peduncularis* Benth.**	h	f	*C. Whitefoord* 10350 (BM)
Poaceae			
Andropogon bicornis L.	h	f	*M. Peña* 1060 (BM)
Arundinella berteroniana (Schult.) Hitchc. & Chase	h	r	*T. Croat* 23538 (MO)
Arundinella deppeana Nees ex Steud.	h	r	*C. Whitefoord* 10139 (BM)
Chloris radiata (L.) Sw.	h	f	*T. Croat* 23501 (MO)
Cryptochloa strictiflora (E.Fourn.) Swallen	h	r	*A. Monro* 3262 (BM)
Dichanthelium dichotomum (L.) Gould	h	f	*S. Cafferty* 120 (BM)
Dichanthelium sciurotoides (Zuloaga & Morrone) Davidse	h	f	*A. Monro* 3208 (BM)
Digitaria ciliaris (Retz.) Koeler	h	f	*T. Croat* 23503 (MO)
Digitaria horizontalis Willd.	h	f	*A. Monro* 2681 (BM)
Eleusine indica (L.) Gaertn.	h	f	*C. Whitefoord* 2119 (BM)
Eragrostis atrovirens (Desf.) Trin. ex Steud.	h	f	*A. Monro* 3236 (BM)
Eragrostis maypurensis (Kunth) Steud.	h	ps	*C. Whitefoord* 9189 (BM)
Eragrostis rufescens Schrad.	h	f	*P. Gentle* 2281 (MO)
Gynerium sagittatum (Aubl.) P.Beauv.	h	f	*T. Hawkins* 1317 (MO)
Homolepis aturensis (Kunth) Chase	h	f	*T. Croat* 23634 (MO)
Hymenachne amplexicaulis (Rudge) Nees	h	r	*T. Hawkins* 1297 (MO)
Hyparrhenia rufa (Nees) Stapf	h	f	*A. Monro* 751 (BM)
Ichnanthus mexicanus E.Fourn.	h	f	*A. Monro* 3260 (MO)
Ichnanthus tenuis (J.Presl) Hitchc. & Chase	h	f	*A. Monro* 3260 (BM)
Lasiacis divaricata (L.) Hitchc.	h	f	*C. Whitefoord* 2024 (BM)
Lasiacis grisebachii (Nash) Hitchc.	h	f	*C. Whitefoord* 2025 (BM)
Lasiacis nigra Davidse	h	f	*A. Monro* 409 (BM)
Lasiacis procerrima (Hack.) Hitchc.	h	f	*M. Peña* 1055 (BM)
Lasiacis rugelii (Griseb.) Hitchc.	h	r	*J. Dwyer* 12284 (MO)
Lasiacis scabrior Hitchc.	h	f	*M. Short* 185 (BM)
Lasiacis sloanei (Griseb.) Hitchc.	h	f	*D. Sutton* 41 (BM)
Leersia ligularis Trin.	h	f	*T. Croat* 23496 (MO)
Leptochloa virgata (L.) P.Beauv.	h	f	*A. Monro* 2679 (BM)
Lithachne pauciflorus (Sw.) P.Beauv.	h	f	*C. Whitefoord* 10234 (BM)
***Muhlenbergia tenella* (Kunth) Trin.**	h	f	*T. Hawkins* 1292 (MO)

Olyra glaberrima Raddi	h	f	*A. Monro* 1450 (BM)
Olyra latifolia L.	h	f	*A. Monro* 1224 (BM)
Oplismenus hirtellus (L.) P.Beauv.	h	r	*C. Lundell* 6312 (MO)
Panicum bartlettii Swallen	h	f	*A. Monro* 1020 (BM)
Panicum hirsutum Sw.	h	f	*C. Whitefoord* 2090 (BM)
Panicum pilosum Sw.	h	f	*M. Short* 251 (BM)
Panicum polygonatum Schrad.	h	f	*C. Whitefoord* 9309 (BM)
Panicum pulchellum Raddi	h	f	*A. Monro* 2645 (BM)
Panicum trichoides Sw.	h	f	*T. Hawkins* 1040 (MO)
Paspalum botterii (E.Fourn.) Chase	h	f	*T. Croat* 23700 (MO)
Paspalum caespitosum Flüggé	h	f	*J. Dwyer* 10779 (MO)
Paspalum conjugatum P.J.Bergius	h	f	*S. Cafferty* 165 (BM)
Paspalum corcovadense Raddi	h	f	*M. Peña* 995 (BM)
Paspalum paniculatum L.	h	f	*T. Croat* 23789 (MO)
Paspalum virgatum L.	h	f	*A. Gentry* 7750 (MO)
Pharus parvifolius Nash	h	f	*A. Monro* 1207 (BM)
Phragmites australis (Cav.) Trin. ex Steud.	h	f	*T. Hawkins* 1316 (MO)
Rhipidocladum bartlettii (McClure) McClure	h	f	*A. Monro* 2744 (BM)
Setaria paniculifera (Steud.) E.Fourn. ex Hemsl.	h	f	*S. Cafferty* 36 (BM)
Setaria parviflora (Poir.) Kerguélen	h	f	*C. Whitefoord* 2118 (BM)
***Setaria poiretiana* (Schult.) Kunth**	h	f	*S. Cafferty* 36 (BM)
Steinchisma laxa (Sw.) Zuloaga (= *Panicum laxum* Sw.)	h	r	*J. Dwyer* 10755 (MO)
***Tripsacum andersonii* J.R.Gray**	h	f	*S. Matola* s.n. (MO)
Tripsacum latifolium Hitchc.	h	f	*S. Cafferty* 164 (BM)
***Urochloa fusca* (Sw.) B.F.Hansen & Wunderlin**	h	f	*D. Sutton* 83 (BM)
Podostemaceae			
Marathrum oxycarpum Tul.	h/a	r	*C. Whitefoord* 9359 (BM)
Tristicha trifaria (Bory ex Willd.) Spreng.	h/a	r	*T. Hawkins* 1188 (MO)
Polemoniaceae			
Loeselia glandulosa (Cav.) G.Don	h	f/r	*C. Whitefoord* 10046 (BM)
Polygalaceae			
Bredemeyera lucida (Benth.) Klotzsch ex Hassk.	s	f/r	*C. Whitefoord* 9381 (BM)
Polygala aparinoides Hook. & Arn.	h	f	*C. Whitefoord* 9341 (BM)
Polygala hondurana Chodat	h	f	*J. Dwyer* 12301 (MO)
Polygala paniculata L.	h	r	*L. Urban* 353 (E)
Securidaca diversifolia (L.) S.F.Blake	v	f	*A. Monro* 1478 (BM)
Securidaca sylvestris Schltdl.	v	f	*A. Monro* 988 (BM)
Polygonaceae			
Coccoloba acapulcensis Standl.	t	f	*C. Whitefoord* 9205 (BM)
Coccoloba barbadensis Jacq.	t	f	*A. Monro* 948 (BM)
Coccoloba belizensis Standl.	t	r	*L. Urban* 184 (E)
Coccoloba tuerckheimii Donn.Sm.	t	f	*A. Gentry* 7845 (MO)
Polygonum persicarioides Kunth	h	r	*L. Urban* 226 (E)
Polygonum punctatum Elliott	h	r	*T. Hawkins* 1291 (MO)
Pontederiaceae			
Pontedaria cordata L.	h/a	r	*T. Hawkins* 1296 (MO)

Portulacaceae			
Portulaca sp.	h	f	*T. Edgall* 13 (E)
Primulaceae (see *Myrsinaceae*)			
Proteaceae			
Roupala glaberrima Pittier +	s	f	*S. Brewer* 1698 (WNC)
Roupala montana Aubl.	s	f	*L. Urban* 154 (E)
Putranjivaceae			
Drypetes brownii Standl.	t	f	*A. Caldwell* 8 (E)
Rhamnaceae			
***Gouania eurycarpa* Standl.**	v	f	*T. Hawkins* 1156 (MO)
Gouania lupuloides (L.) Urb.	s	f	*T. Hawkins* 1596 (MO)
Rhizophoraceae			
Cassipourea guianensis Aubl.	t	f	*C. Whitefoord* 9360 (BM)
Rosaceae			
Photinia microcarpa Standl.	t	f	*A. Monro* 1234 (BM)
Prunus aff. *tikalana* Lundell +	t	f	*S. Brewer* 1702 (WNC)
Rubiaceae			
Alseis yucatanensis Standl.	t	f	*S. Bridgewater* pers. obs.
Amaioua corymbosa Kunth	s/t	f	*A. Monro* 1111 (BM)
Appunia guatemalensis Donn.Sm.	s/t	f	*C. Whitefoord* 9326 (BM)
Augusta rivalis (Benth.) J.H.Kirkbr. (= *Lindenia rivalis* Benth.)	s/t	r	*C. Whitefoord* 1220 (BM)
Chiococca alba (L.) Hitchc.	v	f	*A. Monro* 673 (BM)
Chiococca belizensis Lundell	v	f	*A. Ibáñez García* 72 (MO)
Chomelia protracta (Bartl. ex DC.) Standl.	t	f	*C. Gantz* 9(E)
Coccocypselum herbaceum P.Browne +	h	f	*S. Bridgewater* 4009 (BM)
Coccocypselum hirsutum Bartl. ex DC.	h	f	*A. Monro* 1740 (BM)
Diodia brasiliensis Spreng.	h/s	f	*J. Dwyer* 10895 (MO)
Diodia sarmentosa Sw.	h	f	*I. Holmes-Smith* 13 (E)
Exostema mexicanum A.Gray	t	f	*A. Ibáñez García* 81 (MO)
Faramea brachysiphon Standl. +	s/t	f	*S. Bridgewater* 3899 (BM)
Faramea occidentalis (L.) A.Rich.	s/t	f	*C. Whitefoord* 9401 (BM)
Geophila macropoda (Ruiz & Pav.) DC.	v	f	*M. Balick* 2009 (MO)
Geophila repens (L.) I.M.Johnst.	h	f	*A. Forrest* 54 (E)
Guettarda combsii Urb.	t	f	*A. Ibáñez García* 105 (MO)
Guettarda deamii Standl.	s/t	r	*L. Urban* 249 (E)
Guettarda macrosperma Donn.Sm.	t	f	*T. Hawkins* 1245 (MO)
Guettarda tikalana Lundell	v	f	*C. Whitefoord* 9296 (BM)
Hamelia axillaris Sw.	s/t	f	*C. Whitefoord* 2063 (BM)
Hamelia calycosa Donn.Sm.	t	f	*S. Queensborough* 110 (E)
Hamelia patens Jacq.	s/t	f	*J. Dwyer* 10776 (MO)
Hillia panamensis Standl. +	s	f	*S. Brewer* 1675 (WNC)
Hillia tetrandra Sw.	s/t	f	*J. Dwyer* 10797 (MO)
Hoffmannia ghiesbreghtii (Lem.) Hemsl.	s/t	f	*A. Monro* 3162 (BM)
Manettia reclinata L.	v	f	*T. Hawkins* 1289 (MO)
Mitracarpus hirtus (L.) DC.	h	r	*J. Dwyer* 10171 (MO)
Morinda panamensis Seem.	s/t	f	*C. Whitefoord* 9169 (BM)
Notopleura uliginosa (Sw.) Bremek. (= *Psychotria uliginosa* Sw.) +	s	f	*S. Brewer* 1788 (WNC)

Oldenlandia corymbosa L.	h	f	*J. Dwyer* 12331 (MO)
Palicourea guianensis Aubl. +	s	f	*S. Bridgewater* 3930 (BM)
Palicourea padifolia (Willd. ex Roem. & Schult.) C.M.Taylor & Lorence	t	f	*A. Ibáñez García* 117 (MO)
Posoqueria latifolia (Rudge) Roem. & Schult.	t	f	*C. Whitefoord* 9432 (BM)
Psychotria acuminata Benth.	s/t	f	*A. Monro* 382 (BM)
Psychotria berteriana DC.	t	f	*C. Whitefoord* 9333 (BM)
Psychotria buchtienii (H.J.P.Winkl.) Standl. +	s	f	*S. Brewer* 1789 (WNC)
Psychotria chiapensis Standl.	s/t	f	*C. Whitefoord* 9459 (BM)
Psychotria costivenia Griseb.	s	f	*C. Whitefoord* 10283 (BM)
Psychotria deflexa DC.	s	f	*M. Short* 172 (BM)
Psychotria domingensis Jacq.	s	f	*T. Croat* 23739 (MO)
Psychotria elata (Sw.) Hammel	s	f	*C. Whitefoord* 9321 (BM)
Psychotria fruticetorum Standl.	s	f	*J. Dwyer* 10847 (MO)
Psychotria gracilenta Müll.Arg.	s	f	*A. Monro* 3249 (MO)
Psychotria guadalupensis (DC.) R.A.Howard +	s	f	*S. Bridgewater* 3948 (BM)
Psychotria hoffmannseggiana (Willd. ex Roem. & Schult.) Müll.Arg.	s	f	*A. Monro* 3249 (BM)
Psychotria limonensis K.Krause	t	f	*A. Monro* 1318 (BM)
Psychotria lundellii Standl.	t	f	*C. Gantz* 5 (E)
Psychotria marginata Sw.	s	f	*A. Monro* 1346 (BM)
Psychotria mexicae Standl.	t	f	*A. Ibáñez García* 2 (MO)
Psychotria nervosa Sw.	s	f/r	*C. Whitefoord* 2078 (BM)
Psychotria panamensis Standl.	t	f	*A. Monro* 3290 (BM)
Psychotria poeppigiana Müll.Arg.	s	f	*J. Dwyer* 10807 (MO)
Psychotria pubescens Sw.	s	f	*C. Whitefoord* 9070 (BM)
Psychotria quinqueradiata Pol.	s	f	*J. Dwyer* 10912 (MO)
Psychotria uliginosa Sw.	s	f	*A. Monro* 3230 (BM)
Randia aculeata L.	s	f	*C. Whitefoord* 10364 (BM)
***Randia cookii* Standl.**	t	f	*A. Monro* 1305 (BM)
Randia lundelliana Standl.	s	f	*L. Urban* 145 (E)
Randia matudae Lorence & Dwyer	t	f	*S. Cafferty* 145 (BM)
***Randia retroflexa* Lorence & M.Nee**	v	f	*C. Whitefoord* 9407 (BM)
Richardia scabra L.	s	r	*T. Croat* 23499 (MO)
Rogiera stenosiphon (Hemsl.) Borhidi (= *Rondeletia stenosiphon* Hemsl.)	t	f	*J. Dwyer* 10852 (MO)
Ronabea latifolia Aubl. (= *Psychotria erecta* (Aubl.) Standl. & Steyerm.) +	s	f	*S. Brewer* 1734 (WNC)
Rondeletia buddleioides Benth.	s	f	*A. Monro* 3256 (BM)
Sabicea panamensis Wernham +	v	f	*B. Allen* 15214 (MO)
Simira salvadorensis (Standl.) Steyerm.	t	f	*S. Bridgewater* pers. obs.
Spermacoce assurgens Ruiz & Pav.	h	f	*C. Whitefoord* 9484 (BM)
Spermacoce ocymifolia Willd. ex Roem. & Schult.	h	f	*M. Short* 219 (BM)
Spermacoce prostrata Aubl.	h	f	*C. Whitefoord* 9443 (BM)
Spermacoce tenuior L.	h	f	*T. Croat* 23368 (MO)
Spermacoce verticillata L.	h	f	*L. Urban* 357 (E)
Ruscaceae			
Dracaena americana Donn.Sm.	t	f	*P. Gentle* 2505 (MO)

Rutaceae			
Amyris belizensis Lundell	t	t	*M. Baden* 4 (E)
Amyris elemifera L.	t	f	*A. Monro* 1856 (BM)
Zanthoxylum juniperinum Poepp.	t	f	*A. Monro* 1610 (BM)
Zanthoxylum riedelianum Engl.	t	f	*J. Meerman* pers. obs.
Zanthoxylum setulosum P.Wilson	t	f	*C. Whitefoord* 2593 (MO)
Salicaceae			
Casearia arborea (Rich.) Urb.	t	f	*A. Monro* 1169 (BM)
Casearia commersoniana Cambess.	s/t	f	*A. Monro* 1304 (BM)
***Casearia coronata* Standl. & L.O.Williams** +	s	f	*S. Brewer* 1741 (WNC)
Casearia corymbosa Kunth	s	f	*A. Ibáñez García* 22 (MO)
Casearia sylvestris Sw.	s	f	*C. Whitefoord* 10003 (BM)
Casearia tremula (Griseb.) Griseb. ex C.Wright	t	f	*C. Whitefoord* 9068 (BM)
Laetia thamnia L.	s	f	*C. Whitefoord* 9533 (BM)
Macrohasseltia macroterantha (Standl. & L.O.Williams) L.O.Williams +	t	f	*S. Brewer* 1689 (WNC)
Pleuranthodendron lindenii (Turcz.) Sleumer	t	r	*G. Proctor* 30086 (MO)
Xylosma flexuosum (Kunth) Hemsl.	s	f	*C. Whitefoord* 10301 (BM)
Zuelania guidonia (Sw.) Britton & Millsp.	t	f	*L. Urban* 250 (E)
Sapindaceae			
Allophyllus camptostachys Radlk.	t	f	*C. Whitefoord* 10327 (BM)
Allophyllus cominia (L.) Sw.	t	f	*T. Hawkins* 1229 (MO)
Allophyllus psilospermus Radlk.	t	f	*A. Gentry* 7706 (MO)
Cardiospermum grandiflorum Sw.	v	r	*L. Urban* 289 (E)
Cupania belizensis Standl.	t	f	*C. Whitefoord* 10002 (BM)
Exothea paniculata (Juss.) Radlk.	t	f	*P. Gentle* 2182 (MO)
Matayba apetala Radlk.	t	f	*C. Whitefoord* 10289 (BM)
Paullinia clavigera Schltdl.	v	f	*J. Dwyer* 10837 (MO)
Paullinia costaricensis Radlk.	v	f	*A. Monro* 1149 (BM)
Paullinia costata Schltdl. & Cham.	v	f	*N. Garwood* 4012 (MO)
Paullinia pinnata L.	v	f	*A. Ibáñez García* 89 (MO)
Sapindus saponaria L.	t	f	*L. Urban* 180 (E)
***Serjania acuta* Triana & Planchon**	v	f	*C. Whitefoord* 10094 (BM)
Serjania atrolineata Sauvalle & C.Wright	v	f	*C. Whitefoord* 9012 (BM)
Serjania caracasana (Jacq.) Willd.	v	f	*J. Dwyer* 12356 (MO)
***Serjania goniocarpa* Radlk.** (Balick *et al.* believe this name might be misapplied to *S. lundellii* Croat)	v	f	*C. Whitefoord* 9008 (BM)
Serjania lundellii Croat	v	f	*C. Whitefoord* 2788 (BM)
Serjania macrocarpa Standl. & Steyerm.	v	f	*K. Armstrong* 508 (E)
Serjania mexicana (L.) Willd.	v	f	*A. Gentry* 7789 (MO)
Serjania racemosa Schum.	v	f	*A. Monro* 1153 (BM)
Thinouia tomocarpa Standl.	v	f	*G. MacMaster* 12 (E)
Urvillea ulmacea Kunth	v	f	*C. Whitefoord* 10008 (BM)
Sapotaceae			
Chrysophyllum mexicanum Brandegee ex Standl.	t	f	*J. Dwyer* 12325 (MO)
Manilkara staminodella Gilly	t	f	*A. Gentry* 7697 (MO)
Manilkara zapota (L.) P.Royen	t	f	*C. Whitefoord* 9162 (BM)
Pouteria amygdalina (Standl.) Baehni	t	f	*C. Whitefoord* 9251 (BM)

Pouteria belizensis (Standl.) Cronquist +	t	f	*S. Brewer* 1771 (WNC)
Pouteria campechiana (Kunth) Baehni	t	f	*S. Queensborough* 132 (E)
Pouteria durlandii (Standl.) Baehni	t	f	*A. Young* 7 (E)
Pouteria reticulata (Engl.) Eyma	t	f	*S. Gulliver* 11 (E)
Sideroxylon foetidissimum Jacq.	t	f	*C. Whitefoord* 9275 (BM)
Sideroxylon salicifolium (L.) Lam. +	s/t	f	*S. Brewer* 1781 (WNC)
Sideroxylon stevensonii (Standl.) T.D.Penn.	t	f	*A. Gentry* 7764 (MO)
Schlegeliaceae			
***Schlegelia nicaraguensis* Standl.** +	v	f	*S. Brewer* 1708 (WNC)
Scrophulariaceae (see also *Plantaginaceae* and *Orobanchaceae*)			
Buddleja americana L.	s	f	*C. Whitefoord* 9129 (BM)
Simaroubaceae			
Picramnia antidesma Sw.	t	r	*L. Urban* 297 (E)
Simarouba glauca DC.	t	f	*J. Meerman* pers. obs.
Smilacaceae			
Smilax domingensis Willd.	v	f	*A. Monro* 3226 (BM)
Smilax mollis Humb. & Bonpl. ex Willd.	v	f	*T. Hawkins* 1080 (MO)
Smilax spinosa Mill.	v	f	*C. Whitefoord* 2829 (BM)
Smilax velutina Killip & C.V.Morton	v	f	*J. Dwyer* 12275 (MO)
Solanaceae			
Athenaea cernua Donn.Sm.	h/s	f	*C. Lundell* 6187 (NY)
Capsicum annuum L.	s	f/r	*L. Urban* 308 (E)
Capsicum frutescens L.	h/s	f	*T. Croat* 23459 (MO)
Cestrum megalophyllum Dunal	s	f	*A. Monro* 2650 (BM)
Cestrum nocturnum L.	t	f/r	*C. Whitefoord* 9046 (BM)
Cestrum racemosum Ruiz & Pav.	s	f	*C. Gantz* 2 (E)
Lycianthes gorgonea Bitter	v	f	*L. Ronse de Craene* 1434 (E)
Lycianthes heteroclite (Sendtn.) Bitter	s	f	*A. Monro* 2697 (BM)
Lycianthes hypoleuca Standl.	ss	f	*A. Gentry* 7668 (MO)
Lycianthes lenta (Cav.) Bitter	v	f	*T. Croat* 23552 (MO)
Lycianthes nitida Bitter	v	f	*M. Peña* 1043 (BM)
Nicotiana tabacum L.	s	f	*A. Gentry* 7782 (MO)
Physalis gracilis Miers	h	f	*T. Croat* 23384 (MO)
Physalis philadelphica Lam.	h	cult.	*T. Croat* 23798 (MO)
Physalis pubescens L.	h	f	*H. Irving* 183 (E)
Solanum americanum Mill.	h	f	*T. Croat* 23380 (MO)
***Solanum appendiculatum* Dunal**	h	f	*C. Whitefoord* 9478 (BM)
Solanum capsicoides All.	s	f	*C. Whitefoord* 10300 (BM)
Solanum cordovense Sessé & Moc.	s	f	*C. Brown* 22 (E)
Solanum erianthum D.Don	s	f	*J. Clayton* 3 (E)
Solanum erythrotrichum Fernald	s	f	*C. Whitefoord* 10204 (BM)
Solanum jamaicense Mill.	s	f	*S. Cafferty* 66 (BM)
Solanum lanceifolium Jacq.	v	f	*C. Brown* 13 (E)
Solanum lepidotum Dunal	s	f	*A. Monro* 3148 (BM)
Solanum nudum Dunal	s	f	*C. Whitefoord* 2050 (BM)
Solanum phaseoloides Pol.	h	f	*A. Monro* 2689 (BM)
Solanum rudepannum Dunal	s	f	*K. Armstrong* 507 (E)
Solanum schlechtendalianum Walp.	s	f	*M. Peña* 976 (BM)

Solanum suaveolens Kunth & C.D.Bouché	h	f	*T. Hawkins* 1120 (MO)
Solanum torvum Sw.	s	f	*J. Clayton* 4 (E)
Solanum tuerckheimii Greenm.	s	f	*A. Monro* 1860 (MO)
Witheringia solanacea L'Hér.	s	f	*A. Gentry* 7804 (MO)
Staphyleaceae			
Turpinia occidentalis (Sw.) G.Don	t	f	*C. Whitefoord* 9527 (BM)
Sterculiaceae (see *Malvaceae*)			
Styracaceae			
Styrax argenteus C.Presl	t	f	*C. Whitefoord* 9255 (BM)
***Styrax glabrescens* Benth.** +	t	f	*S. Bridgewater* 3917 (BM)
Symplocaceae			
Symplocos martinicensis Jacq.	t	f	*A. Monro* 2608 (BM)
Theaceae (see *Pentaphylaceae*)			
Theophrastaceae			
Deherainia smaragdina (Planch. ex Linden) Decne.	s	f	*T. Croat* 23764 (MO)
Tiliaceae (see *Malvaceae*)			
Tovariaceae			
Tovaria pendula Ruiz & Pav.	s	f	*R. Rees* 9 (MO)
Trigoniaceae			
Trigonia eriosperma (Lam.) Fromm & Santos	v	f	*C. Whitefoord* 9535 (BM)
Turneraceae			
Erblichia odorata Seem.	t	f	*C. Skema* 7 (E)
Turnera aromatica Arbo	h/s	f	*L. Urban* 127 (E)
Ulmaceae (see also *Cannabaceae*)			
Ampelocera hottlei (Standl.) Standl.	t	f	*L. Urban* 104 (E)
Urticaceae			
Boehmeria caudata Sw.	s	f	*C. Whitefoord* 10231 (BM)
Boehmeria ramiflora Jacq.	s	f	*C. Whitefoord* 2026 (BM)
Boehmeria ulmifolia Wedd.	s	f	*R. Rees* 171 (MO)
Cecropia obtusifolia Bertol.	t	f	*N. Garwood* observation
Cecropia peltata L.	t	f	*N. Garwood* observation
Coussapoa oligocephala Donn.Sm.	t	f	*A. Monro* 971 (BM)
Myriocarpa longipes Liebm.	t	f	*A. Monro* 1200 (BM)
Myriocarpa obovata Donn.Sm.	t	f	*A. Monro* 1117 (BM)
Pilea hyalina Fenzl	h	f	*A. Monro* 3284 (BM)
Pilea microphylla (L.) Liebm.	h	f/r	*A. Monro* 756 (BM)
Pilea pubescens Liebm.	h	f	*T. Hawkins* 1029 (BM)
***Pilea riparia* Donn.Sm.**	h	f	*T. Croat* 23806 (MO)
Urera alceifolia Gaudich.	s	f	*S. Cafferty* 16 (BM)
Urera baccifera (L.) Gaudich.	s	f	*A. Monro* 671 (BM)
***Urera simplexi* Wedd.**	t	f	*T. Croat* 23728 (MO)
Valerianaceae			
Valeriana scandens L.	v	f	*C. Whitefoord* 9097 (BM)

Verbenaceae (see also *Lamiaceae*)			
Citharexylum caudatum L.	s/t	r	*L. Ronse de Craene* 1443 (E)
Citharexylum hexangulare Greenm.	s/t	r	*T. Hawkins* 1293 (MO)
Cornutia grandifolia (Schltdl. & Cham.) Schauer	s	r	*C. Whitefoord* 9408 (BM)
Lantana camara L.	s	f	*L. Urban* 243 (E)
Lantana trifolia L.	s	f	*A. Gentry* 7744 (MO)
Lippia myriocephala Schltdl. & Cham.	s	f	*C. Whitefoord* 10075 (BM)
Petrea volubilis L.	v	f	*A. Gentry* 7794 (MO)
Phyla fruticosa (Mill.) K.Kenn. & Rueda (= *Lippia strigulosa* (M.Martens & Galeotti) Moldenke)	h	f	*C. Whitefoord* 9519 (MO)
Priva lappulacea (L.) Pers.	h	f	*C. Whitefoord* 9567 (BM)
Stachytarpheta cayennensis (Rich.) Vahl	s	f	*G. MacMaster* 1 (E)
Tamonea spicata Aubl.	h	f	*C. Whitefoord* 10192 (BM)
Violaceae			
Hybanthus oppositifolius (L.) Taub.	h	r/f	*L. Urban* 52 (E)
Rinorea guatemalensis (S.Watson) Bartlett	t	f	*C. Whitefoord* 10358 (BM)
Rinorea hummelii Sprague	t	f	*C. Whitefoord* 9101 (BM)
Viscaceae			
***Dendrophthora guatemalensis* Standl.**	p	f	*T. Hawkins* 1055 (MO)
Phoradendron chrysocladon A.Gray	p	f	*A. Gentry* 7700 (MO)
Phoradendron crassifolium (Pohl ex DC.) Eichler	p	ps	*S. Cafferty* 4 (BM)
***Phoradendron hexastichum* (DC.) Griseb.** +	p	f	*B. Holst* 5279 (SEL)
Phoradendron heydeanum Trel.	p	f	*T. Hawkins* 1116 (MO)
***Phoradendron nervosum* Oliver**	p	f	*A. Monro* 1480 (MO)
Phoradendron pedicellatum (Tiegh.) Kuijt	p	f	*S. Cafferty* 9 (BM)
Phoradendron piperoides (Kunth) Trel.	p	f	*T. Hawkins* 1252 (MO)
Vitaceae			
Cissus biformifolia Standl.	v	f	*C. Whitefoord* 10279 (BM)
Cissus gossypiifolia Standl.	v	f	*A. Ibáñez García* 109 (MO)
Cissus microcarpa Vahl	v	f	*M. Balick* 3109 (MO)
Cissus verticillata (L.) Nicolson & C.E.Jarvis	v	f	*T. Hawkins* 1259 (MO)
Vitis tiliifolia Humb. & Bonpl. ex Roem. & Schult.	v	f	*C. Whitefoord* 10130 (BM)
Vochysiaceae			
Vochysia hondurensis Sprague	t	f	*C. Whitefoord* 9240 (BM)
Zingiberaceae			
Renealmia alpinia (Rottb.) Maas	h	f	*A. Monro* 1729 (BM)
Renealmia aromatica (Aubl.) Griseb.	h	f	*D. Sutton* 57 (MO)
Renealmia mexicana Klotzsch ex Petersen	h	f	*A. Monro* 776 (BM)
PINOPHYTA			
Cupressaceae			
***Cupressus lusitanica* Mill.**	t	cult.	*C. Whitefoord* 9521 (BM)
Pinaceae			
Pinus caribaea Morelet var. *hondurensis* (Sénécl.) W.H.Barrett & Golfari	t	ps	*M. Peña* 1003 (BM)

Pinus oocarpa Schltdl.	t	ps	*A. Monro* 2627 (BM)
Podocarpaceae			
Podocarpus guatemalensis Standl.	t	f	*A. Monro* 1811 (BM)
CYCADOPHYTA			
Zamiaceae			
Ceratozamia robusta Miq.	s	f	*A. Monro* 1210 (BM)
Zamia polymorpha D.W.Stev., A.Moretti & L.Gaudio	s	f	*J. Meerman* pers. obs.
POLYPODIOPHYTA			
Adiantaceae			
Adiantopsis radiata (L.) Fée	f	f	*A. Monro* 250 (BM)
Adiantum concinnum Humb. & Bonpl. ex Willd.	f	f	*C. Whitefoord* 10263 (BM)
Adiantum cf. *latifolium* Lam.	f	f	*T. Croat* 23752 (MO)
Adiantum macrophyllum Sw.	f	f	*T. Croat* 23492 (MO)
Adiantum petiolatum Desv.	f	f	*A. Forrest* 50 (E)
Adiantum pulverulentum L.	f	f	*A. Forrest* 46 (E)
Adiantum tenerum Sw.	f	f	*A. Forrest* 44 (E)
Adiantum tetraphyllum Humb. & Bonpl. ex Willd.	f	f	*A. Monro* 49 (BM)
Adiantum trapeziforme L.	f	f	*A. Forrest* 72 (E)
Pityrogramma calomelanos (L.) Link	f	f	*M. Peña* 1023 (BM)
Pteris altissima Poir.	f	f	*A. Forrest* 84 (E)
Pteris grandifolia L.	f	f	*M. Peña* 963 (BM)
Pteris longifolia L.	f	f	*M. Peña* 955 (BM)
Vittaria graminifolia Kaulf.	f/e	f	*T. Croat* 23767 (MO)
Aspleniaceae			
Arachniodes denticulata (Sw.) Ching +	f	f	*S. Bridgewater* 3912 (BM)
Asplenium auritum Sw.	f	f	*G.R. Proctor* 29851 (BRH)
Asplenium cirrhatum Rich. ex Willd. +	f	f	*S. Bridgewater* 3951 (BM)
Asplenium cristatum Lam.	f	f	*A. Forrest* 82 (E)
Asplenium formosum Willd.	f	f	*A. Forrest* 75 (E)
Asplenium juglandifolium Lam.	f	f	*S. Cafferty* 120 (BM)
Asplenium pteropus Kaulf. +	f	f	*B. Holst* 5195 (SEL)
***Asplenium rutaceum* (Willd.) Mett.**	f/e	f	*T. Croat* 23773 (MO)
Asplenium serra Langsd. & Fisch. +	f/e	f	*B. Allen* 15177 (MO)
Asplenium serratum L.	f	f	*S. Cafferty* 100 (BM)
Didymochlaena truncatula (Sw.) J.Sm.	f	f	*M. Short* 189 (BM)
Diplazium plantaginifolium (L.) Urb.	f	f	*A. Monro* 3118 (BM)
Elaphoglossum latifolium (Sw.) J.Sm.	f	f	*S. Cafferty* 28 (BM)
***Elaphoglossum peltatum* (Sw.) Urb.** +	f	f	*B. Allen* 15275 (MO)
Lomariopsis recurvata Fée	f	f	*T. Croat* 23800 (MO)
Olfersia cervina (L.) Kunze	f	f	*A. Monro* 3229 (BM)
Polybotrya polybotryoides (Baker) H.Christ +	f	f	*S. Bridgewater* 3945 (BM)
Blechnaceae			
Blechnum × *caudatum* Cav.	f	r	*C. Whitefoord* 9137 (BM)

Blechnum fragile (Liebm.) C.V.Morton & Lellinger +	f	f	*B. Holst* 5303 (SEL)
Blechnum gracile Kaulf.	f	f	*A. Monro* 3155 (BM)
Blechnum occidentale L.	f	f/r	*A. Monro* 3205 (BM)
Salpichlaena volubilis (Kaulf.) J.Sm. +	f/e	f	*B. Holst* 5319 (SEL)
Cyatheaceae			
Alsophila firma (Baker) D.S.Conant	tf	f	*A. Monro* 3144 (BM)
Cyathea divergens Kunze +	tf	f	*B. Allen* 15224 (MO)
Cyathea multiflora Sm.	tf	f	*M. Peña* 1053 (BM)
Cyathea myosuroides (Liebm.) Domin (= *Sphaeropteris myosuroides* (Liebm.) Domin)	tf	f	*A. Monro* 2623 (BM)
Cyathea schiedeana (C.Presl) Domin	tf	f	*A. Monro* 3169 (BM)
Davalliaceae			
Nephrolepis cordifolia (L.) C.Presl	f/e	f	*G. Proctor* 29861 (BM)
Nephrolepis pendula (Raddi) J.Sm.	f/e	f	*A. Forrest* 73 (E)
***Nephrolepis undulata* (Afzel ex Sw.) J.Sm.**	f/e	f	*D. Sutton* 47 (BM)
Dennstaedtiaceae			
Dennstaedtia bipinnata (Cav.) Maxon	f	f	*A. Monro* 3197 (BM)
Lindsaea lancea (L.) Bedd.	f	f	*A. Monro* 3276 (BM)
Lindsaea quadrangularis Radii subsp. *subalata* K.U.Kramer +	f	f	*S. Bridgewater* 3995 (BM)
Odontosoria schlechtendalii (C.Presl) C.Chr.	f	f	*M. Peña* 944 (BM)
Pteridium caudatum (L.) Maxon	f	f	*T. Croat* 23674 (MO)
Dicksoniaceae			
***Cibotium regale* Versch. & Lem.**	tf	f	*A. Monro* 3277 (BM)
Gleicheniaceae			
Dicranopteris pectinata (Willd.) Underw.	f	f	*A. Monro* 3270 (BM)
***Sticherus bifidus* (Willd.) Underw.**	f	f	*M. Peña* 1045 (BM)
Sticherus palmatus (W.Schaffn. ex E.Fourn.) Copel. +	f	f	*S. Bridgewater* 3979 (BM)
Grammitidaceae			
Cochlidium linearifolium (Desv.) Maxon ex C.Chr. +	f/e	f	*B. Holst* 5247 (MO)
Micropolypodium taenifolium (Jenman) A.R.Sm. +	f/e	f	*B. Holst* 5248 (SEL)
Terpsichore asplenifolia (L.) A.R.Sm. +	f	f	*S. Bridgewater* 3959 (BM)
Terpsichore lehmanniana (Hieron.) A.R.Sm.	f	f	*B. Allen* 15215 (MO)
Hymenophyllaceae			
Abrodictyum rigidum (Sw.) Ebihara & Dubuisson (= *Trichomanes rigidum* Sw.)	f	f	*M. Short* 156 (BM)
***Didymoglossum krausii* (Hook. & Grev.) C.Presl** (= *Trichomanes kraussii* Hook. & Grev.)	f	f	*C. Whitefoord* 10303 (BM)
***Hymenophyllum apiculatum* Kuhn**	f/e	f	*S. Cafferty* 23 (BM)
Hymenophyllum fucoides Cav. +	f/e	f	*B. Holst* 5213 (SEL)
Polyphlebium capillaceum (L.) Ebihara & Dubuisson (= *Trichomanes capillaceum* L.)	f/e	f	*A. Monro* 3150 (BM)

Polyphlebium diaphanum (Kunth) Ebihara & Dubuisson (=*Trichomanes diaphanum* Kunth)	f	r	*A. Monro* 3254 (BM)
Trichomanes crispum L. +	f/e	f	*B. Holst* 5297 (SEL)
Trichomanes galeottii E.Fourn.	f	f	*A. Monro* 3248 (BM)
Trichomanes polypodioides L.	f	r	*M. Short* 157 (BM)
Vandenboschia collariata (Bosch) Ebihara & K.Iwats (= *Trichomanes collariatum* Bosch)	f/e	f	*M. Short* 181 (BM)
Marattiaceae			
Danaea nodosa (L.) Sm.	f	r	*S. Cafferty* 63 (BM)
Marattia excavata Underw. +	f	f	*B. Holst* 5300 (SEL)
Ophioglossaceae			
Cheiroglossa palmata (L.) C.Presl +	f/e	f	*B. Allen* 15170 (MO)
Polypodiaceae			
Campyloneurum fasciale (Humb. & Bonpl. ex Willd.) C.Presl	f/e	f	*C. Whitefoord* 2044 (BM)
Microgramma percussa (Cav.) de la Sota	f/e	f	*T. Hawkins* 1062 (MO)
Neurodium lanceolatum (L.) Fée	f/e	f	*S. Ingram* 1938 (MO)
Niphidium crassifolium (L.) Lellinger	f/e	f	*T. Croat* 23754 (MO)
***Pecluma alfredii* (Rosenst.) M.G.Price**	f	f	*J. Dwyer* 12342 (MO)
Pecluma divaricata (E.Fourn.) Mickel & Beitel +	f/e	f	*B. Holst* 5289 (SEL)
Phlebodium sp.	f/e	f	*M. Peña* 950 (BM)
Pleopeltis sp.	f/e	f/r	*A. Monro* 3213 (BM)
Polypodium dissimile L. +	f	f	*S. Bridgewater* 3970 (BM)
Polypodium fallax Schltdl. & Cham.	f	f	*C. Whitefoord* 9082 (BM)
***Polypodium fraxinifolium* Jacq.**	f/e	f	*M. Peña* 1044 (BM)
***Polypodium hispidulum* Bartlett**	f/e	f	*T. Hawkins* 1078 (MO)
Polypodium polypodioides (L.) Watt	f/e	f	*T. Hawkins* 1315 (MO)
Polypodium triseriale Sw.	f/e	f	*S. Cafferty* 73 (BM)
Schizaeaceae			
Anemia adiantifolia (L.) Sw.	f	r	*T. Hawkins* 1271 (MO)
Anemia pastinacaria Moritz ex Prantl	f	r	*T. Hawkins* 1031 (MO)
Anemia speciosa C.Presl	f	f	*T. Hawkins* 1205 (MO)
Lygodium heterodoxum Kunze	f	f	*T. Hawkins* 1173 (MO)
Lygodium venustum Sw.	f	f	*D. Sutton* 6 (BM)
Lygodium volubile Sw.	f	r	*K. Vint* 13 (E)
Schizaea poeppigiana J.W.Sturm	f	f	*S. Cafferty* 29 (BM)
Tectariaceae			
Ctenitis melanosticta (Kunze) Copel.	f	f	*C. Whitefoord* 9456 (BM)
Ctenitis nigrovenia (H.Christ) Copel.	f	f	*A. Forrest* 74 (E)
Lastreopsis effusa (Sw.) Tindale	f	f	*A. Monro* 3138 (BM)
***Lastreopsis exculta* (Mett.) Tindale**	f	f	*S. Cafferty* 103 (BM)
Tectaria heracleifolia (Willd.) Underw.	f	f	*A. Monro* 3134 (BM)
Tectaria mexicana (Fée) C.V.Morton	f	f	*A. Forrest* 51 (E)
Tectaria rivalis (Mett. ex Kuhn) C.Chr.	f	r	*T. Hawkins* 1273 (MO)
Thelypteridaceae			
Thelypetris biolleyi (C.Christ) Proctor	f	f	*A. Monro* 428 (BM)
Thelypetris blanda (Fée) C.F.Reed	f	f	*T. Hawkins* 1197 (MO)

Thelypetris kunthii (Desv.) C.V.Morton	f	f	*T. Croat* 23353 (MO)
Thelypetris obliterata (Sw.) Proctor	f	f	*A. Forrest* 70 (E)
Thelypetris patens (Sw.) Small	f	r	*T. Hawkins* 1275 (MO)
Thelypetris poiteana (Bory) Proctor	f	f	*T. Hawkins* 1162 (MO)
Thelypetris praetermissa (Maxon) A.R.Sm.	f	f	*A. Monro* 3141 (BM)
Thelypetris reptans (J.F.Gmel.) C.V.Morton	f	f	*T. Croat* 23489 (MO)
Thelypetris tetragona A.R.Sm.	f	f	*T. Croat* 23490 (MO)
LYCOPODIOPHYTA			
Lycopodiaceae			
Huperzia dichaeoides (Maxon) Holub +	h	f	*S. Brewer* 1749 (WNC)
Huperzia linifolia (L.) Trevis. +	h	f	*B. Allen* 15280 (MO)
Lycopodiella cernua (L.) Pic.Serm.	h	f	*M. Peña* 977 (BM)
Selaginellaceae			
Selaginella huehuetenangensis Hieron.	h	r	*C. Whitefoord* 9442 (BM)
Selaginella idiospora Alston	h	f/r	*T. Hawkins* 1035 (MO)
Selaginella mollis A.Braun	h	f	*A. Forrest* 47 (E)
Selaginella pallescens (C.Presl) Spring	h	f/r	*A. Forrest* 76 (E)
Selaginella sertata Spring	h	f	*A. Forrest* 83 (E)

APPENDIX 2

Preliminary checklist of the 100 most frequently observed tree species of the Chiquibul with their common names (if known)

The common names listed are those used by the local staff of the Las Cuevas Research Station.

Species	**Common name**
Anacardiaceae	
Astronium graveolans	jobillo
Mosquitoxylum jamaicense	ridge redwood
Spondias radlkoferi	hogplum
Annonaceae	
Annona reticulata	wild custard apple
Cymbopetalum mayanum	
Apocynaceae	
Aspidosperma megalocarpon	mylady
Stemmadenia donnell-smithii	Horse's balls
Tabernaemontana alba	Dog's balls
Aquifoliaceae	
Ilex guianensis	birdberry
Araliaceae	
Dendropanax arboreus	white gumbolimbo

Species	Common name
Asteraceae	
Koanophyllon galeottii	
Bignoniaceae	
Tabebuia chrysantha	cortez
Boraginaceae	
Cordia alliodora	salmwood
Burseraceae	
Bursera simaruba	red gumbolimbo
Protium copal	copal
Celastraceae	
Crossopetalum eucymosum	
Zinowiewia pallida	
Chrysobalanaceae	
Hirtella americana	Pigeon plum
Hirtella racemosa	Pigeon plum
Clusiaceae	
Calophyllum brasiliense	Santa Maria
Combretaceae	
Bucida buceras	bullet tree
Terminalia amazonia	nargusta
Euphorbiaceae	
Acalypha diversifolia	
Alchornea latifolia	male grape/cajetón
Sebastiana tuerckheimiana	white poisonwood
Lamiaceae	
Cornutia pyramidata	
Vitex gaumeri	fiddlewood
Lauraceae	
Licaria capitata	laurel
Licaria peckii	timbersweet
Nectandra salicifolia	laurel
Leguminosae: Caesalpinioideae	
Dialium guianense	ironwood
Schizolobium parahyba	quamwood
Leguminosae: Mimosoideae	
Abarema idiopoda	
Acacia cookii	cockspur
Acacia polyphylla	cantemo
Cojoba arborea	barba jalote/tamarind
Inga punctata	
Lysiloma acapulcense	bastard mahogany
Leguminosae: Papilionoideae	
Acosmium panamense	Billy Webb

Species	Common name
Andira inermis	white cabbage bark
Dalbergia stevensonii	rosewood
Gliricidia sepium	madre de cacao
Lonchocarpus castilloi	black cabbage bark
Myroxylon balsamum	balsam
Ormosia schipii	John Crow wood
Platymiscium dimorphandrum	granadillo
Pterocarpus rohrii	
Swartzia cubensis	bastard rosewood
Vatairea lundellii	bitterwood
Malvaceae	
Bernoullia flammea	red mapola/pumpkin tree
Ceiba pentandra	ceiba-cotton tree
Guazuma ulmifolia	bay cedar
Hampea stipitata	moho
Heliocarpus americanus	broadleaf moho
Heliocarpus donnell-smithii	broadleaf moho
Luehea speciosa	moho
Trichospermum grewiifolium	red moho
Meliaceae	
Cedrela odorata	cedar/cedro
Guarea glabra	cedrillo
Guarea grandifolia	big-leaved cedrillo
Swietenia macrophylla	mahogany
Trichilia erythrocarpa	
Trichilia havanensis	
Trichilia minutiflora	
Trichilia pallida	
Moraceae	
Brosimum alicastrum	breadnut
Castilla elastica	rubber
Maclura tinctoria	
Pseudolmedia spuria	cherry
Trophis mexicana	
Trophis racemosa	red breadnut/white ramon
Myrtaceae	
Myrcia splendens	
Myrcianthes fragrans	
Pimenta dioica	allspice
Nyctaginaceae	
Neea psychotrioides	
Olacaceae	
Heisteria media	cuero de sapo
Polygonaceae	
Coccoloba belizensis	big-leaved wild grape

Species	Common name
Putranjivaceae	
Drypetes brownii	male bullhoof
Rhizophoraceae	
Cassipourea guianensis	waterwood
Rubiaceae	
Guettarda combosii	glassywood
Simira salvadorensis	
Rutaceae	
Zanthoxylum riedelianum	prickly yellow
Salicaceae	
Casearia arborea	
Zuelania guidonia	
Sapindaceae	
Cupania belizensis	grand betty
Matayba apetala	
Sapindus saponaria	soapseed tree
Sapotaceae	
Chrysophyllum mexicanum	wild apple
Manilkara zapota	chicle
Pouteria amygdalina	red sillón
Pouteria campechiana	mamey cerilla
Pouteria durlandii	
Pouteria reticulata	sapotillo
Simaroubaceae	
Simarouba glauca	negritto
Styracaceae	
Styrax argenteus	
Turneraceae	
Erblichia odorata	conop
Ulmaceae	
Ampelocera hottlei	female bullhoof
Urticaceae	
Cecropia obtusifolia	trumpet tree
Cecropia peltata	trumpet tree
Vochysiaceae	
Vochysia hondurensis	yemeri