

# Wild edible fruits of Colombia: diversity and use prospects

## Frutos silvestres comestibles de Colombia: diversidad y perspectivas de uso

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### Abstract

Wild fruits have been an integral part of the diet of rural inhabitants in tropical America. In Colombia, information on the use of wild fruits appears scattered in the ethnobotanical literature and herbaria collections, limiting the design of conservation and use strategies. This review aims to synthesize information about the wild fruit species used in Colombia. We reviewed herbarium collections and literature references. We recorded 703 species in 76 families, among which Fabaceae (66 species), Arecaceae (58), and Passifloraceae (44) were the most diverse. The genera with more species were *Inga* (42), *Passiflora* (42), and *Pouteria* (21). Most species are widely distributed in tropical America, and only 45 (6.4 %) are endemic to Colombia. The regions with the largest number of species were the Amazon (388), Andes (144), and Pacific (111). Most of the recorded species, 613 (87.2 %), are exclusively wild, whereas 90 (12.8 %) are wild or cultivated. Wild edible fruits have a high potential for agriculture, novel products and nutritional improvement; however, it is vital to create strategies to revalorize their use.

**Keywords.** Biodiversity. Ethnobotany. Underutilized species. Wild foods.

### Resumen

Los frutos silvestres han sido una parte integral de la dieta de los habitantes rurales del trópico americano. En Colombia, la información acerca del uso de los frutos silvestres se encuentra dispersa en la literatura etnobotánica y en colecciones de herbario, limitando el diseño de estrategias de conservación y uso. Esta revisión tiene como propósito sintetizar información acerca de los frutos silvestres usados en Colombia. Se revisaron colecciones de herbario y referencias de literatura. Se registraron 703 especies en 76 familias, entre las cuales Fabaceae (66 especies), Arecaceae (58) y Passifloraceae (44) son las más diversas. Los géneros con más especies fueron *Inga* (42), *Passiflora* (42) y *Pouteria* (21). La mayoría de las especies tienen amplia distribución en América tropical, y solo 45 (6.4 %) son endémicas de Colombia. Las regiones con el mayor número de especies son Amazonia (388), Andes (144) y Pacífico (111). La mayoría de especies registradas, 613 (87.2 %), son exclusivamente silvestres, mientras que 90 (12.8 %) son silvestres o cultivadas. Los frutos silvestres tienen un alto potencial para la agricultura, para desarrollar productos novedosos y para mejoramiento nutricional; sin embargo, es necesario crear estrategias para revalorizar su uso.

**Palabras clave.** Alimentos silvestres. Biodiversidad. Etnobotánica. Especies subutilizadas.

## Introduction

Edible wild species grow with or without human action and need to overcome a process of human selection to be considered as domesticated crops (Heywood, 1999). The limits between both categories can be fuzzy, as more factors must be considered when classifying them. Wild edible plants and their products have been important throughout human history, not only for their nutritional benefits and impact on people's diet, but also because they have shaped the ecological distribution and species richness across ecosystems (Levis *et al.*, 2017). Despite their great influence, many of them have been underused due to *knowledge loss*, various factors, such as the arrival of new alternatives, or changes in the ecosystems and cultural diversity, caused a reduction in the use of native species (Byg & Balsev, 2004; Van Zonneveld *et al.*, 2018).

In tropical America, fruits have been an essential component of diet and culture (Hernández & León, 1992). According to Patiño (2002), Europeans found in the Americas many communities that ate fruits as an integral part of their diet. Amerindian people from the Amazon domesticated at least 71 species of fruit trees (Clement, 1999); for Andean cultures, fruits were related to social customs and were products of frequent exchange (Daza, 2013; Martínez y Manrique, 2014). However, while the native fruits were rooted in the diet of New World inhabitants, the European conquerors looked at them with suspicion (Patiño, 2002), introducing new fruit plants that quickly spread throughout the continent (Hernández & León, 1992). Many native species became underutilized due to the depopulation suffered by native American cultures and the transformation of their traditional knowledge after the European conquest (Clement, 1999, van Zonneveld *et al.*, 2018). Only in the 18th century, did American fruit trees begin to gain interest; by then, both native and introduced Old World plants had become part of home gardens (Patiño, 2002). Under this scenario, consumption of native fruits most probably decreased. Nevertheless, wild fruits are still an essential part of people's alimentary traditions in tropical America (Patiño, 2002; Rivas *et al.*, 2010; Álvarez *et al.*, 2016).

Edible wild fruits contribute significantly to the diet of human communities (Baccheta *et al.*, 2016). Wild fruits are an accessible source of food and income and are well-adapted to local climatic conditions (Bvenura & Sivakmar, 2017). Wild edible species and their varieties are valuable reservoirs of genetic diversity for crops

(Baccheta *et al.*, 2016). Genera like *Annona*, *Solanum*, *Theobroma*, *Pouteria*, *Rubus*, *Passiflora*, or *Bactris*, which include valuable commercial fruit trees, also have many wild species. Thus, these species can play an essential role in crop breeding, to increase the adaptability and resilience of commercial crops (Baccheta *et al.*, 2016). This genetic potential of wild fruits can be related to incipient management and domestication (Baccheta *et al.*, 2016). This could be, for example, the case of some palm species of Colombia, for which Bernal *et al.* (2011) identified management practices related to their edible use. It is also the case of species such as *Vaccinium meridionale*, currently in the process of cultivation and domestication in the Colombian Andes (Ligarreto, 2009). Thus, wild fruit trees may have the potential to increase agricultural diversity in many regions of Colombia.

Wild fruits are often richer in micronutrients and bioactive secondary metabolites than cultivated species, and they can benefit human health either by direct consumption or as processed products (Baccheta *et al.*, 2016; Li *et al.*, 2016; Bvenura & Sivakmar, 2017; Pinela *et al.*, 2017). These favorable properties have been identified in numerous tropical fruit plants (Hernández & Barrera, 2010; Montúfar *et al.*, 2010; Kang *et al.*, 2012; Yamaguchi *et al.*, 2015), increasing the interest in the development of nutritional products and dietary supplements (Oliveira *et al.*, 2012; Neri-Numa *et al.*, 2018). Any of these preparations could be considered as functional foods (Baccheta *et al.*, 2016), which in addition to their nutritional properties, have positive physiological effects on consumers, potentially contributing to disease prevention and health improvement (Hilton, 2017). Along with the interest in biochemical research on wild fruit trees, the recovery of traditional knowledge about their management and preparation has contributed to their reintroduction as innovative foods for gastronomy and new cuisines (Baccheta *et al.*, 2016). Therefore, wild fruit plants can diversify crop production and bring significant health and economic revenues to local communities, as they represent effective value chains (Kehlenbeck *et al.*, 2013; Omotayo & Aremu, 2020).

In Colombia, the diversity of wild fruits has been documented in several publications. Pérez-Arbeláez (1978), in his work "Plantas Útiles de Colombia" reported 50 species of fruit trees. Later, Romero-Castañeda (1991) compiled the most important synthesis about Colombia's wild fruits, reporting 167 species. However, as new revisions (Acero, 2005; Jiménez-Escobar & Estupiñán-González, 2011; Cárdenas *et al.*, 2012; Mesa

& Galeano, 2013; Ledezma-Rentería & Galeano, 2014; López *et al.*, 2016b) and new field studies (Cárdenas & López, 2000; Cárdenas & Ramírez, 2004; López *et al.*, 2006; Cruz *et al.*, 2009; Estupiñan-González & Jiménez-Escobar, 2010; López *et al.*, 2016a; Álvarez *et al.*, 2016) have been accomplished, the number of reported species has increased. The use of many of these fruits are mostly local, so they have had little recognition for their contribution to Colombians' diet. In 2010, Rivas *et al.* (2010) conducted a study on indigenous food, finding 92 new species that had not been reported in the Colombian Food Composition Tables (TCAC), among which one third were fruits. This growing interest in native foods has allowed the resurgence of some wild fruits, which have gained popularity in specialized markets and in the country's research agendas. However, the information in Colombia about the use, nutritional and productive qualities is still scarce and disperse. Therefore, the present review aims to present a synthesis of the wild edible fruits of Colombia and to discuss their use prospects.

## Material and methods

We conducted a literature search on Google Scholar and Science Direct databases. Search terms included "fruits", "native", "Colombia", "edible", "promissory" and "ethnobotany". There was no restriction regarding language or publication year. In total, 74 references among books, articles, technical-scientific reports, and dissertations were included. The search was complemented by a review of herbarium collections, including Colombian National Herbarium (COL), Antioquia University Herbarium (HUA), Javeriana University Herbarium (HPUJ), and Colombian Amazon Herbarium (COAH) (abbreviations follow [Index Herbariorum](#)). The list was built at the species level, including the following criteria: all species have at least one report as edible, are native to Colombia, and they are wild; all growth habits were considered. In some cases, where the species has wild and cultivated varieties, we decided to include or exclude it depending on our assessment of the use frequency of the wild variety; for example, we included *Spondias mombin* and *Theobroma bicolor*, but excluded *Bactris gasipaes*. Also, we included all species reported as edible fruits, regardless of whether it is the pericarp, aril, or accessory parts like hypanthium, perianth, or pedicel that are consumed, but excluded those in which only the seeds are consumed. Thus, we included *Anacardium*, *Coccoloba*, and

*Gaultheria* species, of which the edible parts are the swollen pedicel or the fleshy calyx, but excluded, for example, *Lecythis* and *Phytelephas*, for which it is the seeds, either mature or immature, that are consumed.

The taxonomy followed the APG system and was based on [World Flora Online Consortium](#) and [Catálogo de Plantas y Líquenes de Colombia](#). The spelling of scientific names was verified with the Taxonomic Name Resolution Service v4.0 (Boyle *et al.*, 2013). Based on the literature or herbarium collections, we recoded the region of use for the species. The biogeographic regions were based on [Catálogo de Plantas y Líquenes de Colombia](#) and [Hernández-Camacho \*et al.\* \(1992\)](#). They included Amazon, Caribbean (including the Caribbean islands), Pacific, Orinoco (including Guayana and Serranía de La Macarena), Sierra Nevada de Santa Marta, Andes, Cauca Valley, and Magdalena Valley.

## Results

We found records of 703 plant species of wild edible fruits in Colombia distributed in 76 families ([Appendix 1](#)). The richest families were Fabaceae (66 species), Arecaceae (58), Passifloraceae (44), Sapotaceae (41), Moraceae (34), Rubiaceae and Melastomataceae (28 species each), Annonaceae (27), Apocynaceae (25), Malvaceae and Myrtaceae (24 species each), and Ericaceae (23) ([Table 1](#)). The most reported genera were *Inga* and *Passiflora* (42 species each), followed by *Pouteria* (21), *Bactris* (16), *Annona* (14), *Pourouma* (12), and *Iryanthera* and *Solanum* (10).

The regions with the highest number of species were Amazon (388), Andes (144), Pacific (111), Caribbean (111), and Orinoco (77) ([Table 2](#)). For 36 species, the region of use was not identified. We found that only 45 (6.4 %) of the recorded species are endemic. The region with the highest number of endemic species was the Andes, with 28 species, followed by the Pacific and Magdalena valley, with ten species each ([Appendix 1](#)).

Eighteen species are used in almost all the regions of Colombia: *Spondias mombin*, *Spondias purpurea*, *Bactris brongniartii*, *Oenocarpus bataua*, *Oenocarpus minor*, *Chrysobalanus icaco*, *Garcinia madruno*, *Dialium guianense*, *Hymenaea courbaril*, *Inga edulis*, *Bunchosia armeniaca*, *Pseudolmedia laevigata*, *Campomanesia lineatifolia*, *Eugenia victoriana*, *Passiflora foetida*, *Passiflora vitifolia*, *Genipa americana*, and *Pourouma bicolor* ([Appendix 1](#)).

**Table 1.** Botanical families with more than ten wild fruit species recorded in Colombia.

| Family           | Genera number | Species number |
|------------------|---------------|----------------|
| Fabaceae         | 15            | 66             |
| Arecaceae        | 18            | 58             |
| Passifloraceae   | 2             | 44             |
| Sapotaceae       | 8             | 41             |
| Moraceae         | 15            | 34             |
| Melastomataceae  | 11            | 28             |
| Rubiaceae        | 15            | 28             |
| Annonaceae       | 7             | 27             |
| Apocynaceae      | 13            | 25             |
| Malvaceae        | 8             | 24             |
| Myrtaceae        | 11            | 24             |
| Ericaceae        | 9             | 23             |
| Chrysobalanaceae | 6             | 20             |
| Myristicaceae    | 6             | 18             |
| Cactaceae        | 8             | 15             |
| Urticaceae       | 3             | 15             |
| Burseraceae      | 4             | 14             |
| Solanaceae       | 4             | 14             |
| Clusiaceae       | 5             | 13             |
| Lecythidaceae    | 4             | 12             |
| Rosaceae         | 3             | 11             |

**Table 2.** Number of wild edible fruits recorded in Colombia's biogeographic regions, indicating the type of management (wild or wild and cultivated).

| Region                       | Species number | Wild | Wild and cultivated |
|------------------------------|----------------|------|---------------------|
| Amazon                       | 388            | 351  | 37                  |
| Andes                        | 144            | 110  | 34                  |
| Pacific                      | 111            | 85   | 26                  |
| Caribbean                    | 111            | 88   | 23                  |
| Orinoco                      | 77             | 57   | 20                  |
| Magdalena Valley             | 10             | 6    | 4                   |
| Sierra Nevada de Santa Marta | 8              | 7    | 1                   |
| Cauca Valley                 | 2              | 1    | 1                   |

In contrast, 541 species were reported as used only in one region, mostly in the Amazon (317), followed by the Andes (96), the Caribbean (52), and the Pacific (50).

Most of the species recorded, 613 (87.2 %), are exclusively wild, whereas only 90 (12.8 %) species are both wild and cultivated. Amazon is the region with the highest number of wild species (351), followed by the Andes (110), Caribbean (89), and Pacific (85) (Table 2). Eleven species of wild fruits have been officially reported as threatened in Colombia (Calderón *et al.*, 2002; 2005; Cárdenas & Salinas, 2007), six as endangered and five as vulnerable (Table 3).

**Table 3.** Wild edible fruits recorded in Colombia under threat of extinction according to the IUCN Red List Categories and Criteria. \*Endemic species.

| Species   | Family           | IUCN Category |
|---|------------------|---------------|
| * <i>Astrocaryum malybo</i> H.Karst.                  | Arecaceae        | EN            |
| <i>Attalea colenda</i> (O.F. Cook) Balslev & A.J.Hend | Arecaceae        | EN            |
| <i>Elaeis oleifera</i> (Kunth) Cortés                 | Arecaceae        | EN            |
| * <i>Oenocarpus circumtextus</i> Mart.                | Arecaceae        | VU            |
| <i>Syagrus sancona</i> (Kunth) H.Karst.               | Arecaceae        | VU            |
| <i>Caryocar amygdaliferum</i> Mutis ex Cav.           | Caryocaraceae    | VU            |
| <i>Licania platypus</i> (Hemsl.) Fritsch              | Chrysobalanaceae | EN            |
| <i>Parinari pachyphylla</i> Rusby                     | Chrysobalanaceae | EN            |
| <i>Gustavia nana</i> Pittier                          | Lecythidaceae    | EN            |
| <i>Gustavia speciosa</i> (Kunth) DC.                  | Lecythidaceae    | VU            |
| * <i>Passiflora tenerifensis</i> L.K.Escobar          | Passifloraceae   | VU            |

## Discussion

**Wild edible fruit diversity.** The number of wild fruits recorded here far exceeds the figures previously known for Colombia –50 species by Pérez-Arbeláez (1978) and 167 species by Romero-Castañeda (1991). This substantial raise is basically due to the increase of ethnobotanical studies during the last three decades (e.g., Patiño, 2002; Acero, 2005; López *et al.*, 2006; Cruz *et al.*, 2009; Jiménez-Escobar *et al.*, 2011; Jiménez-Escobar & Estupiñán-González, 2011; Cárdenas *et al.*, 2012; Mesa & Galeano, 2013; Ledezma-Rentería & Galeano, 2014; Álvarez *et al.*, 2016; López *et al.* 2016a, b).

Although fruits have been the most frequent food category reported in literature for tropical America (Van den Eynden *et al.*, 2003; Pulido *et al.*, 2008; do Nascimento *et al.*, 2013), their rich botanical diversity in Colombia is remarkable. The variety of Colombian ecosystems can explain this. Thus, Colombia appears to be a place of botanical convergence, rather than a center of origin of wild fruits. Passifloraceae and Ericaceae are the families with the highest numbers of endemic species, almost all them native to the Andes. The use of endemic species is sporadic, and except for *Compsonera cuatrecasasii* (Patiño, 2002) and *Hesperomeles goudotiana* (Cardozo *et al.*, 2009), there are no productivity or bromatological studies for them. Three of these endemic species are threatened; however, their condition is not related to overexploitation, but to natural habitat transformation (Calderón *et al.*, 2002; 2005).

Palms appear to be one of the most diverse botanical group in our review. Their fleshy fruits are rich in vitamins, oils, and other nutrients (Montúfar *et al.*, 2010; Kang *et al.*, 2012; Yamaguchi *et al.*, 2015), and they are a frequent component in the diet of rural communities across the territory. *Mauritia flexuosa*, *Euterpe precatória*, and *Oenocarpus bataua* are widely appreciated in the Amazon and Orinoco (Acero, 2005; Mesa & Galeano, 2013), *Euterpe oleracea* and *Oenocarpus bataua* in the Pacific (Ledezma-Rentería & Galeano, 2014), and *Bactris guineensis* in the Caribbean (Galeano & Bernal, 2010). Even in the Andean region, edible fruits of palm species like *Aiphanes horrida* are usually consumed by rural people (Galeano & Bernal, 2010; López *et al.*, 2016a). Some of these palm species have protocols for their harvest and management, as they have been promoted as non-timber forest products (Bernal & Galeano, 2013; López-Camacho & Murcia-Orjuela, 2020).

The legume and passion-flower families are also some of the most diverse groups, particularly the genera *Inga* and *Passiflora*. The consumption of *Inga* fruits has been frequently reported in ethnobotanical studies in tropical America (Lévi-Strauss, 1952; Cárdenas & López, 2000; Van den Eynden *et al.*, 2003), and species of *Passiflora* are widely recognized for their edible fruits (Romero-Castañeda, 1991; Ocampo *et al.*, 2007). At least 187 species of *Passiflora* are known in Colombia, and there are recent studies focused on their potential and conservation (Ocampo *et al.*, 2007; Ocampo *et al.*, 2010; Ocampo, 2013).

There is also a significant number of wild edible fruits of Sapotaceae, particularly from the genus *Pouteria*, for instance *Pouteria arguacoensium*, a fruit tree endemic to Sierra Nevada de Santa Marta, traditionally used by the indigenous communities (Rivas *et al.*, 2010). Among the Moraceae, although the genus *Ficus* was the most diverse, its fruits are only sporadically consumed, and have no commercial significance. Another diverse botanical group is Myrtaceae, for which there is a growing interest in using *Myrciaria dubia* (Hernández & Barrera, 2010) and *Campomanesia lineatifolia* (López *et al.*, 2016a). Although *Myrciaria dubia* has been extensively used in Peru, reaching an international market, its potential is just beginning to be known in Colombia (Hernández & Barrera, 2010), and its fruits are now sold in some specialized markets. The two most diverse botanical groups of wild fruits used in Colombia's highlands are Ericaceae and Rosaceae. *Vaccinium meridionale* and *Macleania rupestris* are the most used species of Ericaceae. Whereas the former is widely commercialized and has been subject of several studies (Magnitskiy & Ligarreto, 2007; Ávila *et al.*, 2009; Castrillón *et al.*, 2008; Ligarreto, 2009; Medina *et al.*, 2019; Díaz-Uribe *et al.*, 2019), the latter is barely used (Acero & Bernal, 2003; López *et al.*, 2016a). Andean rural people often consume wild *Rubus* species (Rosaceae), but they do not have commercial significance (López *et al.*, 2016a). Apocynaceae, Melastomataceae, Rubiaceae, Malvaceae, and Annonaceae are other diverse families, that include species locally used and barely studied in Colombia.

Differences in the number of species among regions may be associated with ethnobotanical studies and biological and sociocultural aspects. According to Patiño (1989), until the 1990s, ethnobotanical studies in Colombia were focused on the lowlands, especially in the Amazon region. However, in the last two decades, there has been a growing interest in the ethnobotany of the Caribbean

and Andean regions (Cruz *et al.*, 2009; Jiménez-Escobar & Estupiñán-González, 2011; López *et al.*, 2016a, b). In contrast, even today, the literature on the use of native flora of the Magdalena and Cauca valleys and the Sierra Nevada de Santa Marta is scarce, underlining the need to increase ethnobotanical research there. A recent study on food plants in the Magdalena Valley reported the use of only three wild fruits, which could be the result of sociocultural transformations, since virtually the entire indigenous population has disappeared from that region (Villa & García, 2017).

Recording the Amazon as the most diverse region for wild fruits is not unexpected, since they have been an essential component of the diet among the human groups living there (Hernández & León, 1992; Clement, 1999). Several ethnobotanical studies have reported the prevalence of the use of wild fruits in the Amazon (Cárdenas & López, 2000; Cárdenas & Ramírez, 2004; López *et al.*, 2006). On the other hand, although the Andes are usually considered as the most transformed region in Colombia, it has more records of wild edible fruits than the Orinoco or the Pacific, which include extensive natural areas inhabited by human communities having a deep relationship with the forest. The growing interest in the fruits of Ericaceae and Passifloraceae has contributed to the increase of the reports in this region (López, 2013; Abril, 2010). Likewise, in the Caribbean, recent studies have significantly contributed to the knowledge of useful species, including wild fruits (Cruz *et al.*, 2009; Jiménez-Escobar & Estupiñán-González, 2011; López *et al.*, 2016b).

**Prospects of wild edible fruits.** The most recognized species in literature are usually widely distributed in tropical America, so their use as food is well-known throughout the region. Due to their high potential for agriculture, for become novel products, and represent nutritional complement, most of them have been categorized as promising species, and have been gaining recent recognition in Colombia. Not surprisingly, some species like *Euterpe precatoria*, *Euterpe oleracea*, *Mauritia flexuosa*, *Bactris guineensis*, *Myrciaria dubia*, and *Vaccinium meridionale* are beginning to be traded in some of the largest cities of Colombia. However, some of these wild fruits have been marketed for decades in Brazil and Perú, whereas in Colombia, where studies on wild edible fruits are scarce, they are only a novelty in specialized markets. Some of the most studied wild fruits in Colombia include Amazonian species, especially *Euterpe precatoria*, *Mauritia flexuosa*, *Oenocarpus bataua*, *Myrciaria dubia* and *Theobroma bicolor*

(Hernández *et al.*, 1998; Hernández & Barrera, 2010; Montúfar *et al.*, 2010; Kang *et al.*, 2012; Castro-Rodríguez *et al.*, 2015; Yamaguchi *et al.*, 2015) and the Andean wild fruit *Vaccinium meridionale* (Ligarreto, 2009; Medina *et al.*, 2019; Díaz-Urbe *et al.*, 2019).

Since wild edible fruits have great potential for dealing with food and nutritional insecurity in rural communities (Bvenura & Sivakumar, 2017), it is important to characterize their biochemical and nutritional composition. A significant barrier for encouraging the safe use of our wild edible fruits is the lack of studies on nutritional properties. Rivas *et al.* (2010) pointed out the scarce attention paid in Colombia to studying the chemical composition of traditional foods. A worrisome situation is the frequent reports on wild foods that are toxic to humans (Guill *et al.*, 1997; Spina *et al.*, 2008; Abbet *et al.*, 2014; Pinela *et al.*, 2017). Caution is required with species such as *Thevetia ahouai* or *Lantana camara* reported as possibly toxic (Flores *et al.*, 2001; Sharma *et al.* 2007). Although ethnobotanical reports validate the use of wild fruits, it is crucial to prioritize species with the most significant potential and encourage research on their bromatology. Wild fruits are also important sources of bioactive substances that can be used to develop pharmaceuticals and dietary supplements (Oliveira *et al.*, 2012; Bvenura & Sivakumar, 2017). Several bioactive substances have been identified in the best-known Colombian wild edible fruits; examples include the polyphenolic components with antioxidant properties of *Euterpe precatoria* and *Euterpe oleracea* (Yamaguchi *et al.*, 2015), the heavy concentration of ascorbic acid in *Myrciaria dubia* (Yuyama *et al.*, 2002) and vitamin A in *Aiphanes horrida* and *Mauritia flexuosa* (Balick & Gershoff, 1990; Pacheco, 2005) as well as the rich composition of aminoacids in *Oenocarpus bataua* (Balick & Gershoff, 1981). The search for new sources of bioactive substances should be an important line of research in Colombia, encouraging innovation in the food industry.

Another aspect of wild edible fruits is their potential to treat nutritional deficiencies. Anemia and micronutrient deficiencies (including vitamin A and zinc) are the most prevalent dietary problems in Colombia, particularly acute among rural people (Neufeld, 2012). However, consumption of wild edible fruits could solve some of these nutritional deficiencies. For example, fruits of *Aiphanes horrida* have been considered as an excellent source of Vitamin A (16 000 IU/100 gr) (Balick & Gershoff, 1990), and fruits of *Hymenaea courbaril* are rich in minerals such as iron, calcium, magnesium, zinc, silicon, phosphorus and potassium (Alzate *et al.*, 2008).

Wild edible fruits also provide other exceptional nutritional contents. “Milpeso milk” is a traditional beverage made from fruits of *Oenocarpus bataua*, which contains higher levels of proteins than soy milk (Balick & Gershoff, 1981). Also, the high content of Vitamin C of *Myrciaria dubia* and *Malpighia glabra* and the rich antioxidant contents of *Bactris guineensis* (Osorio *et al.*, 2011), *Vaccinium meridionale* (Garzón *et al.*, 2010), *Mauritia flexuosa* (Restrepo *et al.*, 2016), and *Euterpe* spp. (Yamaguchi *et al.*, 2015) are remarkable. Native fruits are also an alternative source of fiber, helping to decrease the prevalence of cardiovascular diseases, diabetes, obesity, colon cancer, and other diverticular diseases (Oliveira *et al.*, 2012). Fruits of *Byrsonima crassifolia*, for example, were found to have anti-diabetic activity (Pérez-Gutiérrez *et al.*, 2010).

On the other hand, the lack of detailed agronomical studies is a constraint for increasing native fruit production and their market availability (Oliveira *et al.*, 2012). We estimate that less than 20 % of Colombian wild fruits have studies on their agricultural production. This condition could be related to the acceptability and accessibility of wild foods. Consumer preference is another factor affecting the cultivation and resurgence of indigenous fruits and vegetables (Bvenura & Sivakumar, 2017). Consumers often prefer exotic fruits and vegetables, especially those developed over the years, as they are well-known and easier to get (Bvenura & Sivakumar, 2017). Other aspects, such as low governmental interest, poor markets, lack of added value, and the inability to meet demand and standards, make the spread of wild foods problematic (Bacchetta *et al.*, 2016). Since all these factors could be operating in Colombia, it is relevant to create strategies to re-assess fruits and other wild foods. Bacchetta *et al.* (2016) present some proposals that could be applied here. Firstly, we should prioritize species based on the information available and the prevalence of use. Here, it is essential to distinguish between those fruits of which consumption is just as a minor, incidental snack, from those with extensive use or those related to domesticated species, such as wild fruits of Annonaceae, Passifloraceae, or Myrtaceae. Then, we should assess available data and identify gaps through participatory ethnobotanical inventories. These activities might also involve collecting genetic material that remains as a priority to Colombian authorities due to the low representation of wild fruits in national germplasm banks. Based on the review of records from Instituto Colombiano Agropecuario (ICA) and Medina (2009), we found that only about 31 (4.4 %) species are represented in national

germplasm banks. Efforts for *ex situ* conservation of wild fruits could also facilitate conditions for studying their nutritional and agronomic requirements. However, conservation strategies should also include the protection of local knowledge and consumption, as many wild fruits are incorporated in people’s diets around the country (Rivas *et al.*, 2010; Jimenez-Escobar & Estupiñán-González, 2011; Álvarez *et al.*, 2016). Therefore, it is conceivable that wild fruits can play an essential role in different gastronomic traditions, so their commercial prospecting cannot be the only research focus.

Although our results account for a wide variety of wild fruits in Colombia, this does not necessarily reflect the reality of their current consumption. According to Rivas *et al.* (2010), native foods consumption has decreased in Colombia over time. Indigenous communities have replaced foods with others with higher social prestige but a lower nutritional value (Rivas *et al.*, 2010). In other cases, consumption patterns have changed, due to recent socioeconomic transformations (Gómez *et al.*, 2006; Álvarez *et al.*, 2016). The drastic decline in consumption of wild foods has been attributed, among other factors, to forest degradation, agriculture, and urbanization (Bvenura & Sivakumar, 2017). However, the recovery of old habits is an essential strategy for promoting health and welfare (Rivas *et al.*, 2010; Oliveira *et al.*, 2012). We expect that the growing trend to reevaluate native biodiversity and traditions will encourage research on our wild edible fruits.

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## References

- Abbet, Ch., Mayor, R., Roguet, D., Spichiger, R., Hamburger, M. & Potterat, O. (2014). Ethnobotanical survey on wild alpine food plants in Lower and Central Valais (Switzerland). *Journal of Ethnopharmacology*, 15, 1624-634.  
<https://doi.org/10.1016/j.jep.2013.11.022>
- Abril, D. (2010). *Las ericáceas con frutos comestibles del Altiplano Cundiboyacense*. (Thesis). Bogotá D. C.: Pon-

- tificia Universidad Javeriana, Facultad de Ciencias, Departamento de Biología. 41 pp.
- Acero, L. E. (1979). *Principales plantas útiles de la Amazonia colombiana*. Bogotá D. C.: Instituto Geográfico Agustín Codazzi (IGAC). 263 pp.
- Acero, L. E. (2005). *Plantas útiles de la Cuenca del Orinoco*. Bogotá: Zona Ediciones. 608 pp.
- Acero, L. E. & Bernal, H. Y. (2003). *Guía para el cultivo, aprovechamiento y conservación de la uva camarona: *Macleania rupestris* (HBK) A.C. Smith*. Serie Ciencia y Tecnología No. 27. Bogotá D. C.: Convenio Andrés Bello. 43 pp.
- Álvarez, L. M., Gálvez, A. & Salazar, J. C. (2016). Etnobotánica del Darién Caribe colombiano: los frutos del bosque. *Etnográfica*, 20(1), 163-193.  
<https://doi.org/10.4000/etnografica.4244>
- Alzate, L. M., Arteaga, D. M. & Jaramillo, Y. (2008). Propiedades farmacológicas del algarrobo (*Hymenaea courbaril* L.) de interés para la industria de alimentos. *Revista Lasallista de Investigación*, 5(2), 100-111.
- Ariza, W., Huertas, C., Hernández, A., Gelvez, J., González, J. & López, L. (2010). Caracterización y usos tradicionales de Productos Forestales no Maderables (PFNM) en el corredor de conservación Guantiva-La Rusia-Iguaque. *Colombia Forestal*, 13(1), 117-140.  
<https://doi.org/10.14483/issn.2256-201X>
- Ávila, R., Orozco, O., Ligarreto, G., Magnitskiy, S. & Rodríguez, A. (2009). Influence of mycorrhizal fungi on the rooting of stem and stolon cuttings on the Colombian blueberry (*Vaccinium meridionale* Swartz). *International Journal of Fruit Science*, 9(4), 372-384.  
<https://doi.org/10.1080/15538360903378575>
- Bacchetta, L., Visioli, F., Cappelli, G., Caruso, E., Martin, G., Nemeth, E., Bacchetta, G., Bedini, G., Wezel, A., van Asseldonk, T., van Raamsdonk, L., Mariani, F. & Eatwild Consortium. (2016). A manifesto for the valorization of wild edible plants. *Journal of Ethnopharmacology*, 191, 180-187.  
<https://doi.org/10.1016/j.jep.2016.05.061>
- Balick, M. J. & Gershoff, S. N. (1981). Nutritional evaluation of the *Jessenia bataua* palm: source of high-quality protein and oil from tropical America. *Economic Botany*, 35, 261-271.  
<https://doi.org/10.1007/BF02859117>
- Balick, M. J. & Gershoff, S. N. (1990). A nutritional study of *Aiphanes caryotifolia* (Kunth) Wendl. (Palmae) fruit: An exceptional source of vitamin A and high-quality protein from tropical America. *Advances Economic Botany*, 8, 35-40.
- Bernal, R. & Galeano, G. (eds.). (2013). *Cosechar sin destruir. Aprovechamiento sostenible de palmas colombianas*. Bogotá D. C.: Facultad de Ciencias, Instituto de Ciencias Naturales, Universidad Nacional de Colombia. 241 pp.
- Bernal, R., Torres, C., García, N., Isaza, C., Navarro, J., Vallejo, M. I., Galeano, G. & Balslev, H. (2011). Palm management in South America. *The Botanical Review*, 77, 607-646.  
<https://doi.org/10.1007/s12229-011-9088-6>
- Botero-Restrepo, H. (2005). *Etnobotánica de la Cuenca Alta del Río Sinú. Córdoba, Colombia*. Medellín: Fondo Para la Acción Ambiental, Fundación BIOZOO, Corporación Autónoma Regional de los valles de Sinú y del San Jorge. 91 pp.
- Boyle, B., Hopkins, N., Lu, Z., Raygoza, J. A., Mozzherin, D., Rees, T., Matasci, N., Narro, M.L., Piel, W.H., McKay, S.J., Lowry, S., Freeland, C., Peet, R. K. & Enquist, B. J. (2013). The taxonomic name resolution service: an online tool for automated standardization of plant names. *BMC Bioinformatics*, 14, 16.  
<https://doi.org/10.1186/1471-2105-14-16>
- Bvenura, C. & Sivakmar, D. (2017). The role of wild fruits and vegetables in delivering a balanced and healthy diet. *Food Research International*, 99, 15-30.  
<https://doi.org/10.1016/j.foodres.2017.06.046>
- Byg, A., & Balslev, H. (2004). Factors affecting local knowledge of palms in Nangaritza valley in south-eastern Ecuador. *Journal of Ethnobiology*, 24(2), 255-278.
- Caballero, R. (1995). *La etnobotánica en las comunidades negras e indígenas del delta del río Patía*. Quito: Ediciones Abya-Yala. 248 pp.
- Calderón, E., Galeano G. & García N. (eds.). (2002). *Libro Rojo de las Plantas Fanerógamas de Colombia. Volumen 1: Chrysobalanaceae, Dichapetalaceae y Lecythidaceae*. Serie Libros Rojos de Fauna, Flora y Hongos Amenazados de Colombia. Bogotá D. C.: Instituto Alexander von Humboldt, Instituto de Ciencias Naturales de la Universidad Nacional de Colombia, Ministerio del Medio Ambiente. 220 pp.
- Calderón, E., Galeano G. & García N. (eds.). (2005). *Libro Rojo de Plantas de Colombia. Volumen 2: Palmas, Frailejones y Zamias*. Serie Libros Rojos de Especies Amenazadas de Colombia. Bogotá D. C.: Instituto Alexander von Humboldt-Instituto de Ciencias Naturales de la Universidad Nacional de Colombia-Ministerio de Ambiente, Vivienda y Desarrollo Territorial. 454 pp.
- Carbonó, E. (1987). *Estudios etnobotánicos entre los Coguis de la Sierra Nevada de Santa Marta, Colombia*. (Tesis). Bogotá, D.C.: Universidad Nacional de Colombia,



- Facultad de Ciencias, Departamento de Biología. 155 pp.
- Cárdenas, D. & López, R. (2000). *Plantas útiles de la Amazonía Colombiana-Departamento del Amazonas-Perspectivas de los Productos Forestales No Maderables*. Bogotá D. C.: Instituto Amazónico de Investigaciones Científicas (SINCHI), Ministerio del Medio Ambiente. 113 pp.
- Cárdenas, D. & Ramírez, J. (2004). Plantas útiles y su incorporación a los sistemas productivos del departamento del Guaviare (Amazonia Colombiana). *Caldasia*, 26(1), 95-110.
- Cárdenas, D. & Salinas N. (2007). *Libro Rojo de Plantas de Colombia. Volumen 4: especies maderables primera parte*. Serie Libros Rojos de Especies Amenazadas de Colombia. Bogotá D. C.: Instituto de Investigaciones Científicas Sinchi-Ministerio de Ambiente, Vivienda y Desarrollo Territorial. 232 pp.
- Cárdenas, D., Marín N. & Castaño N. (2012). Plantas alimenticias no convencionales en la Amazonia colombiana y anotaciones sobre otras plantas alimenticias. *Colombia Amazónica*, 5, 59-81.
- Cardozo, E.H., Córdoba, S.L., González, J.D., Guzmán, J.R., Lancheros, H.O., Mesa, L.I., Pacheco, R.A., Pérez, B.A., Ramos, F.A., Torres, M.A. & Zúñiga, P.T. (2009). *Especies útiles en la región Andina de Colombia*. Tomo II. Bogotá D. C.: Jardín Botánico de Bogotá. 285 pp.
- Castrillón, J. C., Carvajal, E., Ligarreto, G. & Magnitskiy, S. (2008). El efecto de las auxinas sobre el enraizamiento de las estacas de agraz (*Vaccinium meridionale* Swartz) en diferentes sustratos. *Agronomía Colombiana*, 6(1), 16-22.
- Castro, F., Ocampo-Durán, A., Recio, L. P. & Sanabria, D. P. (2013). *Palmas nativas de la Orinoquía: biodiversidad productiva. Serie Palmas Nativas No.1*. Bogotá D. C.: Fundación Horizonte Verde. 91 pp.
- Castro-Rodríguez, S.Y., Barrera-García, J. A., Carrillo-Bautista, M. P. & Hernández-Gómez, M. S. (2015). *Asaí (Euterpe precatoria)-cadena de valor en el sur de la región amazónica*. Bogotá D. C.: Instituto Amazónico de Investigaciones Científicas (SINCHI). 142 pp.
- Clement, C. R. (1999). 1492 and the loss of Amazonian crop genetic resources. I. The relation between domestication and human population decline. *Economic Botany*, 53, 188-202.
- <https://doi.org/10.1007/BF02866498>
- Córdoba, S., Guzmán, C., Pérez, J. R., Zúñiga, B. A., Upegui, P. T. & Pacheco, R. A. 2010. *Propagación de Especies Nativas de la Región Andina*. Bogotá D. C.: Jardín Botánico José Celestino Mutis. 235 pp.
- Cruz, M. P., Estupiñán, A. C., Jiménez-Escobar, N. D., Sánchez, N., Galeano, G. & Linares, E. (2009). Etnobotánica de la región tropical del Cesar, Complejo Ciénaga de Zapatosa. In Rangel, O., (Ed.). *Colombia, Diversidad Biótica VIII: media y baja montaña de la serranía de Perijá*. Pp. 417-447. Bogotá D. C.: Universidad Nacional de Colombia.
- Daza, B. Y. (2013). *Historia del proceso de mestizaje alimentario entre España y Colombia*. (Thesis). Barcelona: Universidad de Barcelona. 494 pp.
- Díaz-Uribe, C., Vallejo, W., Camargo, G., Muñoz-Acevedo, A., Quiñones, C., Schott, E. & Zárate, X. (2019). Potential use of an anthocyanin-rich extract from berries of *Vaccinium meridionale* Swartz as sensitizer for TiO<sub>2</sub> thin films - An experimental and theoretical study. *Journal of Photochemistry & Photobiology A: Chemistry*, 384, 112050.
- <https://doi.org/10.1016/j.jphotochem.2019.112050>
- do Nascimento, V. T., de Lucena, R. F. P., Maciel, M. I. S. & de Albuquerque, U. P. (2013). Knowledge and use of wild food plants in areas of dry seasonal forests in Brazil. *Ecology of Food and Nutrition*, 52(4), 317-343.
- <https://doi.org/10.1080/03670244.2012.707434>
- Estupiñán-González, A. C. & Jiménez-Escobar, N. D. 2010. Uso de las plantas por grupos campesinos en la franja tropical del Parque Nacional Natural Paramillo (Córdoba, Colombia). *Caldasia*, 32(1), 21-38.
- Figueroa-C, Y. & Galeano G. (2007). Lista comentada de las plantas vasculares del enclave seco interandino de La Tatacoa (Huila, Colombia). *Caldasia*, 29(2), 263-281.
- Flores, J. S., Canto-Aviles, G. C. & Flores-Serrano A. G. (2001). Plantas de la flora yucatanense que provocan alguna toxicidad en el humano. *Revista Biomédica* 12: 86-96.
- Galeano, G. & Bernal, R. (2010). *Palmas de Colombia-Guía de Campo*. Bogotá D. C.: Editorial Universidad Nacional de Colombia. Instituto de Ciencias Naturales, Facultad de Ciencias-Universidad Nacional de Colombia. 688 pp.
- Garzón, G. A., Narváez, C. E., Riedl, K. M. & Schwartz, S.J. (2010). Chemical composition, anthocyanins, non-anthocyanin phenolics and antioxidant activity of wild bilberry (*Vaccinium meridionale* Swartz) from Colombia. *Food Chemistry*, 122(4), 980-986.
- <https://doi.org/10.1016/j.foodchem.2010.03.017>
- Gómez, L., Arango, J. U., Siniguí, B., Domicó, M. & Bailarín, O. (2006). Estudio etnobotánico y nutricional de las principales especies vegetales de uso alimentario en territorios de las comunidades Embera de selva de Pavarandó y Chuscal-Tuguridó (Dabei-

- ba Occidente de Antioquia). *Gestión y Ambiente*, 9(1), 49-64.
- Guill, J. L., Rodríguez-García, I. & Torija, E. (1997). Nutritional and toxic factors in selected wild edible plants. *Plant Foods for Human Nutrition*, 51(2), 99-107. <https://doi.org/10.1023/A:1007988815888>
- Hernández-Camacho, J., Hurtado-Guerra, A., Ortiz-Quijano, R. & Walschburger, T. (1992). Unidades biogeográficas de Colombia. In Halfftter, G. (Ed.). *La diversidad biológica de Iberoamérica I: Programa Iberoamericano de Ciencia y Tecnología para el Desarrollo*. Pp. 105-152. México: Instituto de Ecología.
- Hernández, M., Casas, A., Martínez, O. & Galvis, J. (1998). Caracterización físicoquímica y fisiológica del fruto del maraco (*Theobroma bicolor* H.B.K.) durante su desarrollo. *Agronomía Colombiana*, 15(2-3), 172-180.
- Hernández, M. S. & Barrera, J. A. (2010). *Camu camu*. Bogotá D. C.: Instituto Amazónico de Investigaciones Científicas (SINCHI). 148 pp.
- Hernández, B. & León, J. (1992). *Cultivos marginados: otra perspectiva de 1492*. Italia: Organización de las Naciones Unidas para la Alimentación y la Agricultura. 339 pp.
- Heywood, V. H. (1999). *Use and potential of wild plants in farm households*. Italy: Food and Agriculture Organization of the United Nations. 113 pp.
- Hilton, J. (2017). Growth patterns and emerging opportunities in nutraceutical and functional food categories: Market overview. In Bagchi, D. & Nair, S. (Eds.). *Developing New Functional Food and Nutraceutical Products*. Pp. 1-28. London: Elsevier.
- Idárraga, A., Ortiz, R., Callejas, R. & Merello, M. C. (Eds.). (2011). *Flora de Antioquia. Catálogo de las plantas vasculares. Vol. II. Programa Expedición Antioquia-2103. Series Biodiversidad y Recursos Naturales*. Bogotá D. C.: Universidad de Antioquia, Missouri Botanical Garden y Oficina de Planeación Departamental de la Gobernación de Antioquia. Editorial D'Vinni. 939 pp.
- Jiménez-Escobar, N. & Estupiñán-González, A. 2011. Useful trees of the Caribbean region of Colombia. *Bioremediation, Biodiversity and Bioavailability*, 5(1), 65-79.
- Jiménez-Escobar, N., Albuquerque, U. & Rangel-Ch, O. (2011). Huertos Familiares en la bahía de Cispatá, Córdoba, Colombia. *Bonplandia*, 20(2), 309-328.
- Kang, J., Thakali, K. M., Xie, Ch., Kondo, M., Tong, Y., Oub, B., Jensen, G., Medina, M. B., Schauss, A. G. & Wua, X. (2012). Bioactivities of açai (*Euterpe precatoria* Mart.) fruit pulp, superior antioxidant and anti-inflammatory properties to *Euterpe oleracea* Mart. *Food Chemistry*, 133(3), 671-677. <https://doi.org/10.1016/j.foodchem.2012.01.048>
- Kehlenbeck, K., Asaah, E. & Jamnadass, R. (2013). Diversity of indigenous fruit trees and their contribution to nutrition and livelihoods in sub-Saharan Africa: examples from Kenya and Cameroon. In Fanzo, J., Hunter, D, Borelli, T. & Mattei, F. (Eds.). *Diversifying Food and Diets*. Pp. 257-269. London: Routledge.
- Lagos-Burbano, T., Ordóñez-Jurado, H., Criollo-Escobar, H., Burbano, S. & Martínez, Y. (2010). Descripción de Frutales Nativos de la familia Ericaceae en el Altiplano de Pasto, Colombia. *Revista Colombiana de Ciencias Hortícolas*, 4(1), 9-18.
- La Rotta, C. (1983). *Observaciones etnobotánicas sobre algunas especies utilizadas por la comunidad indígena andoque (Amazonas, Colombia)*. (Thesis). Bogotá D. C.: Universidad Nacional de Colombia, Facultad de Ciencias, Departamento de Biología. 117 pp.
- La Rotta, C., Miraña, P., Miraña, M., Miraña, B., Miraña, M. & Yucuna, N. (1989). *Especies utilizadas por la Comunidad Miraña. Estudio Etnobotánico*. Bogotá D. C.: Fondo FEN Colombia. 381 pp.
- Ledezma-Rentería, E. D. & Galeano, G. (2014). Usos de las palmas en las tierras bajas del Pacífico Colombiano. *Caldasia*, 36(1), 71-84. <https://doi.org/10.15446/caldasia.v36n1.43892>
- Lévi-Strauss, C. (1952). The use of wild plants in tropical South America. *Economic Botany*, 6(3), 252-270.
- Levis, C., Costa, F., Bongers, F. & 150 more authors. (2017). Persistent effects of pre-Columbian plant domestication on Amazonian forest composition. *Science*, 355 (6328). <https://doi.org/10.1126/science.aal0157>
- Li, Y., Zhang, J. J., Xu, D. P., Zhou, T., Zhou, Y., Li, S. & Li, H. B. (2016). Bioactivities and health benefits of wild fruits. *International Journal of Molecular Sciences*, 17(8), 2-27. <https://doi.org/10.3390/ijms17081258>
- Ligarreto, G. A. (Ed.). (2009). *Perspectivas del cultivo del agraz o mortiño (Vaccinium meridionale Swartz) en la zona altoandina de Colombia*. Bogotá D. C.: Universidad Nacional de Colombia. 134 pp.
- López, D. (2013). *Las pasifloras de la Sabana de Bogotá*. (Thesis). Bogotá D. C.: Pontificia Universidad Javeriana, Facultad de Ciencias, Departamento de Biología. 76 pp.
- López-Camacho, R. & Murcia-Orjuela, G. (2020). *Productos forestales no maderables (PFNM) en Colombia. Consideraciones para su desarrollo*. Bogotá D. C.:

- Ministerio de Ambiente y Desarrollo Sostenible, Unión Europea. 178 pp.
- López, R., Navarro, J. A., Montero, M. I., Amaya, K., Rodríguez, M. & Polania, A. (2006). *Manual de identificación de especies no maderables del corregimiento de Tarapacá, Colombia*. Bogotá D. C.: Instituto Amazónico de Investigaciones Científicas (SINCHI) y Cooperación Técnica Alemana (GTZ). 218 pp.
- López-C., R., Navarro-L., J. & Caleño, B. (2016a). *Productos Forestales no Maderables de CORPOCHIVOR. Una mirada a los regalos del bosque*. Bogotá D. C.: Corporación Autónoma Regional de Chivor (CORPOCHIVOR) y Universidad Distrital Francisco José de Caldas. 278 pp.
- López-C., R., Sarmiento, C., Espitia, L., Barrero, A. M., Consuegra, C. & Gallego, C. B. (2016b). *100 plantas del Caribe colombiano. Usar para conservar: aprendiendo de los habitantes del bosque seco*. Bogotá D. C.: Fondo Patrimonio Natural. 240 pp.
- Martínez, A. F. & Manrique, E. J. (2014). Alimentación prehispánica y transformaciones tras la conquista europea del Altiplano Cundiboyacense, Colombia. *Revista Virtual Universidad Católica del Norte*, 41, 96-111.
- Magnitskiy, S. A. & Ligarreto, G. A. (2007). El efecto del nitrato de potasio, del ácido giberélico y el ácido indolacético sobre la germinación de semillas de agraz (*Vaccinium meridionale Swartz*). *Revista Colombiana de Ciencias Hortícolas*, 1(2), 137-141.
- Medina, C. I., Lobo, M. & Martínez, B. (2009). Revisión del estado de conocimiento sobre la función productiva del lulo (*Solanum quitoense* Lam.) en Colombia. *Ciencia y Tecnología Agropecuaria*, 10(2), 167-179.
- Medina, C. I., Martínez, E. & López, C. A. (2019). Phenological scale for the mortiño or agraz (*Vaccinium meridionale Swartz*) in the high Colombian Andean area. *Revista Facultad Nacional de Agronomía Medellín*, 72(3), 8897-8908.
- <https://doi.org/10.15446/rfnam.v72n3.74460>
- Mesa, L. & Galeano G. (2013). Usos de las palmas en la Amazonía Colombiana. *Caldasia*, 35(2), 351-369.
- Montúfar, R., Laffargue, A., Pintaud, J. C., Hamon, S., Avallone, S. & Dussert, S. (2010). *Oenocarpus bataua* Mart. (Arecaceae): rediscovering a source of high oleic vegetable oil from Amazonia. *Journal of the American Oil Chemists' Society*, 87(2), 167-172.
- <https://doi.org/10.1007/s11746-009-1490-4>
- Neri-Numa, I. A., Soriano Sancho, R. A., Pereira, A. P. A., Pastore, G. M. (2018). Small Brazilian wild fruits: Nutrients, bioactive compounds, health-promotion properties and commercial interest. *Food Research International*, 103, 345-360.
- <https://doi.org/10.1016/j.foodres.2017.10.053>
- Neufeld, L., Rubio, M. & Gutiérrez, M. (2012). *Nutrición en Colombia II. Actualización del estado nutricional con implicaciones en política*. Nota técnica # 502. Bogotá D. C.: Banco Interamericano de Desarrollo. 50 pp.
- Ocampo, J. A., Coppens D'Eeckenbrugge, G., Restrepo, M. T., Jarvis, A., Salazar, M. H. & Caetano, C. M. (2007). Diversity of Colombian Passifloraceae: Biogeography and an updated list for conservation. *Biota Colombiana*, 8(1), 1-45.
- Ocampo, J., Coppens d'Eeckenbrugge, G. & Jarvis, A. (2010). Distribution of the genus *Passiflora* L. Diversity in Colombia and its potential as an indicator for biodiversity management in the Coffee Growing Zone. *Diversity*, 2, 1158-1180.
- <https://doi.org/10.3390/d2111158>
- Ocampo, J. (2013). Diversidad y distribución de las Passifloraceae en el departamento del Huila en Colombia. *Acta Biológica Colombiana*, 18(3), 511-516.
- Oficina de las Naciones Unidas de Servicios para Proyectos [UNOPS]. (1995). *Especies promisorias del Putumayo, una propuesta de desarrollo sustentable*. Bogotá D.C.: Oficina de las Naciones Unidas de Servicios para Proyectos (UNOPS), Programa de Desarrollo Alternativo en Colombia. 206 pp.
- Oliveira, V. B., Yamada, L. T., Fagg, C. W. & Brandão, M. (2012). Native foods from Brazilian biodiversity as a source of bioactive compounds. *Food Research International*, 48, 170-179.
- <https://doi.org/10.1016/j.foodres.2012.03.011>
- Omotayo, A. O. & Aremu, A. O. (2020). Underutilized African indigenous fruit trees and food-nutrition security: Opportunities, challenges, and prospects. *Food and Energy Security*, 9, 1-16.
- <https://doi.org/10.1002/fes3.220>
- Osorio, C., Carriazo, J. G. & Almanza, O. (2011). Antioxidant activity of corozo (*Bactris guineensis*) fruit by electron paramagnetic resonance (EPR) spectroscopy. *European Food Research and Technology*, 233(1), 103-108.
- <https://doi.org/10.1007/s00217-011-1499-4>
- Pacheco, L. M. (2005). Nutritional and ecological aspects on buriti or aguaje (*Mauritia flexuosa* Linnaeus filius): A carotene-rich palm fruit from Latin America. *Ecology of Food and Nutrition*, 44(5), 345-358.
- <https://doi.org/10.1080/03670240500253369>
- Patiño, V. M. (1989). *Bibliografía etnobotánica parcial, comentada, de Colombia y los países vecinos*. Bogotá D. C.: Instituto Colombiano de Cultura Hispánica. 371 pp.
- Patiño, V. M. (2002). *Historia y dispersión de los frutales nativos del Neotrópico*. Cali: Centro Internacional de Agricultura Tropical, Asociación Hortofrutíco-

- la de Colombia y Fondo Nacional de Fomento Hortofrutícola. 655 pp.
- Pérez-Arbeláez, E. (1978). *Plantas útiles de Colombia*. Cuarta edición. Tercera redacción muy corregida y aumentada. Bogotá D. C.: Litografía Arco. 831 pp.
- Pérez-Gutiérrez, R. M., Muñoz-Ramírez, A., Gómez, Y., Bautista, E. (2010). Antihyperglycemic, antihyperlipidemic and antiglycation effects of *Byrsonima crassifolia* fruit and seed in normal and Streptozotocin-induced diabetic rats. *Plant Foods for Human Nutrition*, 65(4), 350-357.  
<https://doi.org/10.1007/s11130-010-0181-5>
- Pinela, J., Carvalho, A. M., Ferreira, I. C. F. R. (2017). Wild edible plants: Nutritional and toxicological characteristics, retrieval strategies and importance for today's society. *Food and Chemical Toxicology*, 110, 165-188.  
<https://doi.org/10.1016/j.fct.2017.10.020>
- Pulido, M. T., Pagaza-Calderón, E. M., Martínez-Ballesté, A., Maldonado-Almanza, B., Saynes, A. & Pacheco, R. M. (2008). Homegarden as an alternative for sustainability: Challenges and perspectives in Latin America. In Albuquerque, U. P. & Ramos, M. A. (Eds.). *Current Topics in Ethnobotany*. Pp. 55-79. Kerala, India: Research Signpost.
- Restrepo, J., Arias, N. & Madriñán, C. (2016). Determinación del valor nutricional, perfil de ácidos grasos y capacidad antioxidante de la pulpa de aguaje (*Mauritia flexuosa*). *Revista de Ciencias*, 20(1), 71-78.
- Rivas, X., Pazos, S., Castillo, S. & Pachón, H. (2010). Alimentos autóctonos de las comunidades indígenas y afrodescendientes de Colombia. *Archivos Latinoamericanos de Nutrición*, 60(3), 211-219.
- Rodríguez-Mora, D. F., Velásquez-Ávila, H. A., Fernández-Alonso, J. L. & Raz, L. (2019). *Los usos tradicionales de las plantas no maderables de Santa María, Boyacá (Andes Colombianos)*. Serie de Guías de Campo del Instituto de Ciencias Naturales de la Universidad Nacional de Colombia No. 22. Bogotá D. C.: AES Colombia y Universidad Nacional de Colombia. 381 pp.
- Romero-Castañeda, R. (1991). *Frutas silvestres de Colombia*. Segunda edición. Bogotá D. C.: Instituto Colombiano de Cultura Hispánica. 661 pp.
- Salinas, N., Betancur, J. (2005). *Las ericáceas de la vertiente pacífica de Nariño, Colombia*. Bogotá D. C.: Instituto de Ciencias Naturales e Instituto de Investigación de Recursos Biológicos Alexander von Humboldt. 212 pp.
- Sarmiento, E. (1986). *Frutas en Colombia*. Bogotá D. C.: Ediciones Cultural Colombiana Ltda. 155 pp.
- Sharma, S. M., Sharma, S., Pattabhi, V., Mahato, S. B., & Sharma P. D. (2007). A Review of the hepatotoxic plant *Lantana camara*. *Critical Reviews in Toxicology*, 37(4), 313-352.  
<https://doi.org/10.1080/10408440601177863>
- Spina, M., Cuccioloni, M., Sparapani, L., Acciarri, S., Eleuteri, A. M., Fioretti, E. & Angeletti, M. (2008). Comparative evaluation of flavonoid content in assessing quality of wild and cultivated vegetables for human consumption. *Journal of the Science of Food and Agriculture*, 88, 294-304.  
<https://doi.org/10.1002/jsfa.3089>
- Toro, J. L. (2012). *Árboles de las Montañas de Antioquia*. Medellín: Corporación Autónoma Regional del Centro de Antioquia (CORANTIOQUIA). 203 pp.
- UNOPS-Oficina de las Naciones Unidas de Servicios para Proyectos. (1995). *Especies promisorias del Putumayo, una propuesta de desarrollo sustentable. Programa de desarrollo alternativo en Colombia*. Bogotá D. C.: Oficina de las Naciones Unidas de Servicios para Proyectos. 205 pp.
- Van den Eynden, V., Cueva, E. & Cabrera, O. (2003). Wild foods from Southern Ecuador. *Economic Botany*, 57(4), 576-603.
- Van Zonneveld, M., Larranaga, N., Blonder, B., Coradin, L., Hormaza, J. I. & Hunter, D. (2018) Human diets drive range expansion of megafauna-dispersed fruit species. *Proceedings of the National Academy of Sciences*, 1-6.  
<https://doi.org/10.1073/pnas.1718045115>
- Villa, D. & García, N. (2017). Food plants in home gardens of the middle Magdalena basin of Colombia. *Caldasia*, 39(2), 292-309.  
<https://doi.org/10.15446/caldasia.v39n2.63661>
- Yamaguchi, K. K. L., Pereira, L. F. R., Lamarão, C. V., Lima, E. S. & Veiga-Junior, V. F. (2015). Amazon acai: Chemistry and biological activities: A review. *Food Chemistry*, 179, 137-151.  
<https://doi.org/10.1016/j.foodchem.2015.01.055>
- Yuyama, K., Aguiar, J. & Yuyama, L. 2002. Camu-camu: um fruto fantástico como fonte de vitamina C. *Acta Amazonica*, 32(1), 169-174.  
<https://doi.org/10.1590/1809-43922002321174>



## Supplementary material

**Appendix 1.** List of wild edible fruits of Colombia. \*Endemic species. Management: w (wild), w/c (wild/cultivated). Use region: Ama (Amazon), And (Andes), Car (Caribbean), Cau (Cauca Valley), Mag (Magdalena Valley), Pac (Pacific), Ori (Orinoco), SNSM (Sierra Nevada de Santa Marta).

| Family        | Species   | Mangement | Use regions        | Representative reference      | Voucher   |
|---------------|---|-----------|--------------------|-------------------------------|-----------|
| Achariaceae   | <i>Mayna grandifolia</i> (H. Karst.) Warb.                  | w         | Car, Pac           | Romero-Castañeda, 1991        | COL91085  |
| Achariaceae   | <i>Mayna odorata</i> Aubl.                                  | w         | Ama                | Patiño, 2002                  | COL315663 |
| Actinidiaceae | <i>Saurauia bullosa</i> Wawra                               | w         | And                |                               | COL73280  |
| Actinidiaceae | * <i>Saurauia cuatrecasana</i> R.E. Schult.                 | w         | And                |                               | COL335310 |
| Actinidiaceae | * <i>Saurauia pulchra</i> Sprague                           | w         | And                | Romero-Castañeda, 1991        | COL13053  |
| Actinidiaceae | <i>Saurauia scabra</i> (Kunth) D.Dietr.                     | w         | And                |                               | COL74155  |
| Anacardiaceae | <i>Anacardium excelsum</i> (Bertero ex Kunth) Skeels        | w/c       | Pac                | Romero-Castañeda, 1991        |           |
| Anacardiaceae | <i>Anacardium giganteum</i> Hancock ex Engl.                | w         | Ama                | Cárdenas & López, 2000        | COL562711 |
| Anacardiaceae | <i>Anacardium parvifolium</i> Ducke                         | w         | Ama                | Cárdenas & López, 2000        |           |
| Anacardiaceae | <i>Camptosperma panamense</i> Standl.                       | w         | Pac                | Romero-Castañeda, 1991        |           |
| Anacardiaceae | <i>Spondias mombin</i> L.                                   | w/c       | Ama, Car, Ori, Pac | Romero-Castañeda, 1991        |           |
| Anacardiaceae | <i>Spondias purpurea</i> L.                                 | w/c       | And, Car, Ori, Pac | Patiño, 2002                  | COL160254 |
| Anacardiaceae | <i>Spondias radlkoferi</i> Donn.Sm.                         | w/c       | And                | Idárraga <i>et al.</i> , 2011 | COL275819 |
| Anacardiaceae | <i>Tapirira retusa</i> Ducke                                | w         | Ama                | Cárdenas <i>et al.</i> , 2012 |           |
| Annonaceae    | <i>Annona cordifolia</i> (Szyszyl.) Poepp. ex Maas & Westra | w         | Ama                |                               | COAH50038 |
| Annonaceae    | <i>Annona duckei</i> Diels                                  | w         | Ama                |                               | COAH41064 |
| Annonaceae    | <i>Annona glabra</i> L.                                     | w/c       | Car, Ori, Pac      | Romero-Castañeda, 1991        | COL544763 |
| Annonaceae    | <i>Annona hypoglauca</i> Mart.                              | w         | Ama                | Cárdenas & López, 2000        | COL64147  |
| Annonaceae    | <i>Annona jahnii</i> Saff.                                  | w         | Ori                |                               | COAH73688 |
| Annonaceae    | <i>Annona montana</i> Macfad.                               | w/c       | Ama                | Acero, 1979                   |           |
| Annonaceae    | <i>Annona mucosa</i> Jacq.                                  | w/c       | Ama, And           | Patiño, 2002                  | COAH49459 |
| Annonaceae    | <i>Annona nitida</i> Mart.                                  | w         | Ama                |                               | COAH57668 |
| Annonaceae    | <i>Annona puniceifolia</i> Triana & Planch.                 | w         | Car                | Figueroa-C & Galeano, 2007    | COL536170 |
| Annonaceae    | <i>Annona purpurea</i> Moç. & Sessé ex Dunal                | w/c       | Car                | Romero-Castañeda, 1991        | COL571247 |

| Family      | Species  | Mangement | Use regions | Representative reference      | Voucher   |
|-------------|--|-----------|-------------|-------------------------------|-----------|
| Annonaceae  | <i>Annona rensoniana</i> (Standl.)<br>H.Rainer             | w         | And, Pac    | Patiño, 2002                  | COL570543 |
| Annonaceae  | * <i>Annona rufinervis</i> (Triana &<br>Planch.) H.Rainer  | w         | Car         | López <i>et al.</i> , 2016b   |           |
| Annonaceae  | <i>Annona scandens</i> Diels ex Pilg.                      | w         | Ama         | Cárdenas <i>et al.</i> , 2012 |           |
| Annonaceae  | <i>Annona spraguei</i> Saff.                               | w         | Pac         | Idárraga <i>et al.</i> , 2011 |           |
| Annonaceae  | <i>Duguetia cauliflora</i> R.E.Fr.                         | w         | Ama         | Cárdenas <i>et al.</i> , 2012 |           |
| Annonaceae  | <i>Duguetia odorata</i> (Diels) J.F.Macbr.                 | w         | Ama         | Cárdenas <i>et al.</i> , 2012 |           |
| Annonaceae  | <i>Duguetia quitarensis</i> Benth.                         | w         | Ama         | Cárdenas <i>et al.</i> , 2012 |           |
| Annonaceae  | <i>Duguetia spixiana</i> Mart.                             | w         | Ama         | Cárdenas <i>et al.</i> , 2012 |           |
| Annonaceae  | <i>Duguetia stenantha</i> R.E.Fr.                          | w         | Ama         | Patiño, 2002                  | COL554452 |
| Annonaceae  | <i>Fusaea longifolia</i> (Aubl.) Saff.                     | w         | Ama         | Cárdenas <i>et al.</i> , 2012 |           |
| Annonaceae  | <i>Guatteria schomburgkiana</i> Mart.                      | w         | Ama         | Cárdenas <i>et al.</i> , 2012 |           |
| Annonaceae  | <i>Oxandra xylopioides</i> Diels                           | w         | Pac         | Álvarez <i>et al.</i> , 2016  |           |
| Annonaceae  | <i>Rollinia cuspidata</i> Mart.                            | w         | Ama         | Patiño, 2002                  | COL204153 |
| Annonaceae  | <i>Rollinia edulis</i> Planch. & Triana                    | w         | Ama         | Romero-Castañeda, 1991        |           |
| Annonaceae  | <i>Rollinia exsucca</i> (DC.) A.DC.                        | w         | Ama         | Cárdenas <i>et al.</i> , 2012 |           |
| Annonaceae  | <i>Unonopsis guatterioides</i> (A.DC.)<br>R.E.Fr.          | w         | Ama         | Cárdenas & López, 2000        |           |
| Annonaceae  | <i>Unonopsis spectabilis</i> Diels                         | w         | Ama         | Cárdenas <i>et al.</i> , 2012 |           |
| Apocynaceae | <i>Ambelania occidentalis</i> Zarucchi                     | w         | Ama         | Cárdenas & López, 2000        |           |
| Apocynaceae | <i>Aspidosperma spruceanum</i> Benth.<br>ex Müll.Arg.      | w         | Ama         | Cárdenas & López, 2000        |           |
| Apocynaceae | <i>Couma catingae</i> Ducke                                | w         | Ama         | Cárdenas & López, 2000        | COL179966 |
| Apocynaceae | <i>Couma macrocarpa</i> Barb.Rodr.                         | w         | Ama         | Patiño, 2002                  |           |
| Apocynaceae | <i>Couma utilis</i> (Mart.) Müll.Arg                       | w         | Ama         | Romero-Castañeda, 1991        |           |
| Apocynaceae | <i>Lacmellea edulis</i> H.Karst.                           | w         | And, Ori    | Romero-Castañeda, 1991        | COL69699  |
| Apocynaceae | <i>Lacmellea floribunda</i> (Poepp.) Ben-<br>th. & Hook.f. | w         | Pac         | Romero-Castañeda, 1991        |           |
| Apocynaceae | <i>Lacmellea gracilis</i> (Müll.Arg.)<br>Markgr.           | w         | Ama         | López <i>et al.</i> , 2006    |           |
| Apocynaceae | <i>Lacmellea lactescens</i> (Kuhl.)<br>Markgr.             | w         | Ama         | Cárdenas & López, 2000        |           |
| Apocynaceae | <i>Lacmellea speciosa</i> Woodson                          | w         | Pac         | Romero-Castañeda, 1991        | COL294946 |
| Apocynaceae | <i>Macoubea guianensis</i> Aubl.                           | w/c       | Ama         | Acero, 1979                   | COL533301 |

| Family      | Species  | Mangement | Use regions   | Representative reference                   | Voucher   |
|-------------|--|-----------|---------------|--|-----------|
| Apocynaceae | <i>Macoubea sprucei</i> (Müll.Arg.) Markgr.                | w         | Ama           | Cárdenas <i>et al.</i> , 2012              |           |
| Apocynaceae | <i>Malouetia tamaquarina</i> (Aubl.) A.DC.                 | w         | Ama           | Cárdenas <i>et al.</i> , 2012              |           |
| Apocynaceae | <i>Molongum lucidum</i> (Kunth) Zarucchi                   | w         | Ama           | Cárdenas & López, 2000                     | COL362462 |
| Apocynaceae | <i>Mucoa duckei</i> (Markgr.) Zarucchi                     | w         | Ama           | Cárdenas & López, 2000                     | COL12591  |
| Apocynaceae | <i>Neocouma ternstroemiacea</i> (Müll. Arg.) Pierre        | w         | Ama           | Cárdenas & López, 2000                     |           |
| Apocynaceae | <i>Parahancornia fasciculata</i> (Poir.) Benoist           | w         | Ama           | Cárdenas <i>et al.</i> , 2012              |           |
| Apocynaceae | <i>Parahancornia krukovii</i> Monach.                      | w         | Ama           | Acero, 1979                                |           |
| Apocynaceae | <i>Parahancornia oblonga</i> (Benth. ex Müll.Arg.) Monach. | w         | Ama, Ori      | Acero, 2005                                | COL312350 |
| Apocynaceae | <i>Parahancornia peruviana</i> Monach.                     | w         | Ama           | Cárdenas & López, 2000                     | COL147101 |
| Apocynaceae | <i>Parahancornia surrogata</i> Zarucchi                    | w         | Ama           | Cárdenas & López, 2000                     | COL250976 |
| Apocynaceae | <i>Rhigospira quadrangularis</i> (Müll. Arg.) Miers        | w         | Ama           | Acero, 1979                                | COL309598 |
| Apocynaceae | <i>Tabernaemontana sananho</i> Ruiz & Pav.                 | w         | Ama, And, Pac |  | COL428465 |
| Apocynaceae | <i>Tabernaemontana siphilitica</i> (L.f.) Leeuwenb.        | w         | Pac           | Romero-Castañeda, 1991                     |           |
| Apocynaceae | <i>Thevetia ahouai</i> (L.) A.DC.                          | w         | Car, Pac      | Romero-Castañeda, 1991                     |           |
| Araceae     | <i>Spathiphyllum friedrichsthali</i> Schott                | w         | Pac           | Romero-Castañeda, 1991                     |           |
| Arecaceae   | <i>Acrocomia aculeata</i> (Jacq.) Lodd. ex Mart.           | w         | And, Car, Ori | Patiño, 2002                               | COL284144 |
| Arecaceae   | <i>Aiphanes horrida</i> (Jacq.) Burret                     | w/c       | And, Ori      | Idárraga <i>et al.</i> , 2011              | COL275852 |
| Arecaceae   | <i>Astrocaryum acaule</i> Mart.                            | w         | Ama           | Galeano & Bernal, 2010                     | COL30253  |
| Arecaceae   | <i>Astrocaryum aculeatum</i> G.Mey.                        | w/c       | Ama           | Mesa & Galeano, 2013                       | COL554642 |
| Arecaceae   | <i>Astrocaryum chambira</i> Burret                         | w/c       | Ama           | Mesa & Galeano, 2013                       | COL271235 |
| Arecaceae   | <i>Astrocaryum gynacanthum</i> Mart.                       | w         | Ama           | Cárdenas <i>et al.</i> , 2012              |           |
| Arecaceae   | * <i>Astrocaryum malybo</i> H.Karst.                       | w         | Car           | Estupiñan-González & Jiménez-Escobar, 2010 | COL524188 |
| Arecaceae   | <i>Astrocaryum standleyanum</i> L.H.Bailey                 | w         | Car, Pac      | Patiño, 2002                               | COL290977 |
| Arecaceae   | <i>Attalea butyracea</i> (Mutis ex L.f.) Wess.Boer         | w/c       | Ama           | Mesa & Galeano, 2013                       | COL284782 |

| Family    | Species  | Mangement | Use regions        | Representative reference                                       | Voucher   |
|-----------|--|-----------|--------------------|--|-----------|
| Arecaceae | <i>Attalea colenda</i> (O.F.Cook) Balslev & A.J.Hend | w         | Pac                | <a href="#">Patiño, 2002</a>                                   | COL521234 |
| Arecaceae | <i>Attalea insignis</i> (Mart.) Drude                | w         | Ama, Ori           | <a href="#">Mesa &amp; Galeano, 2013</a>                       | COL30968  |
| Arecaceae | <i>Attalea maripa</i> (Aubl.) Mart.                  | w/c       | Ama, Ori           | <a href="#">Mesa &amp; Galeano, 2013</a>                       | COL537375 |
| Arecaceae | <i>Attalea sagotii</i> (Trail ex Thurn) Wess.Boer    | w         | Ama                | <a href="#">Cárdenas et al., 2012</a>                          |           |
| Arecaceae | <i>Bactris balanophora</i> Spruce                    | w         | Ori                | <a href="#">Acero, 2005</a>                                    |           |
| Arecaceae | <i>Bactris bidentula</i> Spruce                      | w         | Ama, Ori           | <a href="#">Galeano &amp; Bernal, 2010</a>                     | COL325485 |
| Arecaceae | <i>Bactris brongniartii</i> Mart.                    | w         | Ama, Car, Mag, Ori | <a href="#">Galeano &amp; Bernal, 2010</a>                     | COL30271  |
| Arecaceae | <i>Bactris coloradonis</i> L.H.Bailey                | w         | Pac                | <a href="#">Galeano &amp; Bernal, 2010</a>                     | COL333451 |
| Arecaceae | <i>Bactris concinna</i> Mart.                        | w         | Ori                | <a href="#">Castro et al., 2013</a>                            |           |
| Arecaceae | <i>Bactris elegans</i> Barb.Rodr. & Trail            | w         | Ama                | <a href="#">Mesa &amp; Galeano, 2013</a>                       |           |
| Arecaceae | <i>Bactris fissifrons</i> Mart.                      | w         | Ama                | <a href="#">Mesa &amp; Galeano, 2013</a>                       |           |
| Arecaceae | <i>Bactris guineensis</i> (L.) H.E.Moore             | w         | Ama, Car, Ori      | <a href="#">Romero-Castañeda, 1991</a>                         | COL293182 |
| Arecaceae | <i>Bactris hirta</i> Mart.                           | w         | Ama                | <a href="#">Mesa &amp; Galeano, 2013</a>                       |           |
| Arecaceae | <i>Bactris hondurensis</i> Standl.                   | w         | Pac                | <a href="#">Ledezma-Rentería &amp; Galeano, 2014</a>           |           |
| Arecaceae | <i>Bactris macroacantha</i> Mart.                    | w         | Ama                | <a href="#">Galeano &amp; Bernal, 2010</a>                     | COL325520 |
| Arecaceae | <i>Bactris major</i> Jacq.                           | w         | Car, Ori, Pac      | <a href="#">Galeano &amp; Bernal, 2010</a>                     | COL532868 |
| Arecaceae | <i>Bactris manriquei</i> R.Bernal & Galeano          | w         | Pac                |  | COL554648 |
| Arecaceae | <i>Bactris maraja</i> Mart.                          | w         | Ama, Car, Ori      | <a href="#">Galeano &amp; Bernal, 2010</a>                     | COL418548 |
| Arecaceae | <i>Bactris martiana</i> A.J.Hend.                    | w         | Ama                | <a href="#">Mesa &amp; Galeano, 2013</a>                       | COL40737  |
| Arecaceae | <i>Bactris pilosa</i> H.Karst.                       | w         | And, Car, Ori      | <a href="#">Jiménez-Escobar &amp; Estupiñán-González, 2011</a> | COL280893 |
| Arecaceae | <i>Desmoncus giganteus</i> A.J.Hend.                 | w         | Ori                | <a href="#">Castro et al., 2013</a>                            |           |
| Arecaceae | <i>Desmoncus mitis</i> Mart.                         | w         | Ori                | <a href="#">Castro et al., 2013</a>                            |           |
| Arecaceae | <i>Desmoncus polyacanthos</i> Mart.                  | w         | Ori                | <a href="#">Castro et al., 2013</a>                            |           |
| Arecaceae | <i>Dictyocaryum lamarckianum</i> (Mart.) H.Wendl.    | w         | SNSM               | <a href="#">Romero-Castañeda, 1991</a>                         | COL83230  |
| Arecaceae | <i>Elaeis oleifera</i> (Kunth) Cortés                | w         | Car, Pac           | <a href="#">Patiño, 2002</a>                                   | COL333266 |
| Arecaceae | <i>Euterpe catinga</i> Wallace                       | w         | Ama, Ori           | <a href="#">Mesa &amp; Galeano, 2013</a>                       | COL519745 |



| Family        | Species  | Mangement | Use regions        | Representative reference         | Voucher   |
|---------------|--|-----------|--------------------|----------------------------------|-----------|
| Arecaceae     | <i>Euterpe oleracea</i> Mart.                                | w         | Ama, Pac           | Mesa & Galeano, 2013             | COL290536 |
| Arecaceae     | <i>Euterpe precatoria</i> Mart.                              | w         | Ama, Ori, Pac      | Mesa & Galeano, 2013             | COL149092 |
| Arecaceae     | <i>Leopoldinia piassaba</i> Wallace                          | w         | Ama, Ori           | Galeano & Bernal, 2010           | COL208889 |
| Arecaceae     | <i>Leopoldinia pulchra</i> Mart.                             | w         | Ama, Ori           | Mesa & Galeano, 2013             | COL478723 |
| Arecaceae     | <i>Manicaria martiana</i> Burret                             | w         | Ama                | Mesa & Galeano, 2013             |           |
| Arecaceae     | <i>Manicaria saccifera</i> Gaertn.                           | w         | Ama, Pac           | Mesa & Galeano, 2013             | COL30882  |
| Arecaceae     | <i>Mauritia carana</i> Wallace ex Archer                     | w         | Ama, Ori           | Galeano & Bernal, 2010           |           |
| Arecaceae     | <i>Mauritia flexuosa</i> L.f.                                | w         | Ama, Ori           | Mesa & Galeano, 2013             | COL2356   |
| Arecaceae     | <i>Mauritiella aculeata</i> (Kunth) Burret                   | w         | Ama, Ori           | Mesa & Galeano, 2013             |           |
| Arecaceae     | <i>Mauritiella armata</i> (Mart.) Burret                     | w         | Ama                | Galeano & Bernal, 2010           |           |
| Arecaceae     | <i>Mauritiella pumila</i> (Wallace) Burret                   | w         | Ori                | Castro <i>et al.</i> , 2013      |           |
| Arecaceae     | <i>Oenocarpus bacaba</i> Mart.                               | w         | Ama, Ori           | Mesa & Galeano, 2013             | COL508414 |
| Arecaceae     | <i>Oenocarpus balickii</i> F.Kahn                            | w         | Ama, Ori           | Mesa & Galeano, 2013             | COL554662 |
| Arecaceae     | <i>Oenocarpus bataua</i> Mart.                               | w         | Ama, Car, Ori, Pac | Mesa & Galeano, 2013             | COL537376 |
| Arecaceae     | * <i>Oenocarpus circumtextus</i> Mart.                       | w         | Ama                | Galeano & Bernal, 2010           | COL554670 |
| Arecaceae     | * <i>Oenocarpus makeru</i> R.Bernal, Galeano & A.J.Hend.     | w         | Ama                | Galeano & Bernal, 2010           |           |
| Arecaceae     | <i>Oenocarpus mapora</i> H.Karst.                            | w         | Ama, Pac           | Aceró, 2005                      | COL271253 |
| Arecaceae     | <i>Oenocarpus minor</i> Mart.                                | w         | Ama, Car, Ori, Pac | Galeano & Bernal, 2010           | COL522531 |
| Arecaceae     | <i>Sabal mauritiiformis</i> (H.Karst.) Griseb. & H.Wendl.    | w         | Car                | López <i>et al.</i> , 2016b      |           |
| Arecaceae     | <i>Socratea exorrhiza</i> (Mart.) H.Wendl.                   | w         | Ama, And           | Mesa & Galeano, 2013             | COL288163 |
| Arecaceae     | <i>Syagrus sancona</i> (Kunth) H.Karst.                      | w         | Ori                | Castro <i>et al.</i> , 2013      |           |
| Arecaceae     | <i>Wettinia fascicularis</i> (Burret) H.E. Moore & J.Dransf. | w         | And                | Galeano & Bernal, 2010           | COL411668 |
| Arecaceae     | <i>Wettinia quinaria</i> (O.F.Cook & Doyly) Burret           | w         | Pac                | Ledezma-Rentería & Galeano, 2014 |           |
| Berberidaceae | * <i>Berberis rigidifolia</i> Kunth                          | w         | And                | s.r.                             |           |
| Bignoniaceae  | * <i>Parmentiera stenocarpa</i> Dugand & L.B.Sm.             | w         | Pac                | Romero-Castañeda, 1991           | COL139639 |
| Boraginaceae  | <i>Cordia alba</i> (Jacq.) Roem. & Schult.                   | w         | Car                | Romero-Castañeda, 1991           |           |

| Family       | Species   | Mangement | Use regions   | Representative reference             | Voucher   |
|--------------|---|-----------|---------------|--------------------------------------|-----------|
| Boraginaceae | <i>Cordia bifurcata</i> Roem. & Schult.                     | w         | Pac           | Álvarez <i>et al.</i> , 2016         |           |
| Boraginaceae | <i>Cordia nodosa</i> Lam.                                   | w         | Ama, Car, Ori | Jiménez-Escobar <i>et al.</i> , 2011 | COL44412  |
| Boraginaceae | <i>Tournefortia hirsutissima</i> L.                         | w         |               | Romero-Castañeda, 1991               |           |
| Bromeliaceae | <i>Aechmea corymbosa</i> (Mart. ex Schult. & Schult.f.) Mez | w         | Ama           | Cárdenas & López, 2000               |           |
| Bromeliaceae | <i>Aechmea hoppii</i> (Harms) L.B.Sm.                       | w         | Ama           | Romero-Castañeda, 1991               | COL104702 |
| Bromeliaceae | <i>Aechmea magdalenae</i> (André) André ex Baker            | w         | Pac           | Romero-Castañeda, 1991               |           |
| Bromeliaceae | <i>Aechmea rubiginosa</i> Mez                               | w         | Ama, Ori      | Cárdenas & López, 2000               | COL313688 |
| Bromeliaceae | <i>Ananas bracteatus</i> (Lindl.) Schult. & Schult.f.       | w         | Ama           | Cárdenas <i>et al.</i> , 2012        |           |
| Bromeliaceae | <i>Bromelia chrysantha</i> Jacq.                            | w         | Car, Pac      | Romero-Castañeda, 1991               | COL523535 |
| Bromeliaceae | <i>Bromelia karatas</i> L.                                  | w         | And           | Romero-Castañeda, 1991               | COL165102 |
| Bromeliaceae | <i>Bromelia pinguin</i> L.                                  | w         | Car           | Romero-Castañeda, 1991               | COL112042 |
| Bromeliaceae | * <i>Bromelia trianae</i> Mez                               | w         | Mag           | Romero-Castañeda, 1991               |           |
| Burseraceae  | <i>Dacryodes chimantensis</i> Steyererm. & Maguire          | w/c       | Ama, Ori      | López <i>et al.</i> , 2006           | COL570738 |
| Burseraceae  | <i>Dacryodes granatensis</i> Cuatrec.                       | w         | Ama           | Cárdenas <i>et al.</i> , 2012        |           |
| Burseraceae  | <i>Dacryodes negrensis</i> Daly & M.C.Martínez              | w         | Ama           | Cárdenas <i>et al.</i> , 2012        |           |
| Burseraceae  | <i>Dacryodes nitens</i> Cuatrec.                            | w         | Ama           | Cárdenas & López, 2000               |           |
| Burseraceae  | <i>Dacryodes peruviana</i> (Loes.) H.J.Lam                  | w         | Ama           | Cárdenas & López, 2000               | COL551978 |
| Burseraceae  | <i>Dacryodes roraimensis</i> Cuatrec.                       | w         | Ama           | Cárdenas & López, 2000               | COL307122 |
| Burseraceae  | <i>Protium altsonii</i> Sandwith                            | w         | Car           | Botero-Restrepo, 2005                |           |
| Burseraceae  | <i>Protium crassipetalum</i> Cuatrec.                       | w         | Ama           | Cárdenas <i>et al.</i> , 2012        |           |
| Burseraceae  | <i>Protium decandrum</i> (Aubl.) Marchand                   | w         | Ama           | Cárdenas & López, 2000               |           |
| Burseraceae  | <i>Protium nodulosum</i> Swart                              | w         | Ama           | Cárdenas & Ramírez, 2004             |           |
| Burseraceae  | <i>Protium sagotianum</i> Marchand                          | w         | Ama           | Cárdenas <i>et al.</i> , 2012        |           |
| Burseraceae  | <i>Tetragastris panamensis</i> (Engl.) Kuntze               | w         | Ori           | Acero, 1979                          | COL556123 |
| Burseraceae  | <i>Trattinnickia burserifolia</i> Mart.                     | w         | Ama           | Cárdenas <i>et al.</i> , 2012        |           |
| Burseraceae  | <i>Trattinnickia glaziovii</i> Swart                        | w         | Ama           | Cárdenas <i>et al.</i> , 2012        |           |

| Family            | Species  | Mangement | Use regions | Representative reference      | Voucher   |
|-------------------|--|-----------|-------------|-------------------------------|-----------|
| Cactaceae         | <i>Acanthocereus tetragonus</i> (L.) Hummelinck        | w/c       | Car         | Romero-Castañeda, 1991        |           |
| Cactaceae         | <i>Cereus hexagonus</i> (L.) Mill.                     | w         | And         | Romero-Castañeda, 1991        |           |
| Cactaceae         | <i>Cereus repandus</i> (L.) Mill.                      | w         | Car         | Romero-Castañeda, 1991        | COL92664  |
| Cactaceae         | <i>Epiphyllum phyllanthus</i> (L.) Haw.                | w         |             | Romero-Castañeda, 1991        |           |
| Cactaceae         | <i>Hylocereus lemairei</i> (Hook.) Britton & Rose      | w         |             | Romero-Castañeda, 1991        |           |
| Cactaceae         | <i>Hylocereus undatus</i> (Haw.) Britton & Rose        | w/c       | And         | Figuerola-C & Galeano, 2007   |           |
| Cactaceae         | <i>Melocactus curvispinus</i> Pfeiff.                  | w         | And, Car    | Figuerola-C & Galeano, 2007   |           |
| Cactaceae         | <i>Opuntia caracasana</i> Salm-Dyck                    | w         | Car         | Romero-Castañeda, 1991        |           |
| Cactaceae         | <i>Opuntia elatior</i> Mill.                           | w         | And         | Patiño, 2002                  |           |
| Cactaceae         | <i>Pereskia aculeata</i> Mill.                         | w         |             | Romero-Castañeda, 1991        |           |
| Cactaceae         | <i>Pereskia bleo</i> (Kunth) DC.                       | w/c       | Car         | Romero-Castañeda, 1991        | COL113326 |
| Cactaceae         | <i>Pereskia guamacho</i> F.A.C.Weber                   | w         | Car         | Romero-Castañeda, 1991        | COL14413  |
| Cactaceae         | <i>Selenicereus grandiflorus</i> (L.) Britton & Rose   | w         | Car         | López <i>et al.</i> , 2016b   |           |
| Cactaceae         | <i>Stenocereus griseus</i> (Haw.) Buxb.                | w         | And, Car    | Romero-Castañeda, 1991        |           |
| Cactaceae         | * <i>Stenocereus humilis</i> (Britton & Rose) D.R.Hunt | w         | And         |                               | COL545602 |
| Campanulaceae     | * <i>Centropogon lehmannii</i> Zahlbr.                 | w         | And         | Romero-Castañeda, 1991        | COL22740  |
| Cannabaceae       | <i>Celtis iguanaea</i> (Jacq.) Sarg.                   | w         | Car         | Romero-Castañeda, 1991        | COL114463 |
| Cannabaceae       | <i>Trema micrantha</i> (L.) Blume                      | w         | And, Car    | Cruz <i>et al.</i> , 2009     | COL570947 |
| Capparaceae       | <i>Crateva tapia</i> L.                                | w         | Car, Pac    | Romero-Castañeda, 1991        |           |
| Capparaceae       | <i>Morisonia americana</i> L.                          | w         |             | Romero-Castañeda, 1991        |           |
| Cardiopteridaceae | <i>Dendrobangia boliviana</i> Rusby                    | w         | Ama         | Cárdenas <i>et al.</i> , 2012 |           |
| Caricaceae        | * <i>Carica goudotiana</i> (Triana & Planch.) Solms    | w         | And, Pac    | Romero-Castañeda, 1991        | COL99985  |
| Caricaceae        | <i>Jacaratia digitata</i> (Poepp. & Endl.) Solms       | w         |             | Patiño, 2002                  |           |
| Caricaceae        | <i>Vasconcellea cauliflora</i> (Jacq.) A.DC.           | w         | And         | Idárraga <i>et al.</i> , 2011 |           |
| Caryocaraceae     | <i>Caryocar amygdaliferum</i> Mutis ex Cav.            | w         | Ama         | Cárdenas <i>et al.</i> , 2012 |           |
| Caryocaraceae     | <i>Caryocar villosum</i> (Aubl.) Pers.                 | w         | Ama         | Cárdenas <i>et al.</i> , 2012 |           |

| Family           | Species   | Mangement | Use regions        | Representative reference      | Voucher   |
|------------------|---|-----------|--------------------|-------------------------------|-----------|
| Celastraceae     | <i>Cheiloclinium anomalum</i> Miers                     | w         | Ama                | Cárdenas <i>et al.</i> , 2012 |           |
| Celastraceae     | <i>Peritassa laevigata</i> (Hoffmanns. ex Link) A.C.Sm. | w         |                    | Romero-Castañeda, 1991        |           |
| Celastraceae     | <i>Salacia gigantea</i> Loes.                           | w         | Ama                | Cárdenas <i>et al.</i> , 2012 |           |
| Celastraceae     | <i>Salacia impressifolia</i> (Miers) A.C.Sm.            | w         | Ama                | Cárdenas <i>et al.</i> , 2012 |           |
| Chrysobalanaceae | <i>Chrysobalanus icaco</i> L.                           | w/c       | Ama, Car, Mag, Pac | Romero-Castañeda, 1991        | COL474075 |
| Chrysobalanaceae | <i>Chrysochlamys weberbaueri</i> Engl.                  | w         | Ama                | Cárdenas & López, 2000        | COL305555 |
| Chrysobalanaceae | <i>Couepia chrysocalyx</i> (Poepp.) Benth. ex Hook.f.   | w/c       | Ama                | Cárdenas & López, 2000        | COL214734 |
| Chrysobalanaceae | <i>Couepia dolichopoda</i> Prance                       | w         | Ama                | Cárdenas & López, 2000        |           |
| Chrysobalanaceae | <i>Couepia krukovii</i> Standl.                         | w/c       | Ama                |                               | COAH16771 |
| Chrysobalanaceae | <i>Couepia obovata</i> Ducke                            | w         | Ama                |                               | COAH3787  |
| Chrysobalanaceae | <i>Couepia subcordata</i> Benth. ex Hook.f.             | w/c       | Ama                | Acero, 1979                   | COL290993 |
| Chrysobalanaceae | <i>Couepia ulei</i> Pilg.                               | w         | Ama                | Cárdenas & López, 2000        |           |
| Chrysobalanaceae | <i>Hirtella americana</i> L.                            | w         | Car                | Cruz <i>et al.</i> , 2009     | COL530713 |
| Chrysobalanaceae | <i>Hirtella carbonaria</i> Little                       | w         | Pac                | Toro, 2012                    | COL104119 |
| Chrysobalanaceae | <i>Hirtella racemosa</i> Lam.                           | w         |                    | Romero-Castañeda, 1991        |           |
| Chrysobalanaceae | <i>Hirtella triandra</i> Sw.                            | w         | Car, SNSM          | Romero-Castañeda, 1991        | COL264540 |
| Chrysobalanaceae | <i>Licania macrocarpa</i> Cuatrec.                      | w/c       | Pac                | Acero, 1979                   | COL492126 |
| Chrysobalanaceae | <i>Licania platypus</i> (Hemsl.) Fritsch                | w         | Ama                | Romero-Castañeda, 1991        | COL271151 |
| Chrysobalanaceae | <i>Licania pyriformis</i> Griseb.                       | w/c       | And, Ori           | Romero-Castañeda, 1991        | COL114202 |
| Chrysobalanaceae | <i>Licania triandra</i> Mart. ex Hook.f.                | w         | Ama                | Cárdenas & López, 2000        |           |
| Chrysobalanaceae | <i>Parinari klugii</i> Prance                           | w         | Ama                | Cárdenas & López, 2000        |           |
| Chrysobalanaceae | <i>Parinari montana</i> Aubl.                           | w         | Ama                | Cárdenas & López, 2000        |           |
| Chrysobalanaceae | <i>Parinari pachyphylla</i> Rusby                       | w         | Car, Ori           | Romero-Castañeda, 1991        | COL206552 |
| Chrysobalanaceae | <i>Parinari parilis</i> J.F.Macbr.                      | w         | Ama                | Cárdenas & López, 2000        |           |
| Clusiaceae       | <i>Clusia lineata</i> (Benth.) Planch. & Triana         | w         | Ama                | Cárdenas <i>et al.</i> , 2012 |           |
| Clusiaceae       | <i>Garcinia benthamiana</i> (Planch. & Triana) Pipoly   | w         | Car                | López <i>et al.</i> , 2016b   |           |
| Clusiaceae       | <i>Garcinia brasiliensis</i> Mart.                      | w         | Ama                | Cárdenas & López, 2000        |           |
| Clusiaceae       | <i>Garcinia elliptica</i> Wall. ex Wight                | w         | Ama                | Cárdenas <i>et al.</i> , 2012 |           |

| Family         | Species   | Mangement | Use regions             | Representative reference           | Voucher   |
|----------------|---|-----------|-------------------------|------------------------------------|-----------|
| Clusiaceae     | <i>Garcinia intermedia</i> (Pittier) Hammel                     | w         | And, Car, Pac           | Patiño, 2002                       | COL350023 |
| Clusiaceae     | <i>Garcinia macrophylla</i> Mart.                               | w         | Ama, Ori                | Idárraga <i>et al.</i> , 2011      | COL590595 |
| Clusiaceae     | <i>Garcinia madruno</i> (Kunth) Hammel                          | w/c       | Ama, And, Car, Ori, Pac | Romero-Castañeda, 1991             | COL520400 |
| Clusiaceae     | <i>Garcinia magnifolia</i> (Pittier) Hammel                     | w         | Pac                     | Idárraga <i>et al.</i> , 2011      | COL224240 |
| Clusiaceae     | <i>Garcinia spruceana</i> Engl.                                 | w         | Ama                     | Cárdenas <i>et al.</i> , 2012      |           |
| Clusiaceae     | <i>Lorostemon bombaciflorus</i> Ducke                           | w         | Ama                     | Cárdenas <i>et al.</i> , 2012      |           |
| Clusiaceae     | <i>Lorostemon colombianus</i> Maguire                           | w         | Ama                     | Cárdenas <i>et al.</i> , 2012      |           |
| Clusiaceae     | <i>Platonia insignis</i> Mart.                                  | w/c       | Ama, Ori                | Patiño, 2002                       |           |
| Clusiaceae     | <i>Symphonia globulifera</i> L.f.                               | w         | Pac                     | Acero, 1979                        | COL66130  |
| Combretaceae   | <i>Buchenavia macrophylla</i> Eichler                           | w         | Ama                     | Cárdenas <i>et al.</i> , 2012      |           |
| Convolvulaceae | <i>Maripa panamensis</i> Hemsl.                                 | w         | Pac                     | Romero-Castañeda, 1991             |           |
| Cucurbitaceae  | <i>Melothria trilobata</i> Cogn.                                | w         | Pac                     | Romero-Castañeda, 1991             | COL544764 |
| Cucurbitaceae  | <i>Psiguria triphylla</i> (Miq.) C.Jeffrey                      | w         | Ama                     | Cárdenas <i>et al.</i> , 2012      |           |
| Cucurbitaceae  | <i>Rytidostylis carthagenensis</i> (Jacq.) Kuntze               | w         |                         | s.r.                               |           |
| Dilleniaceae   | <i>Curatella americana</i> L.                                   | w         | Ama                     | Cárdenas <i>et al.</i> , 2012      |           |
| Ebenaceae      | <i>Diospyros nigra</i> (J.F.Gmel.) Perrier                      | w         |                         | Patiño, 2002                       |           |
| Ericaceae      | * <i>Cavendishia adenophora</i> Mansf.                          | w         | And                     | Idárraga <i>et al.</i> , 2011      |           |
| Ericaceae      | <i>Cavendishia bracteata</i> (Ruiz & Pav. ex J.St.Hil.) Hoerold | w         | And                     | Romero-Castañeda, 1991             |           |
| Ericaceae      | * <i>Cavendishia guatapeensis</i> Mansf.                        | w         | And                     | Toro, 2012                         |           |
| Ericaceae      | * <i>Cavendishia nitida</i> (Kunth) A.C.Sm.                     | w         | And                     | Idárraga <i>et al.</i> , 2011      | COL44859  |
| Ericaceae      | <i>Cavendishia pubescens</i> (Kunth) Hemsl.                     | w         | And                     | Patiño, 2002                       | COL66957  |
| Ericaceae      | <i>Disterigma acuminatum</i> (Kunth) Nied.                      | w         | And                     | Lagos-Burbano <i>et al.</i> , 2010 |           |
| Ericaceae      | <i>Disterigma alaternoides</i> (Kunth) Nied.                    | w         | And                     | Idárraga <i>et al.</i> , 2011      | COL137256 |
| Ericaceae      | <i>Disterigma dumontii</i> Luteyn                               | w         | And                     | Salinas & Betancur, 2005           |           |
| Ericaceae      | <i>Disterigma empetrifolium</i> (Kunth) Nied.                   | w         | And                     | Idárraga <i>et al.</i> , 2011      |           |
| Ericaceae      | <i>Gaultheria erecta</i> Vent.                                  | w         | And                     | Idárraga <i>et al.</i> , 2011      | COL582247 |

| Family    | Species  | Mangement | Use regions        | Representative reference           | Voucher   |
|-----------|--|-----------|--------------------|------------------------------------|-----------|
| Ericaceae | <i>Gaultheria foliolosa</i> Benth.                         | w         | And                | Lagos-Burbano <i>et al.</i> , 2010 |           |
| Ericaceae | <i>Gaultheria insipida</i> Benth.                          | w         | And                | Lagos-Burbano <i>et al.</i> , 2010 |           |
| Ericaceae | <i>Gaylussacia buxifolia</i> Kunth                         | w         | And                | Romero-Castañeda, 1991             |           |
| Ericaceae | <i>Macleania hirtiflora</i> (Benth.) A.C.Sm.               | w         | And                |                                    | COL511407 |
| Ericaceae | <i>Macleania rupestris</i> (Kunth) A.C.Sm.                 | w         | And                | Romero-Castañeda, 1991             | COL570549 |
| Ericaceae | * <i>Plutarchia guascensis</i> (Cuatrec.) A.C. Sm.         | w         | And                | Romero-Castañeda, 1991             |           |
| Ericaceae | * <i>Plutarchia monantha</i> A.C. Sm.                      | w         | And                |                                    | COL63061  |
| Ericaceae | <i>Satyria breviflora</i> Hoerold                          | w         | And                | Toro, 2012                         |           |
| Ericaceae | <i>Thibaudia floribunda</i> Kunth                          | w         | And                | Romero-Castañeda, 1991             | COL63259  |
| Ericaceae | * <i>Thibaudia grantii</i> A.C. Sm.                        | w         | And                | Romero-Castañeda, 1991             |           |
| Ericaceae | <i>Vaccinium corymbodendron</i> Dunal                      | w         | And                | Idárraga <i>et al.</i> , 2011      |           |
| Ericaceae | <i>Vaccinium floribundum</i> Kunth                         | w         | And                | Romero-Castañeda, 1991             | COL531479 |
| Ericaceae | <i>Vaccinium meridionale</i> Sw.                           | w/c       | And                | Romero-Castañeda, 1991             |           |
| Fabaceae  | <i>Abarema auriculata</i> (Benth.) Barneby & J.W.Grimes    | w         | Ama                | Cárdenas & López, 2000             |           |
| Fabaceae  | <i>Abarema leucophylla</i> (Benth.) Barneby & J.W.Grimes   | w         | Ama                | Cárdenas <i>et al.</i> , 2012      |           |
| Fabaceae  | <i>Cassia grandis</i> L.f.                                 | w         | Car, Ori           | Patiño, 2002                       |           |
| Fabaceae  | <i>Cassia leiandra</i> Benth.                              | w         |                    | s.r.                               |           |
| Fabaceae  | <i>Cynometra marginata</i> Benth.                          | w         | Ama                | Cárdenas & López, 2000             |           |
| Fabaceae  | <i>Dialium guianense</i> (Aubl.) Sandwith                  | w         | Ama, Car, Ori, Pac | Romero-Castañeda, 1991             | COL530700 |
| Fabaceae  | <i>Dipteryx punctata</i> (S.F.Blake) Amshoff               | w         | Ama                | Cárdenas <i>et al.</i> , 2012      |           |
| Fabaceae  | <i>Enterolobium cyclocarpum</i> (Jacq.) Griseb.            | w         | Ama                | Cárdenas <i>et al.</i> , 2012      |           |
| Fabaceae  | <i>Enterolobium schomburgkii</i> (Benth.) Benth.           | w         | Ama                | Cárdenas <i>et al.</i> , 2012      |           |
| Fabaceae  | <i>Hydrochorea marginata</i> (Benth.) Barneby & J.W.Grimes | w         | Ama                | Cárdenas <i>et al.</i> , 2012      |           |
| Fabaceae  | <i>Hymenaea courbaril</i> L.                               | w/c       | Ama, Car, Ori, Pac | Romero-Castañeda, 1991             | COL266343 |
| Fabaceae  | <i>Hymenaea intermedia</i> Ducke                           | w         | Ama                |                                    | COL435332 |
| Fabaceae  | <i>Hymenaea oblongifolia</i> Huber                         | w         | Ama                | Cárdenas & Ramírez, 2004           | COL299255 |

| Family   | Species                                 | Mangement | Use regions        | Representative reference                   | Voucher   |
|----------|---|-----------|--------------------|--|-----------|
| Fabaceae | <i>Hymenaea parvifolia</i> Huber        | w         | Ama                | Cárdenas & López, 2000                     | COL271222 |
| Fabaceae | <i>Inga acreana</i> Harms               | w         | Ama                |  | COL14882  |
| Fabaceae | <i>Inga acrocephala</i> Steud.          | w         | Ama                | Acero, 1979                                |           |
| Fabaceae | <i>Inga alba</i> (Sw.) Willd.           | w         | Ama                | Cárdenas & Ramírez, 2004                   | COL311685 |
| Fabaceae | <i>Inga brachystachya</i> Ducke         | w         | Ama                | Cárdenas & López, 2000                     |           |
| Fabaceae | <i>Inga capitata</i> Desv.              | w/c       | Ori                | La Rotta, 1989                             | COL393444 |
| Fabaceae | <i>Inga chocoensis</i> T.S.Elias        | w         | Pac                | Caballero, 1995                            |           |
| Fabaceae | <i>Inga ciliata</i> C.Presl             | w         | Ama                |  | COAH9396  |
| Fabaceae | <i>Inga cinnamomea</i> Benth.           | w         | Ama                |  | COL89600  |
| Fabaceae | <i>Inga cocleensis</i> Pittier          | w         | And                | Ariza <i>et al.</i> , 2010                 | COL390299 |
| Fabaceae | <i>Inga coerulescens</i> Walp.          | w         | Ama                | Cárdenas <i>et al.</i> , 2012              |           |
| Fabaceae | <i>Inga coruscans</i> Willd.            | w/c       | And                |  | COL88036  |
| Fabaceae | <i>Inga densiflora</i> Benth.           | w/c       | And                |  | COL67777  |
| Fabaceae | <i>Inga disticha</i> Benth.             | w         | Ama                | Cárdenas <i>et al.</i> , 2012              |           |
| Fabaceae | <i>Inga edulis</i> Mart.                | w/c       | Ama, Car, Ori, Pac | Romero-Castañeda, 1991                     | COL540665 |
| Fabaceae | <i>Inga fastuosa</i> (Jacq.) Willd.     | w         | Ama                | Cárdenas <i>et al.</i> , 2012              |           |
| Fabaceae | <i>Inga goldmanii</i> Pittier           | w         | Pac                | Álvarez <i>et al.</i> , 2016               |           |
| Fabaceae | <i>Inga heterophylla</i> Willd.         | w         |                    | s.r.                                       |           |
| Fabaceae | <i>Inga ingoides</i> (Rich.) Willd.     | w/c       |                    | Romero-Castañeda, 1991                     |           |
| Fabaceae | <i>Inga lateriflora</i> Miq.            | w         | Ama                | Cárdenas <i>et al.</i> , 2012              |           |
| Fabaceae | <i>Inga laurina</i> (Sw.) Willd.        | w         | Pac                |  | COL383381 |
| Fabaceae | <i>Inga leiocalycina</i> Benth.         | w         | Ama                |  | COAH34651 |
| Fabaceae | <i>Inga macrophylla</i> Willd.          | w/c       | Ama, Ori           | Cárdenas & López, 2000                     | COL306354 |
| Fabaceae | <i>Inga marginata</i> Willd.            | w         | Ori                |  | COAH55721 |
| Fabaceae | <i>Inga melinonis</i> Sagot             | w         | Ama                | Cárdenas <i>et al.</i> , 2012              |           |
| Fabaceae | <i>Inga multijuga</i> Benth.            | w/c       | Ama                | Cárdenas & López, 2000                     |           |
| Fabaceae | <i>Inga nobilis</i> Willd.              | w         | Ama, And, Pac      | Caballero, 1995                            | COL115376 |
| Fabaceae | <i>Inga oerstediana</i> Benth.          | w/c       | And, Car           | Jiménez-Escobar & Estupiñán-González, 2011 | COL126613 |
| Fabaceae | <i>Inga pezizifera</i> Benth.           | w         | And                | Idárraga <i>et al.</i> , 2011              | COL300988 |
| Fabaceae | <i>Inga pilosula</i> (Rich.) J.F.Macbr. | w/c       | Ama                | Cárdenas & Ramírez, 2004                   | COL169982 |

| Family       | Species  | Mangement | Use regions      | Representative reference                                       | Voucher   |
|--------------|--|-----------|------------------|--|-----------|
| Fabaceae     | <i>Inga plumifera</i> Benth.                         | w         | Ama              |  | COAH40635 |
| Fabaceae     | <i>Inga pruriens</i> Poepp.                          | w         | Ama              | <a href="#">Cárdenas &amp; López, 2000</a>                     |           |
| Fabaceae     | <i>Inga punctata</i> Willd.                          | w         | Ama,<br>And      |  | COL513015 |
| Fabaceae     | <i>Inga sapindoides</i> Willd.                       | w         | Ama              |  | COAH40005 |
| Fabaceae     | <i>Inga semialata</i> (Vell.) C.Mart.                | w         | Ama,<br>And      | <a href="#">Ariza et al., 2010</a>                             | COL243125 |
| Fabaceae     | <i>Inga sertulifera</i> DC.                          | w         | Ama              |  | COAH29295 |
| Fabaceae     | <i>Inga spectabilis</i> (Vahl) Willd.                | w/c       | And, Car,<br>Pac | <a href="#">Cárdenas &amp; Ramírez, 2004</a>                   | COL88049  |
| Fabaceae     | <i>Inga splendens</i> Willd.                         | w         | Ama              |  | COAH61533 |
| Fabaceae     | <i>Inga stenoptera</i> Benth.                        | w         | Ori              | <a href="#">Cárdenas &amp; Ramírez, 2004</a>                   | COL214195 |
| Fabaceae     | <i>Inga tessmannii</i> Harms                         | w         | Ama              | <a href="#">Cárdenas et al., 2012</a>                          |           |
| Fabaceae     | <i>Inga thibaudiana</i> DC.                          | w         | Ama              | <a href="#">Cárdenas &amp; Ramírez, 2004</a>                   |           |
| Fabaceae     | <i>Inga venusta</i> Standl.                          | w         | Ama              | <a href="#">Cárdenas et al., 2012</a>                          |           |
| Fabaceae     | <i>Inga vera</i> Willd.                              | w/c       | And, Car,<br>Pac | <a href="#">Idárraga et al., 2011</a>                          | COL571523 |
| Fabaceae     | <i>Parkia igneiflora</i> Ducke                       | w         | Ama              | <a href="#">Cárdenas et al., 2012</a>                          |           |
| Fabaceae     | <i>Parkia multijuga</i> Benth.                       | w         | Ama              | <a href="#">Cárdenas &amp; Ramírez, 2004</a>                   |           |
| Fabaceae     | <i>Parkia nitida</i> Miq.                            | w         | Ama              | <a href="#">Cárdenas &amp; López, 2000</a>                     |           |
| Fabaceae     | <i>Pithecellobium dulce</i> (Roxb.) Benth.           | w/c       |                  | s.r.   |           |
| Fabaceae     | <i>Pithecellobium hymenaeafolium</i> (Willd.) Benth. | w         | Car              | <a href="#">Romero-Castañeda, 1991</a>                         |           |
| Fabaceae     | <i>Pithecellobium lanceolatum</i> (Willd.) Benth.    | w         | And, Car         | <a href="#">Romero-Castañeda, 1991</a>                         | COL356390 |
| Fabaceae     | <i>Senna obtusifolia</i> (L.) H.S.Irwin & Barneby    | w         | Car              | <a href="#">Cruz et al., 2009</a>                              | COL530902 |
| Fabaceae     | <i>Swartzia racemosa</i> Benth.                      | w         | Ama              | <a href="#">Cárdenas et al., 2012</a>                          |           |
| Fabaceae     | <i>Uribea tamarindoides</i> Dugand & Romero          | w         | Car              | <a href="#">Romero-Castañeda, 1991</a>                         | COL80310  |
| Fabaceae     | <i>Zygia longifolia</i> (Willd.) Britton & Rose      | w         | Ama              |  | COAH7956  |
| Humiriaceae  | <i>Humiria balsamifera</i> Aubl.                     | w         | Ama              | <a href="#">Cárdenas et al., 2012</a>                          |           |
| Hypericaceae | <i>Vismia baccifera</i> (L.) Planch. & Triana        | w         | Car              | <a href="#">Jiménez-Escobar &amp; Estupiñán-González, 2011</a> |           |
| Icacinaeae   | <i>Poraqueiba sericea</i> Tul.                       | w/c       | Ama              | <a href="#">Romero-Castañeda, 1991</a>                         | COL59625  |



| Family        | Species   | Mangement | Use regions        | Representative reference      | Voucher   |
|---------------|---|-----------|--------------------|-------------------------------|-----------|
| Lamiaceae     | <i>Callicarpa acuminata</i> Kunth                         | w         | Pac                | Álvarez <i>et al.</i> , 2016  |           |
| Lamiaceae     | <i>Vitex capitata</i> Vahl                                | w         |                    | Romero-Castañeda, 1991        |           |
| Lamiaceae     | <i>Vitex compressa</i> Turcz.                             | w         | Car                | López <i>et al.</i> , 2016b   |           |
| Lamiaceae     | <i>Vitex cymosa</i> Bertero ex Spreng.                    | w/c       | Car                | Romero-Castañeda, 1991        | COL571371 |
| Lamiaceae     | <i>Vitex flavens</i> Kunth                                | w         | Car                | López <i>et al.</i> , 2016b   |           |
| Lamiaceae     | <i>Vitex gigantea</i> Kunth                               | w         | Mag                | Patiño, 2002                  |           |
| Lamiaceae     | <i>Vitex orinocensis</i> Kunth                            | w         |                    | Romero-Castañeda, 1991        |           |
| Lamiaceae     | <i>Vitex triflora</i> Vahl                                | w         | Ama                | Cárdenas <i>et al.</i> , 2012 |           |
| Lauraceae     | <i>Anaueria brasiliensis</i> Kosterm.                     | w         | Ama                | Cárdenas <i>et al.</i> , 2012 |           |
| Lauraceae     | <i>Beilschmiedia brasiliensis</i> (Kosterm.) Kosterm.     | w         | Ama                | Cárdenas & Ramírez, 2004      | COL312343 |
| Lauraceae     | <i>Nectandra cuspidata</i> Nees & Mart.                   | w         | Ama                | Cárdenas <i>et al.</i> , 2012 |           |
| Lauraceae     | <i>Ocotea floribunda</i> (Sw.) Mez                        | w         | Ama                | Cárdenas <i>et al.</i> , 2012 |           |
| Lauraceae     | <i>Ocotea javitensis</i> (Kunth) Pittier                  | w         | Ama                | Cárdenas <i>et al.</i> , 2012 |           |
| Lauraceae     | <i>Ocotea oblonga</i> (Meisn.) Mez                        | w         | Ama                | Acero, 1979                   |           |
| Lauraceae     | <i>Persea cuneata</i> Meisn.                              | w         | Ama                | Cárdenas <i>et al.</i> , 2012 |           |
| Lecythidaceae | <i>Couroupita guianensis</i> Aubl.                        | w         | Ama                | UNOPS, 1995                   |           |
| Lecythidaceae | <i>Eschweilera itayensis</i> R.Knuth                      | w         | Ama                | Cárdenas <i>et al.</i> , 2012 |           |
| Lecythidaceae | <i>Eschweilera parvifolia</i> Mart. ex DC.                | w         | Ama                | Cárdenas <i>et al.</i> , 2012 |           |
| Lecythidaceae | <i>Grias cauliflora</i> L.                                | w         | Pac                | Álvarez <i>et al.</i> , 2016  |           |
| Lecythidaceae | * <i>Grias haughtii</i> R.Knuth                           | w         | Mag                | Romero-Castañeda, 1991        | COL48645  |
| Lecythidaceae | <i>Grias neuberthii</i> J.F.Macbr.                        | w         | Ama                | Cárdenas & López, 2000        |           |
| Lecythidaceae | <i>Gustavia angustifolia</i> Benth.                       | w         | Pac                | Patiño, 2002                  |           |
| Lecythidaceae | <i>Gustavia hexapetala</i> (Aubl.) Sm.                    | w         | Ama                | Cárdenas <i>et al.</i> , 2012 |           |
| Lecythidaceae | <i>Gustavia nana</i> Pittier                              | w         | Pac                | Romero-Castañeda, 1991        | COL82151  |
| Lecythidaceae | <i>Gustavia poeppigiana</i> O.Berg                        | w         | Ama                | Cárdenas <i>et al.</i> , 2012 |           |
| Lecythidaceae | <i>Gustavia speciosa</i> (Kunth) DC.                      | w         |                    | Romero-Castañeda, 1991        |           |
| Lecythidaceae | <i>Gustavia superba</i> (Kunth) O.Berg                    | w         | Car, Pac           | Romero-Castañeda, 1991        | COL416360 |
| Loganiaceae   | <i>Strychnos bredemeyeri</i> (Schult.) Sprague & Sandwith | w         | Pac                | Álvarez <i>et al.</i> , 2016  |           |
| Malpighiaceae | <i>Bunchosia argentea</i> (Jacq.) DC.                     | w         | And, Pac           | Álvarez <i>et al.</i> , 2016  | COL529975 |
| Malpighiaceae | <i>Bunchosia armeniaca</i> (Cav.) DC.                     | w/c       | Ama, And, Car, Pac | Romero-Castañeda, 1991        | COL42663  |

| Family        | Species  | Mangement | Use regions   | Representative reference                     | Voucher   |
|---------------|--|-----------|---------------|--|-----------|
| Malpighiaceae | <i>Bunchosia pseudonitida</i> Cuatrec.                         | w         | Car, Cau      | <a href="#">Cruz et al., 2009</a>            | COL88219  |
| Malpighiaceae | <i>Byrsonima crassifolia</i> (L.) Kunth                        | w         | Car, Ori      | <a href="#">Romero-Castañeda, 1991</a>       | COL356350 |
| Malpighiaceae | <i>Byrsonima crispa</i> A.Juss.                                | w         | Ama, Ori      |  | COL582091 |
| Malpighiaceae | <i>Byrsonima verbascifolia</i> (L.) DC.                        | w         | Ama, Ori      |  | COL100041 |
| Malpighiaceae | <i>Malpighia emarginata</i> DC.                                | w/c       | Ama, Car      | <a href="#">Romero-Castañeda, 1991</a>       | COL121267 |
| Malpighiaceae | <i>Malpighia glabra</i> L.                                     | w/c       | And, Car, Mag | <a href="#">Cruz et al., 2009</a>            | COL160282 |
| Malvaceae     | <i>Guazuma ulmifolia</i> Lam.                                  | w/c       | Car, Pac      | <a href="#">Romero-Castañeda, 1991</a>       | COL543470 |
| Malvaceae     | <i>Herrania albiflora</i> Goudot                               | w         |               | <a href="#">Romero-Castañeda, 1991</a>       |           |
| Malvaceae     | <i>Herrania cuatrecasana</i> García-Barr.                      | w         | Ama           | <a href="#">Cárdenas et al., 2012</a>        |           |
| Malvaceae     | <i>Herrania nitida</i> (Poepp.) R.E.Schult.                    | w/c       | Ama           | <a href="#">Cárdenas &amp; Ramírez, 2004</a> | COL489790 |
| Malvaceae     | <i>Herrania nycterodendron</i> R.E. Schult.                    | w         | Ama           | <a href="#">López et al., 2006</a>           |           |
| Malvaceae     | <i>Herrania purpurea</i> (Pittier) R.E. Schult.                | w         | And, Pac      | <a href="#">Álvarez et al., 2016</a>         | COL125341 |
| Malvaceae     | <i>Matisia alata</i> Little                                    | w         | Pac           | <a href="#">Patiño, 2002</a>                 | COL65376  |
| Malvaceae     | <i>Matisia bicolor</i> Ducke                                   | w         | Ama           | <a href="#">Cárdenas et al., 2012</a>        |           |
| Malvaceae     | <i>Matisia glandifera</i> Planch. & Triana                     | w         | Ama, Ori      | <a href="#">Cárdenas &amp; López, 2000</a>   | COL307064 |
| Malvaceae     | <i>Matisia malacocalyx</i> (A.Robyns & S.Nilsson) W.S.Alverson | w         | Ama           | <a href="#">Cárdenas et al., 2012</a>        |           |
| Malvaceae     | <i>Matisia ochrocalyx</i> K.Schum.                             | w         | Ama           | <a href="#">Cárdenas et al., 2012</a>        |           |
| Malvaceae     | <i>Pachira aquatica</i> Aubl.                                  | w         | Ama           | <a href="#">Cárdenas &amp; López, 2000</a>   |           |
| Malvaceae     | <i>Patinoa almirajo</i> Cuatrec.                               | w/c       | Pac           | <a href="#">Romero-Castañeda, 1991</a>       |           |
| Malvaceae     | * <i>Quararibea hirta</i> (Cuatrec.) Cuatrec.                  | w         | Pac           | <a href="#">Patiño, 2002</a>                 |           |
| Malvaceae     | * <i>Quararibea leptandra</i> Cuatrec.                         | w         | Pac           | <a href="#">Patiño, 2002</a>                 |           |
| Malvaceae     | <i>Sterculia rugosa</i> R.Br.                                  | w         | Ama           | <a href="#">Cárdenas &amp; López, 2000</a>   |           |
| Malvaceae     | <i>Sterculia speciosa</i> K. Schum.                            | w         | Ama           | <a href="#">Cárdenas et al., 2012</a>        |           |
| Malvaceae     | <i>Theobroma bicolor</i> Humb. & Bonpl.                        | w/c       | Ama, Ori, Pac | <a href="#">Romero-Castañeda, 1991</a>       | COL169403 |
| Malvaceae     | <i>Theobroma glaucum</i> H. Karst.                             | w         | Ama, Car, Pac | <a href="#">Cárdenas &amp; Ramírez, 2004</a> | COL310791 |
| Malvaceae     | <i>Theobroma microcarpum</i> Mart.                             | w         | Ama           | <a href="#">Cárdenas et al., 2012</a>        |           |
| Malvaceae     | <i>Theobroma obovatum</i> Klotzsch ex Bernoulli                | w         | Ama           | <a href="#">Cárdenas &amp; Ramírez, 2004</a> | COL403122 |
| Malvaceae     | <i>Theobroma simiarum</i> Donn. Sm.                            | w         | Ama, Pac      | <a href="#">La Rotta, 1989</a>               | COL271224 |

| Family          | Species   | Mangement | Use regions | Representative reference            | Voucher   |
|-----------------|---|-----------|-------------|-------------------------------------|-----------|
| Malvaceae       | <i>Theobroma stipulatum</i> Cuatrec.                | w         | Pac         | Romero-Castañeda, 1991              | COL520735 |
| Malvaceae       | <i>Theobroma subincanum</i> Mart.                   | w/c       | Ama, Ori    | Romero-Castañeda, 1991              | COL308736 |
| Marantaceae     | <i>Calathea latifolia</i> (Willd. ex Link) Klotzsch | w         | SNSM        | Carbonó, 1987                       |           |
| Melastomataceae | <i>Aciotis purpurascens</i> (Aubl.) Triana          | w         | Pac         | Caballero, 1995                     |           |
| Melastomataceae | <i>Bellucia grossularioides</i> (L.) Triana         | w         | Ama, Pac    | Romero-Castañeda, 1991              | COL541108 |
| Melastomataceae | <i>Bellucia pentamera</i> Naudin                    | w         | And, Car    | Cárdenas & Ramírez, 2004            | COL277389 |
| Melastomataceae | <i>Conostegia subcrustulata</i> (Beurl.) Triana     | w         | And         | Rodríguez-Mora <i>et al.</i> , 2019 |           |
| Melastomataceae | <i>Clidemia capitellata</i> (Bonpl.) D. Don         | w         | And         | López <i>et al.</i> , 2016a         |           |
| Melastomataceae | <i>Clidemia ciliata</i> Pav. ex D. Don              | w         | And, Car    | López <i>et al.</i> , 2016a         | COL79867  |
| Melastomataceae | <i>Clidemia hirta</i> (L.) D. Don                   | w         | Ama         | Romero-Castañeda, 1991              | COL184552 |
| Melastomataceae | <i>Clidemia sericea</i> D. Don                      | w         | Ori, Pac    |                                     | COL315134 |
| Melastomataceae | * <i>Huilaea macrocarpa</i> L. Uribe                | w         | And         | Romero-Castañeda, 1991              |           |
| Melastomataceae | <i>Leandra aristigera</i> (Naudin) Cogn.            | w         | Ama         | Cárdenas <i>et al.</i> , 2012       |           |
| Melastomataceae | <i>Maieta guianensis</i> Aubl.                      | w         | Ama         | Cárdenas <i>et al.</i> , 2012       |           |
| Melastomataceae | <i>Miconia argyrophylla</i> DC.                     | w         | Ama         | Cárdenas <i>et al.</i> , 2012       |           |
| Melastomataceae | <i>Miconia biglandulosa</i> Gleason                 | w         | Ama         | Cárdenas <i>et al.</i> , 2012       |           |
| Melastomataceae | <i>Miconia ciliata</i> (Rich.) DC.                  | w         | Ama         | Cárdenas <i>et al.</i> , 2012       |           |
| Melastomataceae | <i>Miconia dodecandra</i> Cogn.                     | w         | Ama         | Cárdenas <i>et al.</i> , 2012       |           |
| Melastomataceae | <i>Miconia ligustrina</i> (Sm.) Triana              | w         | And         | Romero-Castañeda, 1991              | COL103066 |
| Melastomataceae | <i>Miconia nervosa</i> (Sm.) Triana                 | w         | Ama         | Cárdenas <i>et al.</i> , 2012       |           |
| Melastomataceae | <i>Miconia phanerostila</i> Pilg.                   | w         | Ama         | Cárdenas <i>et al.</i> , 2012       |           |
| Melastomataceae | <i>Miconia tomentosa</i> (Rich.) D. Don ex DC.      | w         | Ama         | Cárdenas <i>et al.</i> , 2012       |           |
| Melastomataceae | <i>Miconia variabilis</i> Gamba & Almeda            | w         | Ama         | Cárdenas <i>et al.</i> , 2012       |           |
| Melastomataceae | <i>Mouriri cauliflora</i> Mart. ex DC.              | w         | Ama         | Cárdenas <i>et al.</i> , 2012       |           |
| Melastomataceae | <i>Mouriri grandiflora</i> DC.                      | w         | Ama         | La Rotta, 1983                      | COL208877 |
| Melastomataceae | <i>Mouriri guianensis</i> Aubl.                     | w         | Ori         | Acero, 2005                         |           |
| Melastomataceae | <i>Mouriri myrtifolia</i> Spruce ex Triana          | w         | Ama         | Cárdenas <i>et al.</i> , 2012       |           |
| Melastomataceae | <i>Mouriri nigra</i> (DC.) Morley                   | w         | Ama         | Cárdenas & López, 2000              |           |

| Family          | Species   | Mangement | Use regions | Representative reference      | Voucher   |
|-----------------|---|-----------|-------------|-------------------------------|-----------|
| Melastomataceae | <i>Mouriri vernicosa</i> Naudin                           | w         | Ama         | La Rotta, 1983                | COL271147 |
| Melastomataceae | <i>Myriaspora egensis</i> Mart. ex DC.                    | w         |             | Romero-Castañeda, 1991        |           |
| Melastomataceae | <i>Tococa guianensis</i> Aubl.                            | w         | Ama         | Cárdenas <i>et al.</i> , 2012 |           |
| Meliaceae       | <i>Guarea grandifolia</i> DC.                             | w         | Ama         | Cárdenas <i>et al.</i> , 2012 |           |
| Meliaceae       | <i>Guarea guidonia</i> (L.) Sleumer                       | w         | Ama         | Cárdenas <i>et al.</i> , 2012 |           |
| Meliaceae       | <i>Guarea kunthiana</i> A.Juss.                           | w         | Ama         | Cárdenas <i>et al.</i> , 2012 |           |
| Menispermaceae  | <i>Abuta grandifolia</i> (Mart.) Sandwith                 | w         | Ama         | López <i>et al.</i> , 2006    | COL46204  |
| Metteniusaceae  | <i>Metteniusa edulis</i> H.Karst.                         | w         | SNSM        | Patiño, 2002                  | COL309614 |
| Moraceae        | <i>Batocarpus amazonicus</i> (Ducke) Fosberg              | w         | Ama         | Cárdenas & López, 2000        |           |
| Moraceae        | <i>Batocarpus orinocensis</i> H.Karst.                    | w/c       | Ama         | Cárdenas & Ramírez, 2004      | COL299912 |
| Moraceae        | <i>Brosimum acutifolium</i> Huber                         | w         | Ama         | Cárdenas & López, 2000        |           |
| Moraceae        | <i>Brosimum alicastrum</i> Sw.                            | w         | Car         | López <i>et al.</i> , 2016b   |           |
| Moraceae        | <i>Brosimum guianense</i> (Aubl.) Huber                   | w         | Ama         | Cárdenas <i>et al.</i> , 2012 |           |
| Moraceae        | <i>Brosimum lactescens</i> (S.Moore) C.C.Berg             | w         | Ama, Ori    | Cárdenas & Ramírez, 2004      | COL283482 |
| Moraceae        | <i>Brosimum utile</i> (Kunth) Oken                        | w/c       | Ori, Pac    | Romero-Castañeda, 1991        | COL76066  |
| Moraceae        | <i>Castilla ulei</i> Warb.                                | w         | Ama         | Cárdenas <i>et al.</i> , 2012 |           |
| Moraceae        | <i>Clarisia racemosa</i> Ruiz & Pav.                      | w         | Ama         | Cárdenas & Ramírez, 2004      |           |
| Moraceae        | <i>Ficus dulciaria</i> Dugand                             | w         | And         | Romero-Castañeda, 1991        | COL55246  |
| Moraceae        | <i>Ficus gigantosyce</i> Dugand                           | w         | And         | Romero-Castañeda, 1991        |           |
| Moraceae        | <i>Ficus insipida</i> Willd.                              | w         | Pac         | Patiño, 2002                  |           |
| Moraceae        | <i>Ficus pallida</i> Vahl                                 | w         |             | Romero-Castañeda, 1991        |           |
| Moraceae        | <i>Ficus velutina</i> Humb. & Bonpl. ex Willd.            | w/c       |             | Romero-Castañeda, 1991        |           |
| Moraceae        | <i>Helicostylis heterotricha</i> Ducke                    | w         | Ama         | Cárdenas <i>et al.</i> , 2012 |           |
| Moraceae        | <i>Helicostylis scabra</i> (J.F.Macbr.) C.C.Berg          | w         | Ama         | Cárdenas & López, 2000        | COL290879 |
| Moraceae        | <i>Helicostylis tomentosa</i> (Poepp. & Endl.) J.F.Macbr. | w         | Ama, And    | Cárdenas & López, 2000        | COL324383 |
| Moraceae        | <i>Maclura tinctoria</i> (L.) D.Don ex Steud.             | w         | Car, Pac    | Romero-Castañeda, 1991        | COL124539 |
| Moraceae        | <i>Maquira coriacea</i> (H.Karst.) C.C.Berg               | w         | Ama         | Cárdenas & López, 2000        |           |
| Moraceae        | <i>Maquira guianensis</i> Aubl.                           | w         | Ama         | Cárdenas <i>et al.</i> , 2012 |           |

| Family        | Species   | Mangement | Use regions        | Representative reference      | Voucher   |
|---------------|---|-----------|--------------------|-------------------------------|-----------|
| Moraceae      | <i>Naucleopsis glabra</i> Spruce ex Pittier                       | w         | Ama                | López <i>et al.</i> , 2006    | COL148892 |
| Moraceae      | <i>Naucleopsis oblongifolia</i> (Kuhlm.) Carauta                  | w         | Ama                | Cárdenas <i>et al.</i> , 2012 |           |
| Moraceae      | <i>Naucleopsis ulei</i> (Warb.) Ducke                             | w         | Ama                | Cárdenas & López, 2000        |           |
| Moraceae      | <i>Perebea guianensis</i> Aubl.                                   | w         | Ama, And           | López <i>et al.</i> 2006      | COL465133 |
| Moraceae      | <i>Perebea mollis</i> (Poepp. & Endl.) Huber                      | w         | Ama                | Cárdenas & López, 2000        |           |
| Moraceae      | <i>Perebea xanthochyma</i> H.Karst.                               | w         | Ama                | Cárdenas & López, 2000        |           |
| Moraceae      | <i>Poulsenia armata</i> (Miq.) Standl.                            | w         |                    | Romero-Castañeda, 1991        |           |
| Moraceae      | <i>Pseudolmedia laevigata</i> Trécul                              | w         | Ama, And, Mag, Pac | Cárdenas & López, 2000        | COL322065 |
| Moraceae      | <i>Pseudolmedia laevis</i> (Ruiz & Pav.) J.F.Macbr.               | w         | Ama, Ori           | Cárdenas & López, 2000        | COL62285  |
| Moraceae      | <i>Pseudolmedia rigida</i> (Klotzsch & H.Karst.) Cuatrec.         | w         |                    | Romero-Castañeda, 1991        |           |
| Moraceae      | <i>Sorocea pubivena</i> Hemsl.                                    | w         | Ama                | Cárdenas <i>et al.</i> , 2012 |           |
| Moraceae      | <i>Sorocea pubivena</i> subsp. <i>hirtella</i> (Mildbr.) C.C.Berg | w         | Ama                | Cárdenas & López, 2000        |           |
| Moraceae      | <i>Trophis racemosa</i> (L.) Urb.                                 | w         | Ori                | Patiño, 2002                  |           |
| Moraceae      | <i>Trymatococcus amazonicus</i> Poepp. & Endl.                    | w         | Ama                | Cárdenas & López, 2000        |           |
| Muntingiaceae | <i>Muntingia calabura</i> L.                                      | w         | And, Car, Pac      | Romero-Castañeda, 1991        |           |
| Myristicaceae | <i>Compsonaura atopa</i> (A.C.Sm.) A.C.Sm.                        | w         | Pac                | Romero-Castañeda, 1991        | COL327880 |
| Myristicaceae | <i>Compsonaura capitellata</i> (A.DC.) Warb.                      | w         | Ama                | Cárdenas <i>et al.</i> , 2012 |           |
| Myristicaceae | * <i>Compsonaura claroensis</i> Janovec & A.K.Neill               | w         |                    | Idárraga <i>et al.</i> , 2011 |           |
| Myristicaceae | * <i>Compsonaura cuatrecasii</i> A.C.Sm.                          | w         |                    | Patiño, 2002                  |           |
| Myristicaceae | <i>Iryanthera crassifolia</i> A.C.Sm.                             | w         | Ama                | Cárdenas <i>et al.</i> , 2012 |           |
| Myristicaceae | <i>Iryanthera elliptica</i> Ducke                                 | w         | Ama                | Cárdenas <i>et al.</i> , 2012 |           |
| Myristicaceae | <i>Iryanthera hostmannii</i> (Benth.) Warb.                       | w         | Ama                | Cárdenas & Ramírez, 2004      |           |
| Myristicaceae | <i>Iryanthera juruensis</i> Warb.                                 | w         | Ama                | Cárdenas & López, 2000        | COL310978 |
| Myristicaceae | <i>Iryanthera laevis</i> Markgr.                                  | w         | Ama                |                               | COL271208 |

| Family        | Species  | Mangement | Use regions        | Representative reference                   | Voucher   |
|---------------|--|-----------|--------------------|--|-----------|
| Myristicaceae | <i>Iryanthera lancifolia</i> Ducke                       | w         | Ama                | Cárdenas & Ramírez, 2004                   |           |
| Myristicaceae | <i>Iryanthera macrophylla</i> Warb.                      | w         | Ama                | Cárdenas <i>et al.</i> , 2012              |           |
| Myristicaceae | <i>Iryanthera paraensis</i> Huber                        | w         | Ama                | Cárdenas & Ramírez, 2004                   |           |
| Myristicaceae | <i>Iryanthera polyneura</i> Ducke                        | w         | Ama                | Cárdenas <i>et al.</i> , 2012              |           |
| Myristicaceae | <i>Iryanthera tricornis</i> Ducke                        | w         | Ama                | Cárdenas & López, 2000                     |           |
| Myristicaceae | <i>Osteophloeum platyspermum</i> (Spruce ex A.DC.) Warb. | w         | Ama                | Cárdenas <i>et al.</i> , 2012              |           |
| Myristicaceae | <i>Otoba acuminata</i> (Standl.) A.H.Gentry              | w         | Car                | Romero-Castañeda, 1991                     |           |
| Myristicaceae | <i>Otoba parvifolia</i> (Markgr.) A.H.Gentry             | w         | Ama                | La Rotta, 1983                             | COL271232 |
| Myristicaceae | <i>Virola duckei</i> A.C.Sm.                             | w         | Ama                | Cárdenas & Ramírez, 2004                   |           |
| Myrtaceae     | <i>Calycolpus moritzianus</i> (O.Berg) Burret            | w         | And                | Ariza <i>et al.</i> , 2010                 | COL512229 |
| Myrtaceae     | <i>Calycorectes grandifolius</i> O.Berg                  | w         | Car                | Romero-Castañeda, 1991                     |           |
| Myrtaceae     | <i>Calyptranthes bipennis</i> O.Berg                     | w         | Ama                | Cárdenas & Ramírez, 2004                   |           |
| Myrtaceae     | <i>Calyptranthes speciosa</i> Sagot                      | w         | Ama                |  | COAH12699 |
| Myrtaceae     | <i>Campomanesia lineatifolia</i> Ruiz & Pav.             | w/c       | Ama, And, Ori, Pac | Romero-Castañeda, 1991                     | COL576327 |
| Myrtaceae     | <i>Eugenia acapulcensis</i> Steud.                       | w         | Car                | López <i>et al.</i> , 2016b                |           |
| Myrtaceae     | <i>Eugenia biflora</i> (L.) DC.                          | w         | And                | Cárdenas & López, 2000                     | COL158727 |
| Myrtaceae     | <i>Eugenia florida</i> DC.                               | w         | Ama                | Romero-Castañeda, 1991                     | COL162369 |
| Myrtaceae     | <i>Eugenia patrisii</i> Vahl                             | w         | Ama                |  | COAH41582 |
| Myrtaceae     | <i>Eugenia puniceifolia</i> (Kunth) DC.                  | w         | Ama                | Cárdenas <i>et al.</i> , 2012              |           |
| Myrtaceae     | * <i>Eugenia victoriana</i> Cuatrec.                     | w/c       | Ama, And, Mag, Pac | Patiño, 2002                               | COL560993 |
| Myrtaceae     | * <i>Myrcia popayanensis</i> Hieron.                     | w         | And                | Sarmiento, 1986                            | COL66980  |
| Myrtaceae     | <i>Myrcia salicifolia</i> DC.                            | w         | Ama                | Cárdenas & López, 2000                     |           |
| Myrtaceae     | <i>Myrcia splendens</i> (Sw.) DC.                        | w         | Ori                | Jiménez-Escobar & Estupiñán-González, 2011 | COL110999 |
| Myrtaceae     | <i>Myrcianthes leucoxylla</i> (Ortega) McVaugh           | w         | And                | Romero-Castañeda, 1991                     | COL582229 |

| Family         | Species   | Mangement | Use regions   | Representative reference      | Voucher   |
|----------------|---|-----------|---------------|-------------------------------|-----------|
| Myrtaceae      | <i>Myrcianthes orthostemon</i> (O.Berg) Grifo     | w         | And           | López <i>et al.</i> , 2016a   |           |
| Myrtaceae      | <i>Myrcianthes rhopaloides</i> (Kunth) McVaugh    | w         | And           | Romero-Castañeda, 1991        | COL116756 |
| Myrtaceae      | <i>Myrciaria dubia</i> (Kunth) McVaugh            | w/c       | Ama, Ori      | Romero-Castañeda, 1991        | COL103522 |
| Myrtaceae      | <i>Plinia duplipilosa</i> McVaugh                 | w         | Ama           |                               | COAH20082 |
| Myrtaceae      | <i>Plinia pinnata</i> L.                          | w         | Ama           | Cárdenas <i>et al.</i> , 2012 |           |
| Myrtaceae      | <i>Pseudanamosis umbellulifera</i> (Kunth) Kausel | w/c       | Car           | Romero-Castañeda, 1991        | COL114076 |
| Myrtaceae      | <i>Psidium acutangulum</i> Mart. ex DC.           | w/c       | Cau           | Romero-Castañeda, 1991        | COL75585  |
| Myrtaceae      | <i>Psidium guineense</i> Sw.                      | w         | And, Car, Ori | Romero-Castañeda, 1991        | COL575987 |
| Myrtaceae      | <i>Psidium sartorianum</i> (O.Berg) Nied.         | w         | Car           | Romero-Castañeda, 1991        |           |
| Nyctaginaceae  | <i>Neea parviflora</i> Poepp. & Endl.             | w         | Ama           | Cárdenas <i>et al.</i> , 2012 |           |
| Ochnaceae      | <i>Lacunaria jenmanii</i> (Oliv.) Ducke           | w         | Ama           | Cárdenas <i>et al.</i> , 2012 |           |
| Ochnaceae      | * <i>Ouratea kananariensis</i> Sastre             | w         | Ama           | Cárdenas <i>et al.</i> , 2012 |           |
| Ochnaceae      | <i>Quiina obovata</i> Tul.                        | w         | Ama           | Cárdenas <i>et al.</i> , 2012 |           |
| Olacaceae      | <i>Aptandra tubicina</i> (Poepp.) Benth. ex Miers | w         | Ama           | Cárdenas <i>et al.</i> , 2012 |           |
| Olacaceae      | <i>Dulacia macrophylla</i> (Benth.) Kuntze        | w         | Ama           | Cárdenas <i>et al.</i> , 2012 |           |
| Olacaceae      | <i>Minuartia guianensis</i> Aubl.                 | w         | Ama           | Cárdenas <i>et al.</i> , 2012 |           |
| Olacaceae      | <i>Ximenia americana</i> L.                       | w         | Car, Pac      | Romero-Castañeda, 1991        | COL32252  |
| Onagraceae     | <i>Fuchsia boliviana</i> Carrière                 | w         | And           | Sarmiento, 1986               | COL540210 |
| Opiliaceae     | <i>Agonandra brasiliensis</i> Miers ex Benth.     | w         | Car           | López <i>et al.</i> , 2016b   |           |
| Passifloraceae | <i>Dilkea acuminata</i> Mast.                     | w         | Ama           |                               | COAH16600 |
| Passifloraceae | <i>Dilkea retusa</i> Mast.                        | w         | Ama           | Ocampo <i>et al.</i> , 2007   |           |
| Passifloraceae | <i>Passiflora adenopoda</i> DC.                   | w         | And           | Ocampo <i>et al.</i> , 2007   | COL46533  |
| Passifloraceae | <i>Passiflora ambigua</i> Hemsl.                  | w         | And, Pac      | Idárraga <i>et al.</i> , 2011 | COL410708 |
| Passifloraceae | * <i>Passiflora antioquiensis</i> H. Karst.       | w/c       | And           | Patiño, 2002                  | COL26752  |
| Passifloraceae | <i>Passiflora arborea</i> Spreng.                 | w         | Car           | Sarmiento, 1986               | COL537313 |
| Passifloraceae | <i>Passiflora auriculata</i> Kunth                | w         | Ori, Pac      |                               | COL49400  |
| Passifloraceae | <i>Passiflora candollei</i> Triana & Planch.      | w         | Ama           | Cárdenas <i>et al.</i> , 2012 |           |
| Passifloraceae | <i>Passiflora cincinnata</i> Mast.                | w         | And           | Ocampo <i>et al.</i> , 2007   |           |

| Family         | Species   | Mangement | Use regions        | Representative reference      | Voucher   |
|----------------|---|-----------|--------------------|-------------------------------|-----------|
| Passifloraceae | <i>Passiflora coccinea</i> Aubl.                      | w         |                    | Ocampo <i>et al.</i> , 2007   |           |
| Passifloraceae | <i>Passiflora cumbalensis</i> (H. Karst.) Harms       | w/c       | And                | Patiño, 2002                  | COL29875  |
| Passifloraceae | * <i>Passiflora emarginata</i> Bonpl.                 | w         | And                | Ocampo <i>et al.</i> , 2007   | COL227362 |
| Passifloraceae | * <i>Passiflora flexipes</i> Triana & Planch.         | w         | And                | Ocampo <i>et al.</i> , 2007   |           |
| Passifloraceae | <i>Passiflora foetida</i> L.                          | w         | And, Car, Ori, Pac | Romero-Castañeda, 1991        | COL450547 |
| Passifloraceae | <i>Passiflora guazumifolia</i> Jacq.                  | w         | Car                | Ocampo <i>et al.</i> , 2007   |           |
| Passifloraceae | <i>Passiflora holtii</i> Killip                       | w         |                    | Ocampo <i>et al.</i> , 2007   |           |
| Passifloraceae | <i>Passiflora involucreta</i> (Mast.) A.H. Gentry     | w         | Ama                | La Rotta, 1989                | COL556242 |
| Passifloraceae | <i>Passiflora laurifolia</i> L.                       | w/c       |                    | Patiño, 2002                  |           |
| Passifloraceae | <i>Passiflora leptomischa</i> Harms                   | w         | And                | Ocampo <i>et al.</i> , 2007   |           |
| Passifloraceae | * <i>Passiflora magnifica</i> L.K.Escobar             | w         | And                | Ocampo <i>et al.</i> , 2007   |           |
| Passifloraceae | <i>Passiflora maliformis</i> L.                       | w/c       | And, Pac           | Romero-Castañeda, 1991        | COL43829  |
| Passifloraceae | <i>Passiflora manicata</i> (Juss.) Pers.              | w/c       | And                | Idárraga <i>et al.</i> , 2011 | COL160270 |
| Passifloraceae | <i>Passiflora mixta</i> L.f.                          | w/c       | And                | Idárraga <i>et al.</i> , 2011 | COL301947 |
| Passifloraceae | <i>Passiflora multiformis</i> Jacq.                   | w         |                    | Ocampo <i>et al.</i> , 2007   |           |
| Passifloraceae | <i>Passiflora nitida</i> Kunth                        | w/c       | Ama, Ori           | Romero-Castañeda, 1991        | COL89795  |
| Passifloraceae | <i>Passiflora palenquensis</i> Holm-Niels. & Lawesson | w/c       | Pac                | Idárraga <i>et al.</i> , 2011 | COL492910 |
| Passifloraceae | * <i>Passiflora parritae</i> (Mast.) L.H. Bailey      | w         | And                | Ocampo <i>et al.</i> , 2007   |           |
| Passifloraceae | <i>Passiflora pinnatistipula</i> Cav.                 | w/c       | And                | Patiño, 2002                  |           |
| Passifloraceae | <i>Passiflora platyloba</i> Killip                    | w         | And                | Idárraga <i>et al.</i> , 2011 |           |
| Passifloraceae | <i>Passiflora popenovii</i> Killip                    | w/c       | And                | Romero-Castañeda, 1991        |           |
| Passifloraceae | <i>Passiflora riparia</i> Mart. ex Mast.              | w         |                    | Ocampo <i>et al.</i> , 2007   |           |
| Passifloraceae | * <i>Passiflora schlimiana</i> Regel                  | w         | SNSM               | Romero-Castañeda, 1991        | COL118505 |
| Passifloraceae | <i>Passiflora seemannii</i> Griseb.                   | w         | Ama, Pac           | Idárraga <i>et al.</i> , 2011 | COL45595  |
| Passifloraceae | <i>Passiflora serratodigitata</i> L.                  | w/c       | Ama, Pac           | Romero-Castañeda, 1991        | COL66864  |
| Passifloraceae | <i>Passiflora serrulata</i> Jacq.                     | w         | Ori                | Patiño, 2002                  |           |
| Passifloraceae | * <i>Passiflora sphaerocarpa</i> Triana & Planch.     | w         | And                | Ocampo <i>et al.</i> , 2007   |           |
| Passifloraceae | <i>Passiflora suberosa</i> L.                         | w         | Car                | Ocampo <i>et al.</i> , 2007   | COL290331 |



| Family         | Species   | Mangement | Use regions         | Representative reference                   | Voucher   |
|----------------|---|-----------|---------------------|--|-----------|
| Passifloraceae | <i>Passiflora tarminiana</i> Coppens & V.E. Barney            | w/c       | And                 | Idárraga <i>et al.</i> , 2011              | COL510596 |
| Passifloraceae | * <i>Passiflora tenerifensis</i> L.K.Escobar                  | w         | Pac                 | Ocampo <i>et al.</i> , 2007                |           |
| Passifloraceae | <i>Passiflora tica</i> Gómez-Laur. & L.D. Gómez               | w         |                     | Jiménez-Escobar & Estupiñán-González, 2011 |           |
| Passifloraceae | * <i>Passiflora tiliifolia</i> L.                             | w/c       | And                 | Idárraga <i>et al.</i> , 2011              |           |
| Passifloraceae | * <i>Passiflora tolimana</i> Harms                            | w         | And                 | Idárraga <i>et al.</i> , 2011              |           |
| Passifloraceae | <i>Passiflora variolata</i> Poepp. & Endl.                    | w         | Ama                 |  | COAH16601 |
| Passifloraceae | <i>Passiflora vitifolia</i> Kunth                             | w         | Ama, And, Pac, SNSM | Romero-Castañeda, 1991                     | COL582696 |
| Phyllanthaceae | <i>Hieronyma alchorneoides</i> Allemão                        | w         | Ori                 | Acero, 2005                                |           |
| Phyllanthaceae | <i>Hieronyma duquei</i> Cuatrec.                              | w         | And                 | Acero, 2005                                | COL33725  |
| Phyllanthaceae | <i>Hieronyma macrocarpa</i> Müll.Arg.                         | w/c       | And                 | Romero-Castañeda, 1991                     | COL46338  |
| Phyllanthaceae | <i>Hieronyma oblonga</i> (Tul.) Müll. Arg.                    | w         | Ama                 | Cárdenas <i>et al.</i> , 2012              |           |
| Polygonaceae   | <i>Coccoloba acuminata</i> Kunth                              | w         | Car                 | Jiménez-Escobar & Estupiñán-González, 2011 | COL523582 |
| Polygonaceae   | <i>Coccoloba ascendens</i> Duss ex Lindau                     | w         | Ama                 | Cárdenas <i>et al.</i> , 2012              |           |
| Polygonaceae   | <i>Coccoloba densifrons</i> Mart. ex Meisn.                   | w         | Ama                 | López <i>et al.</i> , 2006                 | COL518987 |
| Polygonaceae   | <i>Coccoloba excelsa</i> Benth.                               | w         | Pac                 | Álvarez <i>et al.</i> , 2016               |           |
| Polygonaceae   | <i>Coccoloba obovata</i> Kunth                                | w         | Car, Pac            | Romero-Castañeda, 1991                     | COL32200  |
| Polygonaceae   | <i>Coccoloba uvifera</i> (L.) L.                              | w/c       | Car, Mag, Pac       | Romero-Castañeda, 1991                     | COL134746 |
| Polygonaceae   | <i>Diclidanthera penduliflora</i> Mart.                       | w         | Ama                 | Cárdenas <i>et al.</i> , 2012              |           |
| Polygonaceae   | <i>Moutabea guianensis</i> Aubl.                              | w         | Ama                 | Cárdenas <i>et al.</i> , 2012              |           |
| Polygonaceae   | <i>Ruprechtia ramiflora</i> (Jacq.) C.A.Mey.                  | w         | Car                 | Cruz <i>et al.</i> , 2009                  |           |
| Primulaceae    | * <i>Ardisia manglillo</i> Cuatrec.                           | w         | Pac                 | Romero-Castañeda, 1991                     |           |
| Primulaceae    | * <i>Ardisia sapida</i> Cuatrec.                              | w         | And                 | Romero-Castañeda, 1991                     |           |
| Primulaceae    | * <i>Clavija latifolia</i> (Willd. ex Roem. & Schult.) K.Koch | w         | Car                 | Jiménez-Escobar & Estupiñán-González, 2011 | COL524025 |
| Primulaceae    | <i>Clavija membranacea</i> Mez                                | w         | Ama                 | Cárdenas <i>et al.</i> , 2012              |           |

| Family         | Species  | Mangement | Use regions      | Representative reference                         | Voucher   |
|----------------|--|-----------|------------------|--|-----------|
| Primulaceae    | <i>Cybianthus amplus</i> (Mez)<br>G.Agostini                   | w         | Ama              | Cárdenas <i>et al.</i> , 2012                    |           |
| Primulaceae    | <i>Geissanthus longistamineus</i><br>(A.C.Sm.) Pipoly          | w         | Pac              | Romero-Castañeda, 1991                           |           |
| Primulaceae    | <i>Stylogyne longifolia</i> (Mart. ex Miq.)<br>Mez             | w         | Ama              | Cárdenas <i>et al.</i> , 2012                    |           |
| Putranjivaceae | <i>Drypetes variabilis</i> Uittien                             | w         | Ama              | Cárdenas <i>et al.</i> , 2012                    |           |
| Rhamnaceae     | <i>Ziziphus cinnamomum</i> Triana &<br>Planch.                 | w         |                  | Romero-Castañeda, 1991                           |           |
| Rhamnaceae     | <i>Ziziphus saeri</i> Pittier                                  | w         | Car              | Romero-Castañeda, 1991                           |           |
| Rosaceae       | <i>Hesperomeles ferruginea</i> (Pers.)<br>Benth.               | w         | And              | Romero-Castañeda, 1991                           |           |
| Rosaceae       | * <i>Hesperomeles goudotiana</i> (Decne.)<br>Killip            | w         | And              | Córdoba <i>et al.</i> , 2010                     | COL480035 |
| Rosaceae       | <i>Hesperomeles obtusifolia</i> (Pers.)<br>Lindl.              | w         | And              | Idárraga <i>et al.</i> , 2011                    | COL543301 |
| Rosaceae       | <i>Margyricarpus pinnatus</i> (Lam.)<br>Kuntze                 | w         | And              | Sarmiento, 1986                                  | COL5240   |
| Rosaceae       | <i>Rubus adenotrichus</i> Schltldl.                            | w/c       | And              | López <i>et al.</i> , 2016a                      | COL13106  |
| Rosaceae       | <i>Rubus bogotensis</i> Kunth                                  | w         | And              | Romero-Castañeda, 1991                           | COL72502  |
| Rosaceae       | <i>Rubus boliviensis</i> Focke                                 | w         | And              | Idárraga <i>et al.</i> , 2011                    |           |
| Rosaceae       | <i>Rubus floribundus</i> Kunth                                 | w         | And              | Idárraga <i>et al.</i> , 2011                    | COL385126 |
| Rosaceae       | <i>Rubus nubigenus</i> Kunth                                   | w         |                  | Romero-Castañeda, 1991                           |           |
| Rosaceae       | <i>Rubus rosifolius</i> var. <i>coronarius</i><br>(Sims) Focke | w         | And, Car,<br>Ori | Patiño, 2002                                     | COL478555 |
| Rosaceae       | <i>Rubus urticifolius</i> Poir.                                | w         | And              | Romero-Castañeda, 1991                           |           |
| Rubiaceae      | <i>Alibertia claviflora</i> K.Schum.                           | w         | Car              | Jiménez-Escobar &<br>Estupiñán-González,<br>2011 |           |
| Rubiaceae      | <i>Alibertia edulis</i> (Rich.) A.Rich. ex<br>DC.              | w         | And, Car,<br>Ori | Romero-Castañeda, 1991                           | COL304620 |
| Rubiaceae      | <i>Alibertia sorbilis</i> Huber ex Ducke                       | w         | Ama              | Cárdenas <i>et al.</i> , 2012                    |           |
| Rubiaceae      | * <i>Borojoa duckei</i> Steyerl.                               | w/c       | Ama, Pac         | Cárdenas & López, 2000                           |           |
| Rubiaceae      | <i>Botryarrhena pendula</i> Ducke                              | w         | Ama              | Cárdenas <i>et al.</i> , 2012                    |           |
| Rubiaceae      | <i>Cordia macrophylla</i> (K.Schum.)<br>Kuntze                 | w         | Ama              | Cárdenas & López, 2000                           |           |
| Rubiaceae      | <i>Coussarea bernardii</i> Steyerl.                            | w         | Ama              | Cárdenas <i>et al.</i> , 2012                    |           |
| Rubiaceae      | <i>Coussarea brevicaulis</i> K.Krause                          | w         | Ama              | Cárdenas <i>et al.</i> , 2012                    |           |
| Rubiaceae      | <i>Coussarea flava</i> Poepp.                                  | w         | Ama              | Cárdenas <i>et al.</i> , 2012                    |           |

| Family      | Species   | Mangement | Use regions        | Representative reference                   | Voucher   |
|-------------|---|-----------|--------------------|--|-----------|
| Rubiaceae   | <i>Duroia hirsuta</i> (Poepp.) K.Schum.                         | w         | Ama                | Cárdenas <i>et al.</i> , 2012              |           |
| Rubiaceae   | <i>Duroia maguirei</i> Steyerem.                                | w         | Ama                | Cárdenas <i>et al.</i> , 2012              |           |
| Rubiaceae   | <i>Duroia micrantha</i> (Ladbr.) Zarucchi & J.H.Kirkbr.         | w         | Ama                | Cárdenas <i>et al.</i> , 2012              |           |
| Rubiaceae   | <i>Faramea occidentalis</i> (L.) A.Rich.                        | w/c       | Ama, Pac           | Álvarez <i>et al.</i> , 2016               | COL423424 |
| Rubiaceae   | <i>Faramea torquata</i> Müll.Arg.                               | w         | Car                | Jiménez-Escobar & Estupiñán-González, 2011 |           |
| Rubiaceae   | <i>Genipa americana</i> L.                                      | w/c       | Ama, Car, Ori, Pac | Romero-Castañeda, 1991                     | COL111317 |
| Rubiaceae   | <i>Kutchubaea micrantha</i> Steyerem.                           | w         | Ama                | Cárdenas <i>et al.</i> , 2012              |           |
| Rubiaceae   | <i>Manettia calycosa</i> Griseb.                                | w         | Ama                | La Rotta, 1983                             |           |
| Rubiaceae   | <i>Pagamea plicata</i> Spruce ex Benth.                         | w         | Ama                | Cárdenas <i>et al.</i> , 2012              |           |
| Rubiaceae   | <i>Pentagonia brachyotis</i> (Standl.) Standl.                  | w         | Pac                | Romero-Castañeda, 1991                     |           |
| Rubiaceae   | <i>Pentagonia macrophylla</i> Benth.                            | w         | Pac                | Romero-Castañeda, 1991                     | COL70535  |
| Rubiaceae   | <i>Pentagonia pinnatifida</i> Seem.                             | w         | Car                | Jiménez-Escobar & Estupiñán-González, 2011 |           |
| Rubiaceae   | <i>Posoqueria latifolia</i> (Rudge) Schult.                     | w/c       | Pac                | Romero-Castañeda, 1991                     | COL354946 |
| Rubiaceae   | <i>Posoqueria longiflora</i> Aubl.                              | w         | Ama                | Cárdenas <i>et al.</i> , 2012              |           |
| Rubiaceae   | <i>Randia aculeata</i> L.                                       | w         | Car                | Romero-Castañeda, 1991                     | COL313428 |
| Rubiaceae   | <i>Randia dioica</i> H.Karst.                                   | w         | Car                | Cruz <i>et al.</i> , 2009                  | COL530707 |
| Rubiaceae   | <i>Retiniphyllum schomburgkii</i> (Benth.) Müll.Arg.            | w         | Ama                | Cárdenas <i>et al.</i> , 2012              |           |
| Rubiaceae   | <i>Sabicea amazonensis</i> Wernham                              | w         | Ama                | Cárdenas <i>et al.</i> , 2012              |           |
| Rubiaceae   | <i>Sabicea villosa</i> Schult.                                  | w         | Ama                | Cárdenas <i>et al.</i> , 2012              |           |
| Salicaceae  | <i>Casearia arguta</i> Kunth                                    | w         | Pac                | Álvarez <i>et al.</i> , 2016               |           |
| Salicaceae  | <i>Casearia decandra</i> Jacq.                                  | w         | Ama                | Cárdenas <i>et al.</i> , 2012              |           |
| Sapindaceae | <i>Cupania hirsuta</i> Radlk.                                   | w         | Car                | Jiménez-Escobar & Estupiñán-González, 2011 |           |
| Sapindaceae | <i>Dilodendron costaricense</i> (Radlk.) A.H.Gentry & Steyerem. | w         | And, Car           | López <i>et al.</i> , 2016b                | COL301025 |
| Sapindaceae | <i>Matayba inelegans</i> Radlk.                                 | w         | Ama                | Cárdenas <i>et al.</i> , 2012              |           |
| Sapindaceae | <i>Matayba purgans</i> (Poepp.) Radlk.                          | w         | Car                | Jiménez-Escobar & Estupiñán-González, 2011 |           |
| Sapindaceae | <i>Melicoccus oliviformis</i> Kunth                             | w/c       | Car                | Romero-Castañeda, 1991                     |           |

| Family      | Species  | Mangement | Use regions | Representative reference             | Voucher   |
|-------------|--|-----------|-------------|--------------------------------------|-----------|
| Sapindaceae | <i>Paullinia cupana</i> Kunth                                | w         | Ama         | Cárdenas <i>et al.</i> , 2012        |           |
| Sapindaceae | * <i>Paullinia macrophylla</i> Kunth                         | w         | Car         | Romero-Castañeda, 1991               | COL115306 |
| Sapindaceae | <i>Paullinia yoco</i> R.E.Schult. & Killip                   | w         | Ama         | Cárdenas <i>et al.</i> , 2012        |           |
| Sapindaceae | <i>Talisia hexaphylla</i> Vahl                               | w         | Pac         |                                      | COL285953 |
| Sapotaceae  | <i>Chrysophyllum amazonicum</i> T.D.Penn.                    | w         | Ama         | Cárdenas <i>et al.</i> , 2012        |           |
| Sapotaceae  | <i>Chrysophyllum argenteum</i> Jacq.                         | w         | Ama, Car    | Jiménez-Escobar <i>et al.</i> , 2011 | COL539618 |
| Sapotaceae  | <i>Chrysophyllum bombycinum</i> T.D.Penn.                    | w         | Ama         | Cárdenas <i>et al.</i> , 2012        |           |
| Sapotaceae  | <i>Chrysophyllum manaosense</i> (Aubrév.) T.D.Penn.          | w         | Ama         |                                      | COAH72152 |
| Sapotaceae  | <i>Chrysophyllum pomiferum</i> (Eyma) T.D.Penn.              | w         | Ama         | Cárdenas <i>et al.</i> , 2012        |           |
| Sapotaceae  | <i>Chrysophyllum prieurii</i> A.DC.                          | w         | Ori         |                                      | COAH78626 |
| Sapotaceae  | <i>Chrysophyllum sanguinolentum</i> (Pierre) Baehni          | w         | Ama         | Cárdenas & López, 2000               | COL179902 |
| Sapotaceae  | <i>Chrysophyllum superbum</i> T.D.Penn.                      | w         | Ama         | Cárdenas & López, 2000               |           |
| Sapotaceae  | <i>Ecclinusa guianensis</i> Eyma                             | w         | Ama         | Cárdenas <i>et al.</i> , 2012        |           |
| Sapotaceae  | <i>Ecclinusa lanceolata</i> (Mart. & Eichler ex Miq.) Pierre | w         | Ama         | Cárdenas <i>et al.</i> , 2012        |           |
| Sapotaceae  | <i>Manilkara bidentata</i> (A.DC.) A.Chev.                   | w         | Ama         | Patiño, 2002                         |           |
| Sapotaceae  | <i>Micropholis egensis</i> (A.DC.) Pierre                    | w         | Ama         | Cárdenas <i>et al.</i> , 2012        |           |
| Sapotaceae  | <i>Micropholis guyanensis</i> (A.DC.) Pierre                 | w         | Ama         | Cárdenas & López, 2000               |           |
| Sapotaceae  | <i>Micropholis melinoniana</i> Pierre                        | w         | Ama         | Cárdenas <i>et al.</i> , 2012        |           |
| Sapotaceae  | * <i>Pouteria arguacoensium</i> (H.Karst.) Baehni            | w/c       | Car, SNSM   | Romero-Castañeda, 1991               | COL551467 |
| Sapotaceae  | <i>Pouteria baehmiana</i> Monach.                            | w         | Ama         |                                      | COAH64852 |
| Sapotaceae  | <i>Pouteria bangii</i> (Rusby) T.D.Penn.                     | w         | Ama         |                                      | COAH34942 |
| Sapotaceae  | <i>Pouteria bilocularis</i> (H.J.P.Winkl.) Baehni            | w         | Ama         |                                      | COAH25123 |
| Sapotaceae  | <i>Pouteria campanulata</i> Baehni                           | w         | Ama         | Cárdenas & López, 2000               |           |
| Sapotaceae  | <i>Pouteria cladantha</i> Sandwith                           | w         |             | Idárraga <i>et al.</i> , 2011        |           |
| Sapotaceae  | <i>Pouteria cuspidata</i> (A.DC.) Baehni                     | w         | Ama, Mag    | Cárdenas & López, 2000               | COL123271 |
| Sapotaceae  | <i>Pouteria durlandii</i> (Standl.) Baehni                   | w         | Car         | López <i>et al.</i> , 2016b          |           |

| Family        | Species  | Mangement | Use regions | Representative reference                   | Voucher   |
|---------------|--|-----------|-------------|--|-----------|
| Sapotaceae    | <i>Pouteria glauca</i> T.D.Penn.                                       | w         | Ama         | Cárdenas <i>et al.</i> , 2012              |           |
| Sapotaceae    | <i>Pouteria glomerata</i> (Miq.) Radlk.                                | w         | Ama         | Idárraga <i>et al.</i> , 2011              |           |
| Sapotaceae    | <i>Pouteria guianensis</i> Aubl.                                       | w         | Ama         |  | COAH64795 |
| Sapotaceae    | <i>Pouteria hispida</i> Eyma   | w/c       | Ama         | Cárdenas & López, 2000                     | COL438085 |
| Sapotaceae    | <i>Pouteria laevigata</i> (Mart.) Radlk.                               | w         | Ama         |  | COAH73853 |
| Sapotaceae    | <i>Pouteria lucuma</i> (Ruiz & Pav.) Kuntze                            | w/c       | And         | Romero-Castañeda, 1991                     | COL63528  |
| Sapotaceae    | <i>Pouteria macrophylla</i> (Lam.) Eyma                                | w         | Ama, And    | Patiño, 2002                               |           |
| Sapotaceae    | <i>Pouteria multiflora</i> (A.DC.) Eyma                                | w         | Pac         | Álvarez <i>et al.</i> , 2016               |           |
| Sapotaceae    | <i>Pouteria oblanceolata</i> Pires                                     | w         | Ama         | Cárdenas <i>et al.</i> , 2012              |           |
| Sapotaceae    | <i>Pouteria retinervis</i> T.D.Penn.                                   | w         | Ama         | Cárdenas & López, 2000                     |           |
| Sapotaceae    | <i>Pouteria stipitata</i> Cronquist                                    | w         | Car         | Cruz <i>et al.</i> , 2009                  |           |
| Sapotaceae    | <i>Pouteria torta</i> (Mart.) Radlk.                                   | w         | Ama, Car    | Jiménez-Escobar & Estupiñán-González, 2011 |           |
| Sapotaceae    | <i>Pouteria trilocularis</i> Cronquist                                 | w         | Ama         | Cárdenas <i>et al.</i> , 2012              |           |
| Sapotaceae    | <i>Pouteria ucuqui</i> Pires & R.E.Schult.                             | w         | Ama         | Romero-Castañeda, 1991                     | COL34270  |
| Sapotaceae    | <i>Pradosia cochlearia</i> (Lecomte) T.D.Penn.                         | w         | Ama         | Cárdenas <i>et al.</i> , 2012              |           |
| Sapotaceae    | <i>Pradosia colombiana</i> (Standl.) T.D.Penn. ex T.J.Ayers & Boufford | w         | Car         | López <i>et al.</i> , 2016b                |           |
| Sapotaceae    | <i>Pradosia subverticillata</i> Ducke                                  | w         | Ama         | Cárdenas <i>et al.</i> , 2012              |           |
| Sapotaceae    | <i>Sarcaulus brasiliensis</i> (A.DC.) Eyma                             | w         | Ama         | Cárdenas & López, 2000                     |           |
| Sapotaceae    | <i>Sideroxylon obtusifolium</i> (Roem. & Schult.) T.D.Penn.            | w         | Car         | Romero-Castañeda, 1991                     |           |
| Simaroubaceae | <i>Simaba polyphylla</i> (Cavalcante) W.W.Thomas                       | w         | Ama         | Cárdenas <i>et al.</i> , 2012              |           |
| Smilacaceae   | <i>Smilax siphilitica</i> Humb. & Bonpl. ex Willd.                     | w         | Ama         | Cárdenas <i>et al.</i> , 2012              |           |
| Smilacaceae   | <i>Smilax spinosa</i> Mill.  | w         | Ama         | Cárdenas <i>et al.</i> , 2012              |           |
| Solanaceae    | <i>Acnistus arborescens</i> (L.) Schltdl.                              | w         | Car         | Sarmiento, 1986                            |           |
| Solanaceae    | <i>Cyphomandra naranjilla</i> Pittier                                  | w/c       |             | Romero-Castañeda, 1991                     |           |
| Solanaceae    | <i>Physalis angulata</i> L.  | w         | Ama, Pac    | Álvarez <i>et al.</i> , 2016               | COL456960 |
| Solanaceae    | <i>Physalis pubescens</i> L.   | w         | Ama         |  | COL135409 |
| Solanaceae    | <i>Solanum caripense</i> Dunal   | w         | And         | Romero-Castañeda, 1991                     | COL571270 |
| Solanaceae    | <i>Solanum circinatum</i> Bohs   | w         | Ama         | Cárdenas & López, 2000                     |           |

| Family           | Species  | Mangement | Use regions         | Representative reference            | Voucher   |
|------------------|--|-----------|---------------------|-------------------------------------|-----------|
| Solanaceae       | <i>Solanum hirtum</i> Vahl                               | w         | And                 | Ariza <i>et al.</i> , 2010          |           |
| Solanaceae       | <i>Solanum lanceifolium</i> Jacq.                        | w/c       |                     | Romero-Castañeda, 1991              |           |
| Solanaceae       | <i>Solanum pectinatum</i> Dunal                          | w/c       | And                 | Romero-Castañeda, 1991              | COL108397 |
| Solanaceae       | <i>Solanum pseudolulo</i> Heiser                         | w         | And                 | Idárraga <i>et al.</i> , 2011       | COL53080  |
| Solanaceae       | <i>Solanum sibundoyense</i> (Bohs) Bohs                  | w/c       | And                 | Patiño, 2002                        |           |
| Solanaceae       | <i>Solanum sisymbriifolium</i> Lam.                      | w/c       | And                 | Romero-Castañeda, 1991              | COL66187  |
| Solanaceae       | <i>Solanum stramonifolium</i> Jacq.                      | w         | Ama                 | Romero-Castañeda, 1991              | COL214182 |
| Solanaceae       | <i>Solanum vestissimum</i> Dunal                         | w         | And                 | López <i>et al.</i> , 2016a         | COL89552  |
| Strelitziaceae   | <i>Phenakospermum guyannense</i> (A.Rich.) Endl. ex Miq. | w/c       | Ama                 | Cárdenas & Ramírez, 2004            |           |
| Symplocaceae     | <i>Symplocos serrulata</i> Bonpl.                        | w         | And                 | Romero-Castañeda, 1991              | COL306330 |
| Tetrameristaceae | <i>Pelliciera rhizophorae</i> Planch. & Triana           | w         | Pac                 | Caballero, 1995                     |           |
| Tropaeolaceae    | <i>Tropaeolum majus</i> L.                               | w/c       | And                 | Romero-Castañeda, 1991              |           |
| Urticaceae       | <i>Cecropia ficifolia</i> Warb. ex Snethl.               | w         | Ama                 | Cárdenas <i>et al.</i> , 2012       |           |
| Urticaceae       | <i>Cecropia sciadophylla</i> Mart.                       | w         | Ama                 | Cárdenas & Ramírez, 2004            |           |
| Urticaceae       | <i>Coussapoa villosa</i> Poepp. & Endl.                  | w         | Ama                 | Cárdenas <i>et al.</i> , 2012       |           |
| Urticaceae       | <i>Pourouma acuminata</i> Mart. ex Miq.                  | w         | Ama                 | Cárdenas & López, 2000              |           |
| Urticaceae       | <i>Pourouma bicolor</i> Mart.                            | w         | Ama, And, Pac, SNSM | Cárdenas & Ramírez, 2004            | COL552049 |
| Urticaceae       | <i>Pourouma cecropiifolia</i> Mart.                      | w         | Ama, Ori            | Patiño, 2002                        | COL56192  |
| Urticaceae       | <i>Pourouma cucura</i> Standl. & Cuatrec.                | w         | Ama                 | Patiño, 2002                        | COL565516 |
| Urticaceae       | <i>Pourouma cuspidata</i> Mildbr.                        | w         | Ama                 | Cárdenas <i>et al.</i> , 2012       |           |
| Urticaceae       | <i>Pourouma ferruginea</i> Standl.                       | w         | Ama                 | Cárdenas <i>et al.</i> , 2012       |           |
| Urticaceae       | <i>Pourouma guianensis</i> Aubl.                         | w         | Ama                 |                                     | COL99437  |
| Urticaceae       | <i>Pourouma melinonii</i> Benoist                        | w         | Ama                 | López <i>et al.</i> , 2006          |           |
| Urticaceae       | <i>Pourouma mollis</i> Trécul                            | w         | Ama                 | Cárdenas <i>et al.</i> , 2012       |           |
| Urticaceae       | <i>Pourouma myrmecophila</i> Ducke                       | w         | Ama                 | Cárdenas <i>et al.</i> , 2012       |           |
| Urticaceae       | <i>Pourouma ovata</i> Trécul                             | w         | Ama                 | Cárdenas <i>et al.</i> , 2012       |           |
| Urticaceae       | <i>Pourouma tomentosa</i> Mart. ex Miq.                  | w         | Ama                 | Cárdenas & López, 2000              |           |
| Verbenaceae      | <i>Lantana camara</i> L.                                 | w/c       | And                 | Rodríguez-Mora <i>et al.</i> , 2019 |           |

| Family        | Species  | Mangement | Use regions | Representative reference                   | Voucher   |
|---------------|--|-----------|-------------|--|-----------|
| Verbenaceae   | <i>Lantana trifolia</i> L.                               | w         | And, Car    | <a href="#">Acero, 2005</a>                | COL97456  |
| Violaceae     | <i>Gloeospermum sphaerocarpum</i> Triana & Planch.       | w         | And         | <a href="#">Romero-Castañeda, 1991</a>     | COL325541 |
| Violaceae     | <i>Leonia glycyarpa</i> Ruiz & Pav.                      | w         | Ama         | <a href="#">Cárdenas et al., 2012</a>      |           |
| Violaceae     | <i>Leonia triandra</i> Cuatrec.                          | w         | And, Pac    | <a href="#">Romero-Castañeda, 1991</a>     | COL126937 |
| Vitaceae      | <i>Vitis tiliifolia</i> Humb. & Bonpl. ex Schult.        | w         | And, Pac    | <a href="#">Romero-Castañeda, 1991</a>     | COL523790 |
| Vochysiaceae  | <i>Erisma bicolor</i> Ducke                              | w         | Ama         | <a href="#">Cárdenas et al., 2012</a>      |           |
| Vochysiaceae  | <i>Erisma japura</i> Spruce ex Warm.                     | w         | Ama         | <a href="#">Patiño, 2002</a>               | COL511060 |
| Vochysiaceae  | <i>Erisma uncinatum</i> Warm.                            | w         | Ama         | <a href="#">Cárdenas &amp; López, 2000</a> |           |
| Vochysiaceae  | <i>Qalea acuminata</i> Spruce ex Warm.                   | w         | Ama         | <a href="#">Cárdenas &amp; López, 2000</a> |           |
| Zingiberaceae | <i>Renealmia alpinia</i> (Rottb.) Maas                   | w         | Ama         | <a href="#">Cárdenas et al., 2012</a>      |           |
| Zingiberaceae | <i>Renealmia thyrsoides</i> (Ruiz & Pav.) Poepp. & Endl. | w         | Ama         | <a href="#">Cárdenas et al., 2012</a>      |           |

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