

The Timber Woods of Panama

PAUL H. ALLEN¹

- Acabu — See *Zanthoxylum* sp.
- Acacia Farnesiana* (L.) Willd. — Leguminosae — “Aromo” — Shrub or small tree, flowers bright yellow, fragrant. Pacific lowlands.
- Acacia melanocera* Beurl. — Small trees, heavily armed with hollow “Bull Horn” thorns, which are inhabited by colonies of stinging ants. Sometimes listed as *Myrmecodendron*.
- Achote — See *Bixa Orellana*.
- Achras calicola* Pittier = *Manilkara chicle* — Sapotaceae, which see “Nispero”.
- Aegiphila anomala* Pittier — Verbenaceae — “Juan de la verdad” — Tree to 50 ft. Flowers white, produced in January. El Valle & probably Atlantic Coast forests to 3000 ft.
- Aegiphila martinicensis* Jacq. — Verbenaceae — “Juan de la verdad”, “Wild Jasmine” — Shrub or small tree.
- Aguacate — See *Persea americana*.
- Aguacatillo — See *Persea schlotheana*.
- Alazano — See *Calanophyllum candidissimum*.
- Albizia caribaea* (Lam.) Britt & Rose — Pacific lowlands.
- Alcabu — See *Zanthoxylum* sp.
- Alcornoque — See *Morinda oleifera* or *Ormosia coccinea*.
- Alfaje — See *Trichilia tuberculata*.
- Alajillo — See *Podocarpus Allenii*.
- Algarrobo — See *Hymenaea courbaril*.
- Algodón — See *Gossypium mexicanum* or *Gossypium tridens*.
- Algodoncillo — See *Hibiscus tiliaceus*.
- Alibertia edulis* (L. Rich.) A. Rich. — Rubiaceae — “Lagartillo”, “Madroño”, “Madroño de Comer”, “Trompito” or “Trompo” — Shrubs of small trees. Flowers white in terminal clusters during first half of rainy season, followed by fruits from October to February.
- Allenanthus erythrocarpus* Standl. — Rubiaceae — Trees, to 60 ft. 12” diameter. Wood white, easy to work. Common to the northern forested slopes of El Valle de Anton, 2000 ft. White flowers in July-August, followed by conspicuous pink-fruits in August-September.
- Almácigo — See *Elaphrium simaruba*.
- Almendra — See *Coumarouna oleifera* or *Andira inermis*.
- Alnus acuminata* HBK — Betulaceae — “Jaul”, “Alum” — Trees, to 60 ft. 24” diameter forming nearly pure stands on the slopes of Chiriquí Volcano above 6,000 ft. Wood used for boxes and crates.
- Alum — See *Alnus acuminata*.
- Amaioua corymbosa* HBK — Rubiaceae — “Madroño” — Trees, 15-30 ft. White flowers, in terminal cymes.
- Amansa Mujer — See *Prioria copaifera*.
- Amargo — See *Andira* sp. aff. *A. vermifuga*.
- Amarillo — See *Bucida buceras* or *Terminalia obovata*.
- Amarillo Carbonero — See *Oncoba laurina*.

Amarillo de Fruta, or Amarillo Fruto — See *Lafoensia puniceifolia*.

Amarillo Guayaquil — See *Centrolobium patinense*.

Amarillo Real — See *Terminalia obovata*.

Amyris barbata Lundell — Putaceae — Trees, averaging 30 ft. in height and 12" diameter. Very common in dry Pacific coast highland areas above 4000 ft. Yellow flowers produced in January.

Anacardium excelsum (Bert. & Baldb.) Skeels — Anacardiaceae — "Espave", "Espave mulato", "Espave prieto", "Wild Cashew" — Very common large trees averaging 80 ft. in height and 4-5 ft. in diameter. Wood described as of "medium density, rather cross grained, fairly coarse-textured, tough and strong, color variable from yellowish to reddish brown". (Kluge). Used locally for dugouts and household utensils. The terminal clusters of tiny tan flowers are produced from February to April, the white branchings rachis rendering them conspicuous. The clove-like fragrance is very pronounced and noticeable for a considerable distance from the trees.

Anacardium occidentale L. — Anacardiaceae — "Marañón" "Cashew" — Small, gnarled trees, to about 25 ft. and 10" diameter. Common to roadsides on the dry Pacific slope. Probably not native, but very widely distributed. The fleshy red or yellow fruits are produced from December to about June.

Andira inermis (Sw.) HBK — Leguminosae — "Cocu", "Cabbage Bark", "Pílón", "Almendro", "Carne Asada" — Often low, round-topped trees 30 ft. to 60 ft. in height and 12-15" in diameter. Common to the dry Pacific coast of Panamá below about 2,000 ft. The terminal clusters of lavender flowers are produced from February to April. Wood variable in color from yellowish to very dark brown, being close-grained, hard, heavy, tough, strong and durable. Takes a high polish.

Andira jamaicensis (Wright) Urban — Leguminosae — Trees, to 45 ft. and 12" diameter. Known in Panama only from El Valle de Anton but probably also in the Atlantic coast forests. The rose-pink flowers are produced in May.

Andira sp. aff. *A. vermifuga* — Leguminosae — "Amargo" — Tall trees, to 90 ft. and 36" diameter. The pale lavender flowers are produced from January to March, while the trees are leafless. Wood light brown, with a rather prominent grain, hard, heavy, durable.

Anime — See *Protium sessiliflorum*.

Annona glabra L. — Annonaceae — "Anon de Puerco" — Small trees, to 30 ft. and about 10" diameter, infrequent on fringes of Mangrove swamps.

Annona purpurea Moc. & Sessé — Annonaceae — "Guanábana Torete" — Trees, to 40 ft. and about 12" diameter, common to the Pacific coast forests.

Annona reticulata L. — Annonaceae — "Anon" — Taboga Island.

Annona spraguei Safford — Annonaceae — "Negrito", "Chirimoya".

Anon — See *Annona reticulata*.

Anon de Puerco — See *Annona glabra*.

Antirrhoea trichantha (Gris.) Hemsl. — Rubiaceae — “Candela” — Infrequent trees of the Pacific slope, averaging 30 ft. in height and 12” diameter. The wood is described by Kluge as “rather light, firm, of the consistency of tupelo, fairly straight-grained, yellow-brown.”

Apeiba aspera Aubl. — Tiliaceae — “Peinecillo”, “Monkey Comb” — Tall trees of the Atlantic slope forests averaging 80 ft. in height and 24” in diameter. The wood is described as being “White, light and soft” (Record).

Apeiba tibourbou Aubl. — Tiliaceae — “Cortezo”, “Cortez”, “Peinecillo”, “Monkey Comb” — Low trees, common to second growth scrub of the Pacific slope, averaging 30 ft. in height and 10” in diameter. The wood is identical for practical purposes with that of *A. aspera*.

Arcabu — See *Zanthoxylum* sp.

Ardisia compressa HBK — Myrsinaceae — Shrubs of trees to 65 ft. Fairly frequent in Chiriqui at about 5,000 ft. The white flowers are produced in January.

Ardisia revoluta HBK — Myrsinaceae — “Uvito”, “Fruta de Pava”, “Margarita” — Shrubs or small trees, to 20 ft. The white flowers are borne in conspicuous paniced racemes.

Ariza — See *Brownea macrophylla*.

Aroma — See *Acacia farnesiana*.

Arracheche — See *Mouriria parvifolia*.

Aspidosperma megalocarpon Muell. Arg. — Apocynaceae — “Alcareto” — A light brown, fine grained, hard, heavy wood taking a high polish.

Astrocaryum Standleyanum Bailey — Palmae — “Black Palm”, “Palma Negra” — Common spiny palms of the Atlantic rain forest, and the Pacific forests of Darien and Chiriqui, averaging about 30 ft. in height and 6” in diameter. The clusters of orange fruits are pendent, usually ripening during the rainy season. The outer layer of the trunk is nearly black, being composed of many very closely compacted fibers. Some use is made locally of the wood for canes and fishing rods.

Astronium graveolens Jacq. — Anacardiaceae — “Zorro” — Large trees of the Pacific slope. The wood varies in color from light to dark brown, or reddish brown. Some specimens are nearly black. All are rather conspicuously marked with blackish bands or figures. The wood is hard and heavy, of a fine grain, taking a high polish.

Avicennia nitida Jacq. — Verbenaceae — “Mangle Salado” — Common trees of the mangrove swamps, sometimes reaching 75 ft. but usually averaging about 30 ft. The fragrant white flowers are produced in March. The wood is described as “brown or nearly black, heavy, hard and coarse” (Standley). The bark has some local use in tanning.

Azota Caballo — See *Zygia longifolia* = *Pithecolobium longifolium*.

Azote — See *Hampea panamensis*.

Azote Caballo — See *Pithecolobium Vahlianum* = *Pithecolobium longifolium*.

Bagamani — See *Tapirira* sp.

Bala or Balo — See *Gliricidia sepium*.

Balsa — See *Ochroma lagopus*.

Bálsamo — See *Myroxylon balsamum* var. *Pereirae*.

Bambita — See *Ocotea veraguensis*.

Bambito — See *Ocotea cuneata* or *Ocotea veraguensis*.

Bambito Colorado — See *Ocotea* Whitei.

Bambú — See *Bambusa vulgaris* or *Guadua aculeata*.

Bambusa vulgaris Schrad. — Gramineae — “Bambú”, “Cañaza” — The common asiatic yellow clump bamboo, frequently planted in Latin America.

Baralazo — See *Matayba scrobiculata*.

Barba de Jolote — See *Pithecolobium Arboreum*.

Barillo — See *Symphonia globulifera*.

Barrigón — See *Bombax barrigón*.

Bateo — See *Carapa Slateri*.

Bauhinia pauletia Pers. — Leguminosae — Small trees, to 20 ft. Common to Pacific lowland scrub thickets. The greenish flowers are produced in November.

Belotia panamensis Pittier — Tiliaceae — Common forest trees, found to about 3000 ft. elevation, ranging from 35 to about 65 ft. in height. The attractive pinkish-lavender flowers are produced in November and December.

Berba — See *Helicostylis latifolia*.

Bernoullia flammea Oliv. — Borbacaceae — “yuca” — Large trees of the lowland forests with buttressed trunks and narrow crowns. flowers blood red, very showy when in bloom. The wood is described as “dull” oatmeal colored or brown, the rays showing prominently as dark flakes on the radial surface and giving a fine, lace-like appearance on the tangential. Very light in weight, but rather firm when dry; very coarse textured; does not finish smoothly; is perishable in contact with the ground” (Record). Frequent in lowland forest west of Puerto Armuelles.

Bixa Orellana L. — Bixaceae — “Achote”, “Achiote” Shrubs or small trees to 30 ft. and about 10” in maximum trunk diameter. The conspicuous flowers are pink. An orange dye is obtained from the scant pulp surrounding the seeds, which is sometimes used for coloring rice.

Black Calabash — See *Enallagma Cucurbitina*.

Black Manwood — See *Minquartia guianensis*.

Bloodwood — See *Pterocarpus officinalis*.

Black Palm — See *Astrocaryum Standleyanum*.

Bloodwood Cacique — See *Brosimum caloxylon*.

Robito — See *Quararibea asterolepis*.

Boca Vieja or Boca de Vieja — See *Posoqueria latifolia*.

Bogamani — See *Virola panamensis* (Hemsl.) Warb.

Bogamani — See *Virola panamensis*.

Bogamani Verde — See *Dialyanthera otoa*.

Bogum — See *Symphonia globulifera*.

Bombacopsis quinatum (Jacq.) Dugand — Bombacaceae — “Cedro Espinoso”, “Pochote”. Common trees of the Pacific slope, 25 to 60 ft. in height. Trunk and branches thorny. Deciduous during the dry season. The greenish bronze and white flowers are produced in March. The wood is described as “Light and soft, but tenacious, having much the consistency of “cedro” except that it is tougher; is straight-grained, rather coarse-textured, of red brown color” (Kluge).

Bombacopsis sessilis (Benth.) Pittier — Bombacaceae — “Ceibo Nuno” — Deciduous. Common lowland trees, to about 50 ft. Unarmed.

Bombax barrigón (Seem.) Decaisne — Bombacaceae — “Barrigón” — Deciduous. Very common lowland trees of the Pacific slope, averaging about 50 ft. in height. The lower trunks are much swollen, being normally double the diameter of the upper portion. The conspicuous white flowers are produced from January to March, while the trees are leafless. The wood is soft and useless.

Bonewood — See *Faramea occidentalis*.

Bongo — See *Cavanillesia platanifolia*.

Borajo — See *Posoqueria latifolia*.

Brauvaisia floribunda DC — Acanthaceae — “Mangle Blanco”, “Mangle de Agua”, “Palo de Agua” — Tree, to about 50 ft. often with stilt roots. The wood has no special uses.

Brosimum caloxylon Standl — Moraceae — “Bloodwood Cacique”, “Cuqua”, “Palo de Leche” — Trees, to about 40 ft. in height and about 12” in diameter. Chiriqui. The wood is described as “in various shades of rich lustrous red and yellow—very hard and heavy— texture rather fine to coarse; grain straight to variable; not difficult to work, finishing smoothly, taking a high polish.” (Record).

Brosimum panamensis (Pitt) Standl — Moraceae — See *Piratinera panamensis* for description.

Brosimum utile (HBK) Pittier — Moraceae — “Palo de Leche”, “Palo de Vaca” — Atlantic forest trees to 80 ft. in height and 24” in trunk diameter. The trunks are described as being nearly all sapwood, and apparently not utilized. The milky latex can be used for a milk substitute in small quantities, and was used for feeding slaves in South America in Humboldt's day.

Brownea macrophylla Linden. — Leguminosae — “Cuchillito”, “Ariza”, “Palo de la Cruz”, “Rosa del Monte” — Small trees of the Darien and Atlantic coast rain forests, rarely exceeding 30 ft. in height and 8” in trunk diameter. The very showy red flower clusters are produced from the old wood of the trunk and branches from January to April.

Bucida buceras L. — Combretaceae — “Amarillo”, “Marión” — Lowland forest trees, to 80 ft. and 3 ft. in trunk diameter. The “olive brown timber is highly valued locally for poles, posts, crossties, piling, and other durable construction”. (Record).

Bunchosia pilosa HBK — Malpighiaceae — “Cerezo de Monte” — Small trees, averaging about 35 ft. in height and 12” in maximum trunk diameter. The yellow flowers are produced in May, followed by orange-red fruits.

Bully tree — See *Hieronyma alchorneoides*.

Bumelia panamensis Standl — Sapotaceae — “Limoncillo”, “Caimitillo” — Rather infrequent trees of the Pacific coast, having a maximum height of about 50 ft. and 24” in trunk diameter. The wood is described as “hard and heavy, with a harsh feel, rather cross-grained, splintery, light reddish brown”. (Kluge).

Bunchosia glauca HBK — Malpighiaceae — “Cerezo” — Trees of the Pacific coast, 25 to 60 ft. in height, the larger trees being found in Chiriquí at about 5,000 ft. elevation. The yellow flowers are borne from January to July.

Burillo — See *Hampea panamensis* or *Guatteria chiriquiensis* or *Guatteria Allenii*.

Bursera Simaruba (L.) Sarg. — Burceraceae — See *Elaphrium* for description.

Bursera tomentosa Tr. & Pl. — Burceraceae — Pacific lowlands near Bejuco.

Byrsonima coriacea var. *spicata* (Calv.) Ndzu — Malpighiaceae — “Nance” — Trees 50 ft. in height and 12” in trunk diameter, seen only at about 3,000 ft. north of El Valle de Anton, although they are probably to be expected in the Atlantic coastal forests as well. The yellow flowers are produced in June.

Byrsonima crassifolia (L.) HBK — Malpighiaceae — “Nance”, “Nance blanco”, “Nance Colorado” — Usually evergreen — Rarely almost deciduous on rocky outcrops. Very common trees of the dry Pacific lowlands, averaging 30-40 ft. in height and about 12” in trunk diameter. They are covered with flowers in April, the effect being of an orange color, although on closer examination it will be found that the flowers open clear yellow, turning reddish brown with age. The wood is described as “dull reddish or pinkish brown, rather hard and heavy, strong and brittle. It is burned for charcoal and used to a small extent for construction purposes”. (Standley).

Cabazuelo — See *Stachyarrhena* sp.

Cabbage Bark — See *Andira inermis*.

Cabeza de Negro — See *Guazuma ulmifolia*.

Cachito — See *Myremcodendron* sp.

Cacique — See *Brosimum caloxylon* or *Diphysa robinoides*.

Cacique blanco — See *Eugenia* sp. var.

Cacique Carey — See *Piratinera panamensis*.

Caimitillo — See *Bumelia panamensis*.

Caimito — See *Chrysophyllum cainito* or *Chrysophyllum panamense*.

Cainillo — See *Miconia argentea*.

Calaba — See *Calophyllum longifolium*.

Calabash — See *Crescentia cujete*.

Calatola costaricensis Standl. — Icaciaceae — “Haguey” — Trees 25 to 40 ft. in height. Wood described as “cream-colored throughout when freshly cut, but soon changing to gray and finally purplish blue, suggesting Genipa, though eventually fading upon exposure to sunlight. Luster medium. Not very hard and heavy, texture medium, uniform; grain somewhat irregular; very easily worked; durability low” (Record).

Calderonia Klugei Standl. = *Sickingia Klugei* Standl. — “Palo Colorado” — Medium sized trees, with usually crooked trunks, found on low lands of the Bayano drainage which are subject to periodic flooding. The Wood is described as “hard and heavy, fine textured, straight grained, somewhat splintery. Color yellowish changing to decidedly pink” (Kluge).

Calocarpum mammosum (L.) Pierre. = *Pouteria*, fide Cronquist — Sapotaceae — “Mamey”, “Mamey de Tierra”, “Oabo” — Handsome trees, to 60 ft. or more in height and 24” in trunk diameter, frequently planted and often sub-spontaneous on the Pacific slope, being found to about 3,000 ft. elevation. The russet skinned fruits are much liked by the local people, being often offered for sale in the markets. The wood is described as “light colored when first cut, changing to light brown or buff, eventually acquiring a slight reddish tinge; —luster rather low— hard, heavy, tough and strong; texture medium; grain usually straight; working properties fair to good; durability doubtful”. (Record).

Calocarpum viride Pittier (?) — Sapotaceae — A closely related wild species (a tree 90 ft. in height.) has been recently found in the wet forests north of El Valle de Antón at about 3,000 ft., and is to be expected on the Atlantic coast. (Allen 3421),

Calophyllum brasiliense Var. *Rekoi* Standl. — Guttiferae — “María”, “Calaba” — Tall, straight trees of handsome appearance averaging 80 ft. in height and 18” in trunk diameter, occurring in great quantity in the forested hills between Panamá City and Chepo. The wood is white, close-grained, rather soft, light in weight, and moderately durable. It is much used in local construction.

Calycolpus glaber (Benth.) Berg. — Myrtaceae — “Guayabita Montaña” — Shrubs or small trees, to 12 ft. The smooth, reddish-brown bark resembles that of *Psidium*. The pale pink flowers are produced in May.

Calycolpus Warscewiczianus Berg. — Myrtaceae — “Guayabillo” — Shrub or small tree.

Calycophyllum candidissimum (Vahl.) DC — Rubiaceae — “Madroño”, “Alazano”, “Guayabo Alazano”, “Harino”, “Salamo” — Deciduous. Very common characteristic trees of the dry forest of the Pacific slope. They average from 40 to 75 ft. in height, the bark reddish-brown, and the trunks prominently ridged and twisted. The white flowers, subtended by broad white conspicuous bracts are produced from November to January. Wood yellowish white, with a beautiful close grain, being hard tough and durable. Sometimes used for supports in house construction.

- Camaroncillo -- See *Hirtella triandra*.
 Camiba -- See *Copaifera chiriquensis*.
 Camibar -- See *Copaifera chiriquensis* or *Prioria copaifera*.
Campnosperma panamensis Standl. -- Anacardiaceae -- "Orey"
 -- Atlantic Coast, common in mangrove, near Bocas del Toro. Forest
 trees, 65 ft. in height and 18-24" in diameter.
 Candela -- See *Antirrhoea trichantha*.
 Candelo -- See *Pittoniotis trichantha* or *Rondeletia platysepala*.
 Canelo -- See *Ocotea veraguensis*.
 Canillito -- See *Conostegia xalapensis*.
 Canillo -- See *Miconia argentea* or *Miconia caudata*.
 Canillo de Cerro -- See *Miconia argentea*.
 Caniva -- See *Copaifera chiriquensis*.
 Caña Brava -- See *Gynerium sagittatum*.
 Caña Fístula -- See *Cassia grandis* or *Cassia moschata*.
 Cañaza -- See *bambusa vulgaris* or *Gradua aculeata*.
 Caoba -- See *Swietenia macrophylla*.
 Caoba Blanca -- See *Swietenia macrophylla*.
Capparis isthmensis Eichl. = *Capparis cyhophallophora* L. --
 Capparidaceae -- Small trees, to 30 ft. The tan flowers are produced
 in March.
 Capulín Blanco -- See *Trema micrantha*.
 Capulín Macho -- See *Trema micrantha*.
 Caracucha -- See *Plumeria acutifolia*.
 Caraño -- See *Protium asperum* or *Zuelania Roussoviae*.
Carapa Slateri Standl. -- Meliaceae -- "Bateo", "Cedro Bateo",
 "Cedro Macho", "Saba" -- Tall trees of the Atlantic coast forests.
 The wood is described as "rather light to dark raddish brown; luster
 frequently low, sometimes golden, mostly of medium-low density, but
 firm and strong; texture rather coarse; grain generally straight, is
 durable". (Record).
 Carapato -- See *Hirtella triandra*.
 Carate -- See *Elaphrium simaruba*.
 Carba Suela -- See *Terminalia* sp.
 Carboncillo -- See *Terminalia obovata*.
 Carbonero -- See *Mosquitoxylon jamaicense* or *Oncoba laurina*.
 Carcuera -- See *Platypodium elegans*.
 Carne Asada -- See *Andira inermis*.
 Casaco -- See *Sloanea megaphylla* or *Sloanea platyphylla* or =
Sloanea medubsa.
Casearia arguta HBK or *Casearia corymbosa* HBK -- Flacourtiaceae --
 "Raspalengua" -- Small trees, to 66 ft. The white flowers
 are borne in December.
Casearia commersoniana Cam. -- Flacourtiaceae -- Small trees,
 to 25 ft. The white flower are borne in June.
 Cashew -- See *Anacardium occidentale*.
Cassia grandis L. f. -- Leguminosae -- "Caña Fístula" -- Tall
 spreading trees of the dry Pacific coast, average 50 ft. in height
 and 18" in trunk diameter. The conspicuous pink flowers are pro-

duced in the dry season, from February to April, followed by very large, dark brown woody seed pods. The wood is sometimes used locally for construction purposes.

Cassia moschata HBK — Leguminosae — “Caña Fistula” — Very common trees of the dry Pacific coast, averaging about 40 ft. in height, and 12” in trunk diameter. The orange flowers are borne in great profusion in pendant clusters from February to April, followed by long, slender dark-brown seed pods.

Cassia nicaraguensis Benth -- See *Chamaesenna nicaraguensis*.

Cassipourea elliptica Poir. -- Rhizophoraecae — “Goatwood” — Shrub or small tree, common in mangrove swamps.

Castaño — See *Sterculia apetala*.

Castilla panamensis Cook -- Moraceae — “Caucho Negro” — Tall trees, to 65 ft. in height and 18” in diameter, frequent in forest of both coasts to about 3,000 ft. Deciduous in dry situations. The coagulated latex has some local use in the waterproofing of rain capes and bags for carrying clothing.

Caivo — See *Prioria copaifera*.

Caucho — See *Perebea castellioides*.

Caucho Negro — See *Castilla panamensis* or *Castilla fallax* Cook.

Cautivo — See *Prioria copaifera*.

Cavanillesia platanifolia HBK -- Bombacaceae — “Cuipo”, “Bongo”, “Quipo” -- Deciduous. Enormous trees, to 100 ft. forming the dominant element in the Darien forest, and extending westward to about Bejuco. The inconspicuous brown flowers are borne in March, when the trees are leafless, being followed by winged fruits which go through a number of color phases in ripening, from pale green to tan, pink, red or brown. The dry wood is white, brittle, slightly lighter than Balsa, and has been considered as a substitute.

Cecropia sp. var. — Moraceae — “Guarumo” — Common slender trees, frequent in second growth. Almost entirely deciduous in dry situations. The hollow stems and trunks are inhabited by stinging ants.

.....*Cedrela fissilis* Vell. -- Meliaceae — “Cedro Dulce” — Common trees of the Pacific slope, to 60 ft. in height and 18” in diameter. One of the “Cigar box Cedars” of commerce.

Cedrela odorata Roem. -- Meliaceae -- “Cedro Amargo”, “Cedro Cebolla”, “Cedro Real Amargo” — Common trees, 30 to 60 ft. The fragrant white flowers are produced from June to August. The reddish brown wood is soft, easy to work, and durable. Much used locally for furniture and construction.

Cedro Amargo -- See *Cedrela odorata*.

Cedro Bateo -- See *Carapa Slateri*.

Cedro Cebolla - See *Cedrela odorata*.

Cedro Dulce -- See *Cedrela fissilis*.

Cedro Espinoso — See *Bombacopsis quinatum*.

- Cedro Macho — See Carapa Slateri.
- Cedro Real Amargo — See Cedrela odorata.
- Ceiba Allenii* Woods. — Bombaceae — Common spiny forest trees to 75 ft. in height and 24" in trunk diameter, found in highland forest north of El Valle de Anton and near Santa Fe in Veraguas at 2,500-3,000 ft. Deciduous during the dry season. They are sometimes strangler epiphytes, growing on other trees. The fleshy white flowers are produced in February and March.
- Ceiba pentandra* (L.) Gaertn. — Bombaceae — "Ceiba", "Ceibo" — Giant lowland trees, to 100 ft. in height and 6-8 ft. in trunk diameter.
- Ceibo or Ceiba — See *Ceiba pentandra*.
- Ceibo Nuno — See *Bombacopsis sessilis*.
- Cenizo — See *Chaetoptelea mexicana*.
- Centrolobium patinense* Pittier — Leguminosae — "Amarillo Guayaquil" — Medium sized to large trees.
- Cerezo — See *Bunchosia glauca*.
- Cerezo de Monte — See *Bunchosia pilosa*.
- Cerillo — See *Clusia Coclensis* Standl. or *Symphonia globulifera*.
- Cero — See *Symphonia globulifera*.
- Cespedesia macrophylla* Seem — Ochnaceae — "Membrillo" — Tree, 45-75 ft. in height and to about 30" in trunk diameter. Very showy yellow flowers produced in late September. Wood brown, hard and heavy — common in wet forests of the Atlantic slope, to about 3,000 ft.
- Cestrum Baenitzii* Lingelsh. — Solanaceae — Trees, to 30 ft. The white flowers are produced in December.
- Chaetoptelea mexicana* Liebm. — Ulmaceae — "Cenizo" — Giant trees, 65 ft. to over 100 ft. Chiriqui highlands, above 5,000 ft. The wood is dark brown, and is used locally for railway crossties and construction.
- Chalcas exótica* (L.) Millsp. = *Murraya paniculata* L. — Rutaceae — "Mirto" — Shrubs or small trees of Asiatic origin frequently planted for ornament, or persistent near sites of former houses.
- Chamaesenna nicaragüensis* (Benth.) B. & R. = *Cassia nicaragüensis* Benth. — Leguminosae — Slender trees, 25 to 30 ft. infrequent in Pacific dryland coastal thickets. The very conspicuous yellow flowers are produced from November to February.
- Chaperno — See *Lonchocarpus lucidus*.
- Chicharrón — See *Hirtella triandra*.
- Chirimoya — See *Annona Spraguei*.
- Chloroleucon tortum* (Mart.) Pittier — Leguminosae — "Espino Amarillo" — Small, low branched trees. Wood described as "golden brown to greenish yellow-brown, with a waxy appearance. Firm, hard, fine texture, of interlocking grain, easy to cut, finishes very smoothly with a high natural polish and is durable" (Record).

Chlorophora tinctoria (L.) Gaud. — Moraceae — “Mora”, “Palo de Mora”, “Macano” — Common trees, to 60 ft. in height, in lowland thickets. The wood is described as “light yellow”, close grained, strong and tough, taking a high polish. It is employed for furniture rail road ties and other purposes”. (Standley).

Chorcha de Gallo — See *Pogonopus speciosus*.

Choyba — See *Helicostylis latifolia*.

Chrysophyllum cainito L. — Sapotaceae — “Caimito”, “Star Apple” — Tall, handsome trees, to 75 ft. probably native of the West Indies, but widely cultivated and naturalized. The wood is pinkish, or reddish brown, hard, heavy and durable, and is used locally for construction purposes.

Chrysophyllum Panamense Pittier. — Sapotaceae — “Caimito”, “Star Apple” — Common trees, to 60 ft. El Valle de Antón, above 2,000 ft.

Chumico — See *Curatella americana*.

Cierito — See *Mouriria parvifolia*.

Cinco Dedos — See *Quaribea asterolepis*.

Ciruella — See *Spondias purpurea*

Citharexylum caudatum L. — Verbenaceae — “Manglillo” — Shrub or small tree, to about 30 ft., common to the lowlands of both coasts. The terminal pendent racemes of orange fruits following the small white flowers are attractive and conspicuous.

Citharexylum macradenium Greenm. — Verbenaceae — “Paloma” — Trees, to 60 ft. and 12” in trunk diameter, seen in fair quantity north of El Valle de Antón at about 3,000 ft. Probably also to be expected in Atlantic Coast forests. The conspicuous orange fruits are produced in November.

Citharexylum macranthum Pittier — Verbenaceae — “Corricente” “Iguanero” — Atlantic forest trees to 100 ft. in height and 20” trunk diameter. The wood is described as dirty yellow, hard and tough.

Citron — See *Suddia macrophyllata*.

Clethra lanata M. & G. or *Clethra Panamensis* Standl. & L. Wms. — Clethraceae — “Nance Macho” — Common highland trees, 30 to 75 ft. tall, frequent to the dry Pacific coast from about 1,500 to 6,000 ft. The largest specimens seen were in heavy forest near Cerro Punta in Chiriquí, and may represent a distinct species. The fragrant white flowers are produced in April and May. The wood is described as “brownish, with an olive tinge; merging gradually into the lighter-colored sapwood. Luster medium. — Has about the consistency of *Alnus*. — tough and strong, texture fine; feel rather harsh; grain straight to roey; easy to work, finishing smoothly; is poorly resistant to decay”. (Record).

Clusia coclensis standl. — Guttiferas — “Copey”, “Cerillo”, “Cupey”, “Sambogum”, “Tar Gum Tree” — Common shrubs to medium sized trees, often beginning as strangler epiphytes. All parts of the plant contain a yellow latex.

Coccoloba Caracasana or *Carasana uvifera* — Polygonaceae — “Uvero”, “Hueso”, “Papaturo Blanco”, “Uva de la playa” — Com-

mon shrubs to medium sized trees, or large trees common to both coasts, being found to about 3,000 ft. Among the most common are the familiar *C. uvifera* of the sea beaches, *C. manzanillensis* deciduous on rocky outcrops and very dry situations of the dry brushy Pacific slope, and *an unknown species 90 ft. tall* frequent in the wet forests north of El Valle de Antón.

Coco — Seed *Lecythis turyanae*.

Cocobolo — See *Dalbergia retusa*.

Cochlospermum vitifolium (Willd.) Spreng. — Cochlospermaceae — “Poropovo” Deciduous small trees, to about 25 ft. and 10” in trunk diameter, but usually smaller, common to second growth scrub. The very large and attractive yellow flowers are produced from December to April, being followed by conspicuous ovoid capsuls filled with a grey cottony down, which surrounds the seeds. The wood is soft, and no used seem to be made of it.

Coco de Mono — See *Couroupita darienensis*.

Coco Zapote — See *Couroupita darienensis*.

Cocu — See *Andira inermis*.

Cocua — See *Poulsenia armata*.

Cojoba rufescens (Benth) B. & R. = *Pithecolobium rufescens* (Benth) Pittier — Leguminosae — “Coralillo”, “Flor de Indio”, “Jarino” — Small trees of low to medium elevations on the Pacific slope, averaging about 30 ft. in height and 10” in trunk diameter. The greyish white flowers are produced in April and May, being followed by red twisted seed pods, which mature in October and November.

Colubrina glandulosa Perkins — Rhamnaceae — “Pichy Pang”, “Spanish Elm”, “Wild Coffee” — Shrubs or small trees, to 30 ft. — San Jose Island.

Comenegro — See *Lonchocarpus lucidus*.

Connarus panamensis Griseb. or *Connarus Williamsii* Britton — Connaraceae — Small trees, to 30 ft. fairly frequent on the Pacific coasts. The pale yellow flowers are produced in November.

Conocarpus erecta L. — Combretaceae — “Zaragoza”, “Mangle Piñuelo”, “Mangle Torcido” — Shrubs or small trees, to about 25 ft. common in Mangrove swamps. The wood is described as “greyish or yellowish-brown, fine grained, hard and heavy, used for general construction purposes and for charcoal”. (Standley).

Conostegia icosandra (Sw) Urban — Melastomaceae — Trees, to 65 ft., fairly frequent in the Chiriqui highlands above 5,000 ft. The white flowers are produced in January.

Conostegia xalapensis (Bonpl.) Don. — Melastomaceae — “Escobillo”, “Canillito”, “Dos Caras”, “Fruta de pava”; “Quicravangue”; “Quita Manteo”, “Raspa Lengua”. Very common trees, 25 to 35 ft. in height, found on the Pacific slope from sea level to about 4,000 ft. The white flowers are produced in April and May. The wood is described as “brownish, moderately dense, rather fine textured”. (Record).

Copa — See *Protium panamense*.

Copaifera chiriquense Pittier — Leguminosae — “Camiba”, “Camibar”, “Caniva” — Fairly common trees of the Pacific forests, to 100 ft. in height and 4 ft. in trunk diameter. The white flowers are produced in September.

Copaifera panamensis (Br.) Standl. — Leguminosae — Tree, 50 ft. — flowers white, fragrant, common along highway from Anton to Santiago de Veraguas. Flowering season July and August.

Cope — See *Clusia* sp.

Copete — See *Tecoma stans*.

Copey — See *Clusia coelensis*.

Conidijo — See *Virola panamensis* or = *Virola sebifera*.

Coralillo — See *Cojoba rufescens* or *Eugenia* sp. var.

Cordia alba (Jacq.) R. & S. — Boraginaceae — “Sabto” — Shrubs or small trees, to 30 ft., common to the dry Pacific Coast. The wood is described as “rather light, firm, rather fine textured, of the consistency of yellow poplar, straight grained, easy to work, pale brown”. (Kluge).

Cordia alliodora (R. & P.) Roem. & Schult. — Boraginaceae — “Laurel” or “Laurel Blanco” — Slender trees, 25 to 40 ft. very common to the lowlands of both coasts. The heavy terminal clusters of white flowers are produced from January to April. The wood is grey, firm, light and coarse-textured and is highly resistant to decay and insect attack.

Cordia heterophylla Roem. & Schult. — Boraginaceae — “Paico” — Low spreading trees, rarely exceeding 30 ft. in height, common to the second growth scrub of the Pacific coast.

Coriente — See *Citharexylum macranthum*.

Cornudo — See *Swartzia darienensis*.

Cornutia grandifolia var. *normalis* (Kuntze) Moldenke — Verbenaceae — “Murciélago” — Trees, common at intermediate elevations above 2,000 ft., to 30 ft. in height and about 10” trunk diameter. The blue flowers are produced from February to July.

Corobá — See *Xylopia macrantha*.

Corotu — See *Enterolobium cyclocarpum*.

Cortez — See *Apeiba Tibourbou*.

Cortezo — See *Apeiba Tibourbou*.

Coumarouna oleifera (Benth.) Taub. — Leguminosae — “Almendro” — Common forest trees of both coasts, often exceeding 100 ft. in height and 3 ft. in trunk diameter. The terminal panicles of pink flowers are conspicuous. The wood is yellowish to reddish-brown, with interwoven grain, very hard and heavy, resembling *Guayacan*; difficult to work, but very durable. Much used locally for ships work, and other durable construction.

Couratari panamensis Standl. — Lecythidaceae — Tall trees with showy pink flowers, to 100 ft. Known in Panama only from the Cricamola Valley, Bocas del Toro Province.

Courbaril — See *Hymenaea courbaril*.

Couroupita darienensis Pittier — Lecythidaceae — “Coco de Mono”, “Coco Zapote” — Giants trees, exceeding 100 ft. in height and 4 ft. in trunk diameter, fairly frequent in the lowlands of Darien province. The reddish-brown flowers and russet-brown cannon-ball-like fruits are borne on the upper trunk and branches.

Couroupita odoratissima Seem. — Lecythidaceae — “Granadillo”, “Palo de Paraiso” — Tall trees, 60 to 80 ft. in height. The fragrant flowers are produced on short woody branching stems directly from the lower tree trunk.

Crataeva Tapia L. — Cappariaceae — “Palo de Guaco”, “Estrella” — Small trees of the Pacific coast, sometimes reaching 50 ft. in height and 18” in trunk diameter. The wood is described as “white or yellow, moderately hard, of medium texture; suitable for minor carpentry” (Record).

Crescentia cujete L. — Bignoniaceae — “Totumo”, “Calabash” — Low spreading trees frequent in pastures and about townsites of the Pacific slope. The tough wood has some local use for boatbuilding, saddle-trees, firewood and charcoal.

Criollo — See *Minquartia guianensis*.

Croton panamensis (Klotzsch) Muell. Arg. — Euphorbiaceae — “Sangrillo” — Common spreading trees of both coasts, from 30 to 65 ft. in height, ascending to about 2,500 ft. The white flowers are produced from September to January.

Crucete — See *Quassia amara*.

Cuajada — See *Vitex Cooperi*.

Cuajado — See *Vitex floridula* or *Vitex Masoniana*.

Cuchillito — See *Brownea macrophylla*.

Cuernito — See *Myrmecodendron*.

Cuipo — See *Cavanillesia platanifolia*.

Cupania cinerea Poepp. — Sapindaceae — “Gorgojo blanco” — Shrubs or small trees, to about 30 ft., common to the forests of both coasts.

Cupey — See *Clusia* sp.

Cuqua — See *Brosimum caloxylon*.

Curatella americana L. — Dilleniaceae — “Chumico” — Small, gnarled trees, rarely exceeding 20 ft. in height, common on the dry grasslands of the Pacific slope, ascending to about 2,000 ft. The greenish-white flowers are produced from January to April.

Cutaro — See *Swartzia darienensis*.

Dalbergia retusa Hemsl. — Leguminosae — “Cocobolo” — Medium sized trees to about 60 ft. of the lowland forests. The greyish-white flowers are produced in March and April. The wood is dark-reddish-brown to nearly black, close grained, exceedingly hard and heavy, and very durable.

Dendropanax arboreum L. Decaisne & Planch — Araliaceae — “Vaquero” — Small trees, to about 30 ft., common to Pacific coast thickets.

Desmoncus isthmius Bailey — Palmae — “Matamba” — Slender spiny climbing palms, to about 30 ft. in height and 2” in diameter, common to forests of both coasts. It would seem probable that the hard, uniform canes might be used for the manufacture of furniture in the same way that the Asiatic genus of climbing palms, *Calamus* is used in the Philippines.

Dialium guianense (Aubl.) Sandw. — Leguminosae — “Fría”, “Monkey apple”, “Tamarindo de montaña”, “Sangrillo negro” (Chiriqui) — Lowland trees, to 80 ft. in height and 24” in trunk diameter. The wood is described as “brown or reddish-brown, becoming darker upon exposure; luster medium. Very hard, heavy, tough and strong; — texture medium, grain interwoven, not very difficult to work; finishing smoothly; is highly durable. Used locally for fence and house posts, bridge timbers, railway cross-ties etc”. (Record).

Dialyanthera otoa (H. & B.) Warb. — Myristicaceae — “Bogamani verde”, “Saba”, “White Cedar” — Common highland trees, 60 to 90 ft. in height and 24” in diameter. The wood is described as “pinkish brown, light and soft, — straight grained; very easy to work, holds nails firmly, but is not durable”. (Record).

Didymopanax Morototoni (Aubl.) Decaisne & Planch. — Araliaceae — “Mangabe”, “Gargoran”, “Pavo”, “Pavilla” — Common forest trees, to 90 ft., but more frequently seen as smaller specimens in second growth along roads. The light wood has some local use for carpentry, and for boxes. It is described as “greyish or pale brownish throughout, luster medium. Variable in density from rather light and soft to moderately heavy and hard — texture medium to rather fine, grain mostly straight, easy to work, finishing smoothly. Poorly resistant to decay”. (Record).

Dipholis minutiflora Pittier — Sapotaceae — “Nispero Amarillo” — Trees, 60 ft. Seen only on Campana Hill, at about 2,000 ft. elevation. The pale greenish yellow flowers are produced in December.

Diphysa robinioides Benth. — Leguminosae — “Macano”, “Cacique”, “Guachapali” — Deciduous. Very common trees of roadsides and pastures of the dry Pacific coast, to elevations of about 2,500 ft., averaging 25-40 ft. in height and 12” in trunk diameter. The conspicuous yellow flowers may be produced from November to March. Wood greenish or whitish yellow, sometimes turning olive, hard, tough and long grained. Very durable in contact with the ground, or in the water.

Dipterodendron costaricense Radlk. — Sapindaceae — “Jarino” — Small to medium sized Pacific lowland trees, to 65 ft. in height. The wood is described as “moderately dense, strong, readily worked, pinkish or brownish — sparingly utilized because of the scarcity of larger sizes”. (Record).

Dos Caras — See *Conostegia xalapensis* or *Miconia argentea* or *M. caudata*.

Duranta repens L. — Verbenaceae — “Espino de paloma”, “Varita de San José” — Large shrubs, common to the dry Pacific coast. The small blue flowers are followed by conspicuous orange fruits.

Dussia macrophyllata (D.Sm.) Harms — Leguminosae — “Ci-iron” — Reported as tall trees, native of Panamá and Costa Rica.

Elaphrium simaruba (L.) Rose = *Bursera Simaruba* (L.) Sarg. — Burseraceae — “Almácigo”, “Carate”, “Indio desnudo”, “Jiñote”, “Gumbolimbo”. Deciduous — Very common small to medium sized trees of the dry Pacific coast, averaging about 25 ft. in height and perhaps 10” in trunk diameter. They are conspicuous by reason of their green, or reddish brown smooth bark which apparently continually renews itself, peeling off in thin papery sheets. Very commonly used for living fence posts. The trees are deciduous during the dry season. In virgin forest stands the trees may reach 60 or more feet, and 24” in diameter. The white, rather soft wood has been used in the West Indies for the manufacture of boxes.

Enallagma cucurbitina (L.) Baill. — Bignoniaceae — “Totumito”, “Totumillo”, “Black Calabash” — Small trees; 20-25 ft. in height, common to Atlantic coastal thickets. The fruits are small, hard, and gourd-like. The wood is described as “pale brownish with an orange hue upon exposure. Luster medium. Moderately hard and heavy; texture coarse, grain variable, easy to work; poorly resistant to decay”. (Record).

Encino — See *Quercus* sp.

Enterolobium cyclocarpum (Jacq.) Griseb. — Leguminosae — “Corotu”, “Genisero”, “Guanacaste”, “Jarina” — Deciduous — Large spreading trees, common to the dry Pacific coast, ascending to about 2,000 ft. Although they often reach 75 ft. in height, and four or five feet in trunk diameter, the branching habit is low; so that clear trunks exceeding 25 ft. are rare. The trees are deciduous for most of the dry season. The brown or reddish brown heartwood somewhat resembles walnut, and has been marketed in the United States in small quantities as Central American or Mexican walnut.

Enterolobium Schomburgkii Benth — Leguminosae — “Guabino” — Tall slender tree, to 75 ft., with white flowers, known in Panamá only from hills near Pacora (Cerro Jefe) at about 2,000 ft.

Erblichia odorata Seem. — Turneraceae — Atlantic forest trees, to 90 ft. in height and 36” in diameter, ascending to 3,000 ft. in the mountains north of El Valle de Antón. The large yellow flowers are produced in May. The wood is described as “pale brownish throughout — except for dark brown areas about wounds. Luster low. Of medium density but hard and tough; has about the consistency of *Liquidambar*; texture rather fine; grain straight to irregular; not difficult to work, finishing smoothly, cross grained material inclined to warp badly; presumably low in resistance to decay”. (Record).

Erythrina chiriquensis Krukoff — Leguminosae — Trees, to 90 ft. and 24” in trunk diameter seen only in the rain forests near Cerro Punta in Chiriqui Province, at about 7,000 ft. The salmon red flowers are borne in January. The light, soft white wood is poorly resistant to decay.

Erythrina glauca Willd. — Leguminosae — “Gallito”, “Palo Bo-bo”, “Palo Santo”, “Pito” — Very common trees; averaging about 30 ft. in height and 30” in trunk diameter, found mostly along water and on the margins of marshy land at sea level along both coasts, sometimes occurring as almost pure stands, as in the coastal swamps near Pacora. The showy orange flowers are produced from January to March. The wood is soft, white to yellowish in color, with an open grain, light in weight, but firm and tough. Poorly resistant to fungi and decay. Might be used for boxes.

Erythrina rubrinervia HBK. — Leguminosae — “Palo Sabre”, “Pernilla de Casa” — Deciduous — Small trees, to about 25 ft. in maximum height and 12” in trunk diameter, frequently planted as living fence posts. The pink or sometimes white flowers are produced from January to April.

Eschweilera panamensis Pittier — Lecythidaceae — “Ollito”, “Majagua de Indio”, “Mata Cansada”, “Olleto”. — Trees; to about 50 ft. in height and 12” in trunk diameter, fairly frequent on the Pacific slope to about 2,500 ft. elevation. The wood is pale olive in color. Several other species are known from the San Blas coast.

Escobillo — See *Conostegia xalapensis*.

Esenbeckia litoralis D. SM. — Rutaceae — Small tree of Chorrera llanos, where it is common.

Espave — See *Anacardium excelsum*.

Espave Prieto — See *Anacardium excelsum*.

Espino Amarillo — See *Chloroleucon tortum*.

Espino de Paloma — See *Duranta repens*.

Estrella — See *Crataeva Tapia* L.

Eugenia antiquae Riley or *Eugenia vallis* — Myrtaceae — “Paico” — Small trees, 18 to 25 ft., common to thickets of the dry Pacific slope to about 2,500 ft. elevation. The white flowers are produced from December to April and are followed by black, juicy fruits in May and June.

Eugenia Jambos L. — Myrtaceae — “Pomarosa” — Asiatic trees, to 50 ft. and 12” in trunk diameter, very widely planted and often naturalized in second growth forest.

Eugenia sp. var. Myrtaceae — “Cacique Blanco”, “Coralillo”, “Paico”, “Sequarra” — A number of species of this genus occur in Panamá, mostly in thickets of the Pacific slope. Most are of too small trunk diameter to be of commercial importance, only very common species, or those of timber size being mentioned here by specific name.

Eugenia Storkii Standl. — Myrtaceae — “Paico” — Trees, to 90 ft. seen only in Chiriqui highland forests above 6,000 ft. The white flowers are produced in January.

Eurya sp. = *Gleyera theaoides* (Sw.) Choisy aff. *E. Seemanniana* Pittier — Theaceae — “Sajinillito”, “Sajanillo”, — Trees to 90 ft.; seen only in the highlands of Chiriqui province above 6,000 ft. The white flowers are produced in January.

Faramia occidentalis (L.) Rich — Rubiaceae — “Huesito”, “Bonewood”, “Huesillo”. — Medium sized trees, averaging about 35 ft. in height, seen only in the forests north of El Valle de Anton at 3,000 ft., but probably to be expected in Atlantic coast forests. They produce their white flowers in June.

Feli — See *Pera arborea*.

Ficus sp. var. — Moraceae — “Matapalo”, “Higuerón”, “Higo”, “Igo”, “Nispero Blanco” — Many species of this genus occur in Panamá, at mostly low to medium elevations, where they may be stately trees over eighty feet in height such as *Ficus crassiuscula*, *Ficus eugeniifolia*, or *Ficus velutina*, or may be epiphytic strangler shrubs; starting in the upper forks of a host tree, and eventually enveloping and killing the host by the many interlocking aerial roots, which finally fuse into a more or less solid trunk. The wood is white, light and soft, and has no present known uses.

Flor de Indio — See *Cojoba rufescens*.

Flor de Mayo — See *Vochysia ferruginea*.

Fría — See *Dialium guianense*.

Frío — See *Saurauia* sp. var.

Friega Platos — See *Miconia argentea*.

Fruta de Mono — See *Posoqueria latifolia*, or *Pachira villosula* or *Rheedia madruno*.

Fruta de Murciélago — See *Posoqueria latifolia*.

Fruta de Pava — See *Ardisia revoluta* or *Conostegia xalapensis*.

Fruta Dorado — See *Virola panamensis*.

Fuchsia arborescens Simm — Onagraceae — Small trees, to 25 ft., very common in Chiriqui highland forests above 4,000 ft. The conspicuous purple flowers are produced in January and February.

Gallinazo — See *Jacaranda Copaia*.

Gallito — See *Erythrina glauca*.

Gallote — See *Lonchocarpus lucidus* or *Trophis racemosa*.

Gargoran — See *Didymopanax Morototoni*.

Gavilán — See *Pentaclotbra macroloba*.

Genipa americana var. *Carulo* (HBK) Schum — Rubiaceae — “Jagua”, “Guayatil Colorado”, “Jagua Amarillo”, “Jagua Blanca”, “Jagua Colorado” — Common trees of the Pacific coast, averaging about 30 ft. in height, and 10” in trunk diameter, but sometimes double that size. The wood is sometimes used locally for interior construction, particular door frames.

Genisero — See *Enterolobium cyclocarpum*.

Glivicidia sepium (Jacq.) Steud. — Leguminosae — “Bala”, “Balo”, “Madre de Cacao”, “Mata Ratón” — Small common trees of the lowlands of the Pacific slope, averaging about 25 ft. in height, but sometimes reaching double that size. The pale pink attractive flowers may be produced from November to March. Very commonly planted for living fence posts. The timber is very durable, and has a considerable local use, limited mostly by the difficulty of securing large pieces. The wood is described by Record as “light olive brown.

deepening upon exposure — Luter rather low — Very hard, heavy tough and strong; texture coarse; grain irregular; not easy to work, but finishing very smoothly — highly resistant to decay”.

Goatwood — See *Sassipourea elliptica*.

Godmania aesculifolia (HBK) Standl. — Bignoniaceae — Tree to about 40 ft. in height. Flowers reddish brown. Collected near Summit, but occasional elsewhere.

Goethalsia meiantha (D. Sm.) Burret — Tiliaceae — “Guacima Blanca” — Trees, to 50 ft. in height and 16” in trunk diameter. The wood is described as “white or greyish, with a slight tinge of pink, knots — brown. Luster low. Light and soft — texture medium, feel soft, grain straight; easy to work, but saws rather wooly; subject to sapstain and perishable on contact with the ground”. (Record).

Gorgojillo — See *Miconia argentea*.

Gorgojo — See *Miconia argentea*.

Gorgojo blanco — See *Cupania cinerea*.

Gorgoran — See *Virola panamensis*.

Gossypium mexicanum Todaro — Malvaceae — “Algodón” — A very common shrub or small tree, to about 10 ft., frequent in brushy places of the Pacific lowlands. The soft white wood has no knots. Deciduous.

Gossypium tridens. Cook & Hubbard — Malvaceae — Small trees, to 18 ft. in height and 4” in trunk diameter. The conspicuous yellow flowers are produced in November.

Gouania polygama (Jacq.) Urban — Rhamnaceae — “Jaboncillo” — Common lowland trees, to 30 ft. The white flowers are produced in November.

Granadillo — See *Couroupita odoratissima*.

Grias Fendleri Seem. — Lecythidaceae — “Membrillo Macho”, “Jaguey”, “Tabaco” — Infrequent trees of the Atlantic lowlands forests. The flowers are white and are produced from the trunks, as in cacao.

Guabino — See *Etenrolobium Schomburgkii*.

Guachapali — See *Diphysa robinoides*.

Guachepelin — See *Diphysa robinoides*.

Guacima Blanca — See *Goethalsia meiantha*.

Guacimo — See *Guazuma ulmifolia*, *Luehea speciosa* or *Luehea Seemannii*.

Guacimo Colorado — See *Luehea Seemannii*.

Guacimo de Terneño — See *Guazuma ulmifolia*.

Guacimo Molinillo — See *Luehea speciosa* or *Luehea Seemannii*.

Guadua aculeata Rupr. — Gramineae — “Bambú”, “Cañaza” — Tall spiny clump bamboos, averaging about 60 ft. in height and 3” in cane diameter, fairly common to stream banks in the dry Pacific lowlands. The canes are utilized locally to some extent for house construction, particularly in Chiriqui, and the Perlas Islands, and might be useful for supports for fruit clusters in Banana plantations.

Guaiacum officinale L. — Zygophyllaceae — “Guayacán”, “Iron Wood”, “Lignum Vitae” — Small to medium sized trees, averaging

about 30 ft. in height, and 12" in trunk diameter. The blue flowers are produced in March. Reported from Bocas del Toro Province. The wood is very hard, heavy, of a dark olive brown, being used to a considerable extent by the Panamá Canal for the manufacture of stern bearings for ships.

Guanábana Torete — See *Annona purpurea*.

Guanacaste — See *Enterolobium cyclocarpum*.

Guango — See *Samanea saman*.

Güapinol — See *Hymenaea Courbaril*.

Guarumo — See *Cecropia* sp.

Guatteria chiriquiensis R. E. Fries — Annonaceae — "Burillo" — Slender tree, to about 80 ft. in height, with green, fleshy flowers. Common in Chiriqui lowlands in rain-forest areas.

Guatteria Allenii R. E. Fries — "Burillo".

Guava — See *Inga spuria*.

Guava del Mono — See *Inga punctata*.

Guavito or Guabito — See *Quassia amara*.

Guavito Amargo — See *Quassia amara*.

Guavo — See *Inga eriorhachis* or *Inga laurina*, or *Inga marginata*.

Guavo Cimarrón — See *Oncoba laurina*.

Guayabillo. — See *Calycolpus Warscewiczianus* or *Quararibea asterolopis*.

Guayabita Arraijan — See *Psidium molle*.

Guayabita Montaña — See *Calycolpus glaber*.

Guayabito Asseyjan — See *Psidium molle*.

Guayabo — See *Quararibea asterolopis*.

Guayabo Alazano — See *Calycophyllum candidissimum*.

Guayabo Hormiguero — See *Triplaris americana*.

Guayacán — See *Guaiacum officinale* or *Tabebuia guayacan* or *Tabebuia chrysantha*.

Guayatil Blanco — See *Genipa americana*.

Guayatil Colorado — See *Sickingia Maxonii* Standl.

Guayaba Peluda — See *Psidium guajava*.

Guazuma ulmifolia Lam. — Sterculiaceae — "Guacimo". "Cabeza de Negrito", "Guacimo de Ternero" — Very common lowland trees, to 65 ft. in height and 24" in diameter, found in pastures, brushy places, and dryland forest generally. Has some use in local carpentry, and could be used for boxes etc.

Gumbolimbo — See *Bursera Simaruba*.

Gustavia superba (HBK) Berg. — Lecythidaceae — "Membrillo" — Very common small trees to about 40 ft, and 10" in trunk diameter, found throughout the lowlands to about 2,000 ft. The large, fleshy pink flowers are produced from the old wood of the branches from January to June.

Gyminda Tonduzii Loes. — Celastraceae — Trees, to 65 ft., seen only in the highlands of Chiriqui above 5,000 ft. The white flowers are borne in January.

Gynerium Sagittatum (Aubl.) Beauv. — Gramineae — "Caña Brava" — Very common stout lowland grasses, to 18 ft. in height, and about 1" in cane diameter, considerably used locally for walls of houses.

Habillo — See *Hura crepitans*.

Haguey — See *Calatola costericensis*.

Hamelia auxillaris Sw. — Rubiaceae — Trees, to 30 ft. and 10" in trunk diameter, seen only north of El Valle de Anton at 3,000 ft., but probably to be expected in Atlantic coast forest. The orange flowers are produced in May.

Hampea panamensis Standl. — Rubiaceae — "Azote", "Burillo" — Small trees, to 50 ft. The white flowers are produced in July.

Harino — See *Calycophyllum candidissimum* or *Cojoba rufescens*.

Helicostylis latifolia Pittier — Moraceae — "Berba", "Choyba". "Querendo" — Fairly common Atlantic forest and Darien trees, to 65 ft. The fine-grained strong wood is used locally for making canoes, according to Standley.

Heliocarpus popayanensis HBK — Tiliaceae — "Majaguillo". — Very common trees of low to medium elevations, averaging about 40 ft. in height. The white flowers are followed by conspicuous pink fruits in February and March. The light, soft, white wood has no known uses.

Heliocarpus rudis E. Watson — Tiliaceae — "Majaguillo" — Trees, to 95 ft., seen only in Chiriqui Province above 6,000 ft. The inconspicuous green flowers are produced in January.

Herrania purpurea (Pittier) R. E. Schultes — Sterculiaceae — Small trees of wet lowlands forests. Often listed as *Theobroma purpureum* Pittier.

Hibiscus tiliaceus L. — Malvaceae — "Majagua", "Algodoncillo", "Mahoe" — Shrubs or small trees, to about 25 ft., common to sea beaches. The handsome flowers are produced nearly throughout the year, opening yellow in the morning, and turning reddish-brown by afternoon. Usually too small to supply useful timber.

Hieronyma alchorneoides Allen. — Euphorbiaceae — "Pantano", "Bully Tree", "Palo Chanco", "Pilón"; "Zapater" — Common forest trees, to 90 ft. in height and 3 ft. in trunk diameter. The wood is described as "very dark brown or reddish brown, often exuding a blackish sap when freshly cut. Luster low. Rather hard and heavy; — texture medium to coarse, sometimes uneven, grain more or less roey; not easy to cut or split, finishing smoothly; require care in seasoning to prevent warping; has rather high durability. Used for posts, railway cross-ties, miscellaneous construction and sometimes for furniture". (Record).

Higo — See *Ficus* sp.

Higuerón — See *Ficus* sp.

Himatanthus articulata (Vahl) Woodson = *Plumeria articulata* (Vahl) Apocynaceae — "Wild Jasmin" — Slender trees, 15 to 80 ft. height. The wood is described by Record as "yellowish brown".

Variable in shade, luster medium to low. Density mostly medium; texture fine to medium; easy to work, finishing smoothly. Poorly resistant to decay. Ranges southward to the Amazon.

Hippomano mancinella L. — Euphobiaceae — “Manzanillo”, “Manzanillo de playa” — Very common round-topped handsome trees, to 50 — 60 ft. in height and 3 ft. in trunk diameter, found along sea beaches of both coasts. The small green fruits resemble crab apples, but are poisonous if eaten. The yellowish brown wood resembles walnut, and can be similarly used for fine cabinet work. The trunks are charred before felling, to avoid poisoning by the acrid sap.

Hirtella triandra Swartz — Rosaceae — “Camaroncillo”, “Carapato”, “Chicharrón” — Small trees, to 30 ft. in height and 12” in trunk diameter. The pale brown wood is hard, heavy, rather splintery; cross grained, of medium texture. (Kluge). Pacific lowlands.

Hormigo — See *Triplaris americana*.

Huesillo — See *Faramea occidentalis*.

Huesito — See *Faramea occidentalis*.

Hueso — See *Coccoloba* sp.

Huevo de Gato — See *Tabernaemontana grandiflora* or *Tabernaemontana pendula*.

Huevo de Mono — See *Posoqueria latifolia*.

Huevos de caballo — See *Stemmadenia Donnell-Smithii*.

Huevos de Gato — See *Pterocarpus officinalis*.

Hura crepitans L. — Euphorbiaceae — “Javillo”, “Habillo”, “Nune”, “Sandbox”, “Tronador”; “White Ceear” — Common thorny trees, to about 60 ft. in height and 24” in trunk diameter, frequent in lowland forest of the Pacific slope. The red flowers are followed by green, woody pumpkin-like fruits which explode violently, scattering the seeds. The light, soft, white; yellow or brown wood is adapted to interior construction and general carpentry, and might be used for boxes and crates.

Hymenaea Courbaril L. — Leguminosae — “Algarrobo”, “Güapinol”, “Courbaril” — Common trees of the dry Pacific slope, ascending to about 2,000 ft. They average about 50 ft. in height, and 12-14” in trunk diameter. The white flowers produced in April and May are followed by stout brown woody seed pods. The reddish-brown wood seed pods. The reddish-brown wood is very hard, heavy and durable and is used for railroad cross-ties and heavy durable construction.

Hyperbaena Allenii Standl. — Menispermaceae — Trees, to 45 ft. in height and 10” in trunk diameter, known only from the wet forests north of El Valle de Anton, at about 3,000 ft., but probably to be expected on the Atlantic coast. The inconspicuous green flowers are produced from February to May.

Igo — See *Ficus* sp.

Iguanero — See *Citharexylum macranthum*.

Indio — See *Schizolobium parahybum*.

Indio desnudo — See *Bursera Simaruba*.

Inga erriorhachis Harms. — Leguminosae — “Guayo” — Tall trees, to 90 ft., known only from highland forests in Chiriqui above 6,000 ft. The white flowers are produced in January.

Inga Hayesii Benth. — Leguminosae — “Guayo”, “Guamo” — Medium sized trees averaging 30 ft. in height, common to the Pacific lowlands. The white flowers are produced in July.

Inga laurina Willd. or = *Inga fagifolia* (L.) Willd. — Leguminosae — “Guavo” — Trees, to 65 ft., fairly common to Pacific lowland forests. The white flowers are produced in January and February.

Inga marginata Willd. — Leguminosae — “Guavo” — Common trees, to 45 ft. in height. The white flowers are produced in September.

Inga Paterna — See Paterno.

Inga punctata Willd. — Leguminosae — “Guava del Mono”.

Inga spuria Willd. — Leguminosae — “Guava” — Very common trees of the Pacific coast lowlands, from 45-60 ft. in height and about 12” in trunk diameter. The yellowish white flowers are produced from January to March.

Injerto de Montaña — See *Lucuma salicifolia*.

Ira Mangle — See *Ocotea Palmana*.

Iron Wood — See *Guaiacum officinale*.

Jaboncillo — See *Gouania polygama* or *Sapindus saponaria*.

Jacaranda copaia (Aubl.) Don — Bignonaceae — “Palo de Buba”, “Gallinazo” — Tall slender trees, locally frequent on the Atlantic slope, Darien, and the forested hills between Panama City and Chepo. The attractive blue flowers are produced in March and April. The trees average about 75 ft. in height, and 12-20” in trunk diameter. The white wood is firm, straight grained, easy to cut and work; and has been used for boxes and interior carpentry.

Jacaranda rhombifolia G. F. W. Mey — Bignonaceae — Trees, averaging about 60 ft., 18-24” diameter, rather common in Pacific lowland forests. The blue flowers — white spot in inner corolla — are produced in April on lateral inflorescences, while those of *J. copaia* are terminal. The fine textured, yellowish white wood is moderately hard and heavy, and easy to work.

Jagua — See *Genipa americana* = *Genipa Caruto*.

Jagua Amarilla — See *Genipa americana* = *Genipa Caruto*.

Jagua Blanca — See *Genipa americana* = *Genipa Caruto*.

Jagua Colorado — See *Genipa americana* = *Genipa Caruto*.

Jaguey — See *Grias Fendleri*.

Jarina — See *Enterolobium cyclocarpum*.

Jarino — See *Cojoba rufescens* or *Dipterodendron costarricense*.

Jaul — See *Almus acuminata*.

Javillo — See *Hura crepitans*.

Jiñote — See *Bursera Simaruba*.

Jobillo — See *Mosquitoxylon jamaicense*.

Jobito — See *Spondias purpurea*.

Jobo — See *Spondias mombin*.

Jobo de Lagarto — See *Sciadodendron excelsum*.

Juan de la Verdad -- See *Aegiphila anomala* or *Aegiphila martinicensis*.

Kenna -- See *Mouriria parvifolia*.

Lacunaria panamensis Standl. -- Quinaceae -- Trees, to 45 ft. The woody brown fruits are produced in August.

Lafocnsia puniceifolia DC -- Lythraceae -- "Amarillo Fruto", "Amarillo de Fruta" -- Tall trees, to 80 ft. and 3 ft. in trunk diameter, fairly frequent in Pacific lowland forests. The yellowish green flowers are produced in October and November. The wood is yellow, fine grained, hard, heavy and tough. Fairly easy to work; finishing well. Much used locally for housebuilding, interior ships work, etc.

Lagartillo -- See *Alibertia edulis*.

Laguncularia recemosa (L.) Gaertn. -- Combretaceae -- "Mangle Blanco" -- Shrubs to trees 60 ft. in height, and 20" in trunk diameter, common to the mangrove swamps. The wood is reddish brown hard, heavy and durable.

Laurel -- See *Cordia alliodora*.

Laurel Blanco -- See *Cordia alliodora*.

Lechoso -- See *Trophis racemosa*.

Lecythis sp. var. -- Lecythidaceae -- "Olla de Mono", "Negrito Colorado" -- Tall forest trees, seen only in the highlands north of El Valle de Anton, at about 3,000 ft. elevation. They average 90 ft. in height, and 3 ft. in trunk diameter.

Lecythis turyanae Pittier -- Lecythidaceae -- "Coco" -- Tall handsome trees, averaging 90 ft. in height, common to the Darien lowlands.

Lacmellea panamensis (Woods) Monachino -- Apocynaceae -- Tree 40-60 ft. in height, with thorny trunk and milky latex. The yellow fragrant flowers are produced in April. Often listed as *Zschokkea panamensis* Woodson.

Licania arborea Seem. -- Rosaceae -- "Raspa" -- Small to medium sized trees, averaging 30 ft. in height, common to the dry Pacific coast, ascending to about 2,500 ft. The white flowers are produced in March. Fairly common near Puerto Armuelles.

Licania platypus (Hemsl.) Fritsch. -- Rosaceae -- "Sangre" -- Very common trees of the dry Pacific coast, to 40 ft. in height and 20" in trunk diameter. The wood is described by Kluge as "hard and heavy, straight grained, rather coarse textured, splintery; fairly easy to work, of dull brownish color.

Lignum Vitae -- See *Guaiacum officinale*.

Limoncillo -- See *Bumelia panamensis* or *Sapindus saponaria*.

Lippia hemisphaeria Jacq. -- Verbenaceae -- "Mastranto" -- Shrubs, to about 15 ft. Common to the dry thickets of the Pacific grasslands.

Lippia Torresii Standl. or *L. Oxyphyllaria* (D. Sm.) Standl. -- Verbenaceae. -- "Mastranto" -- Trees, 45 to 65 ft., fairly common in the highlands of Chiriqui above 5,000 ft. The greenish yellow flowers are produced in January.

Lonchocarpus lucidus Pittier -- Leguminosae -- "Malvecino", "Chaperno", "Comenegro", "Gallote" -- Trees to 50 ft. and 12" in diameter, fairly frequent on the Pacific coast. The wood is described as "pale yellow, -- of medium texture -- rather hard and heavy". (Kluge).

Lozanella enantiophylla (D. Sm.) Killip & Morton -- Trees, 65 ft., known only from Chiriqui Province above 5,000 ft. elevation. The green flowers are produced in January.

Lucuma salicifolia HBK = *Pouteria campechiana* (HBR) Beahni -- Sapotaceae -- "Mameyito", "Mamecillo", "Injerto de Montaña" -- Trees, 40-50 ft., fairly common to the Pacific coast. The reddish-brown wood is hard, heavy and durable.

Lucea Seemannii Tr. & Pl. -- Tiliaceae -- "Guacimo", "Guacimo Molenillo" -- Common lowland forest trees, to 75 ft. in height and 24-30" in trunk diameter. The wood is described as "light and soft, of medium texture, straight grained, easy to work; pale brown, without luster". (Kluge).

Lucea speciosa Willd. -- Tiliaceae -- "Guacimo", "Guacimo Molenillo" -- Common lowland trees, to 50 ft. The rather large white flowers are produced in two fairly well defined seasons at the beginning and at the end of the rains.

Macano -- See *Chlorophora tinctoria* or *Diphysa robinoides*.

Macano Amarillo -- See *Diphysa robinoides*.

Machaerium microphyllum (E. Mey) Standl. -- Leguminosae -- Thorny trees, 20-25 ft., of the dry Pacific lowlands. The lavender flowers are produced in November.

Machari -- See *Rheedia edulis*.

Macrocnemum glabrescens (Benth.) Wedd. -- Rubiaceae -- "Palo Cuadrado" -- Atlantic forest and Darien trees, ascending to about 3,000 ft. They reach 60-75 ft. and about 24" in trunk diameter. The attractive rose pink flowers are produced from December to April.

Madera Negra -- See *Gliricidia sepium*.

Madre de Cacao -- See *Gliricidia sepium*.

Madroño -- See *Alibertia edulis*, *Amaioua corymbosa*, *Calyco-phyllum candidissimum* or *Rheedia edulis*.

Modroñ de Comer -- See *Alibertia edulis*.

Magnolia Allenii Standl. -- Magnoliaceae -- Very large trees, to 90 ft. averaging about 30" in trunk diameter, known only from the highland forests north of el Valle de Anton at 3,000 ft., although it is to be expected generally on the Atlantic slope. The large white flowers are produced in June and July. The wood is white, of straight grain, firm, and easy to work. Possibly referable to *Talauma*.

Magnolia sororum Seibert -- Magnoliaceae -- Trees, 60-75 ft. in height, known only from the highlands of Chiriqui at about 5,000 ft.

Mahoe -- See *Hibiscus tiliaceus*.

Mahogany -- See *Swietenia macrophylla*.

Majagua -- See *Hibiscus tiliaceus*.

- Majagua de Indio — See *Eschweilera panamensis*.
- Majaguillo — See *Heliocarpus popayanensis*, *Heliocarpus rudis*, or *Muntingia calabura*.
- Malagueta de Montaña — See *Virola panamensis*.
- Malagueto Hembra — See *Xylopia frutescens* or *xylopia Aromática*.
- Malagueto Macho — See *Xylopia xylopiodes* or *xylopia. Aromática*.
- Malvaviscus arboreus* Cav. — Malvaceae — Very common intermediate highland shrubs or small trees, to 18 ft. The attractive red flowers are produced during the dry season.
- Malvecino — See *Lonchocarpus lucidus* or *Sweetia panamensis*.
- Mamacillo — See *Quercus* sp.
- Mamecillo — See *Lucuma salicifolia*.
- Mamey — See *Calocarpum mammosum*.
- Mameycillo Colorado — See *Sloanea megaphylla*.
- Mamey de Cartagena — See *Mammea americana*.
- Mamey de Mono — See *Pachira villosula*.
- Mamey de Tierra — See *Calocarpum mammosum*.
- Mameyito — See *Lucuma salicifolia*.
- Mammea americana* L. — Guttiferae — “Mamey de Cartagena” — Erect, handsome trees, to 60 ft., native of the West Indies; planted in the lowlands, and sparingly naturalized, particularly on Taboguilla Island.
- Mamón — See *Melicocca bijuga*.
- Mancha-Mancha — See *Miconia argentea*.
- Mangabe — See *Didymopanax Morcotonii*, *Pourouma aspera* or *Sciandodendron excelsum*.
- Mangifera indica* L. — Anacardiaceae — “Mango” — Asiatic trees, frequently planted and often naturalized throughout the lowlands of Panamá.
- Mangle — See *Rhizophora mangle*.
- Mangle Blanco — See *Bravaisia floribunda* or *Laguncularia racemosa*.
- Mangle de Agua — See *Bravaisia floribunda*.
- Mangle Piñuelo — See *Conocarpus erecta*.
- Mangle Salado — See *Avicennia nitida*.
- Mangle Torcido — See *Conocarpus erecta*.
- Manglillo — See *Citharexylum caudatum*, *Ternstroemia Seemannii* or *Ternstroemia tepezapote*.
- Mango — See *Mangifera indica*.
- Manilkara chicle* Pittier — Sapotaceae — “Nispero” — Tree, to 50 ft. in height and 12” in diameter — Pacific lowlands and islands in Panama Bay. Fruits mature from February to July. (Often listed as *Achras calicola* Pittier).
- Manilkara darienensis* (Pittier) Standl. — Sapotaceae — “Nispero” — Fairly frequent trees, averaging about 75 ft. in height, found

in lowland forests of both coasts. Atlantic slope specimens may exceed 90 ft. and 3 ft. in trunk diameter. They are of considerable economic importance, being the source of the Balata exported from Panamá. The wood is reddish-brown, very hard, heavy and fine grained. It might be mentioned that the wooden beams which were still in reasonably good condition in the upper windows of the main tower of the ruins of Old Panamá, and which were replaced about 1941 were probably of this wood, having withstood more than two and a half centuries exposure to termites and the elements.

Mano de Mono — See *Pachira villosula*.

Manzanillo, or Manzanillo de Playa — See *Hippomano mancinella*.

Maragua — See *Poulsenia armata*.

Marañón — See *Anacardium occidentale*.

Margarita — See *Ardisia revoluta*.

María — See *Calophyllum brasiliense* var.

Marion — See *Bucida buceras*.

Mastate — See *Poulsenia armata*.

Mastranto — See *Lippia hemisphaerica* or *Lippia Torresii* or *Lippia oxyphylloria*.

Mata Cansada — See *Eschweilera panamensis*.

Matamba — See *Desmoncus isthmus*.

Matapalo — See *Ficus* sp. var.

Mata Ratón — See *Gliricidia sepium*.

Matayba scrobiculata (HBK) — Radlk. — Sapindaceae — Small trees, to 30 ft. fairly common on the dry Pacific coast and islands of Panamá Bay. The small white flowers are produced in March.

Matisia cordata H. & B. vel aff. — Bombacaceae — Large forest trees in hills north of El Valle de Anton, at about 3,000 ft. elevation.

Mayo — See *Vochysia ferruginea*.

Mecri — See *Vochysia ferruginea*.

Melicocca bijuca L. — Sapindaceae — “Mamón” — Trees, probably native of South America, to 50 ft. in height and 14” in trunk diameter, frequently planted for their fruit, and sparingly naturalized.

Membrillo — See *Gustavia superba* or *Cespedesia microphylla*.

Membrillo Macho — See *Grias Fendleri*.

Meriania panamensis Gleason — Melastomaceae — Trees 60 ft. in height.

Miconia argentea (Swartz) DC. — Melastomaceae — “Dos Caras”, “Canillo”, “Cainillo”; “Canillo de Cerro”; “Friega Platos”; “Gorgojillo”, “Gorgojo”, “Mancha-Mancha”; “Oreja de Mula”; “Palo Negro”, “Papelillo” — Very common trees of the dry Pacific coast, extending to second growth scrub of the Atlantic, and found to about 3,000 ft. elevation. They average 25-40 ft. in height and about, 6” in trunk diameter. The white flowers are produced toward the end of the dry season, from March to May.

Miconia Candata (Bonpl.) DC. — Dos Caras.

Minquartia guianensis Aubl. — Olacaceae — “Nispero Negro”, “Black Manwood”, “Criollo” — Trees, to 100 ft. in height; of lowland forests of both coasts, reaching a maximum of about 3 ft. in diameter. The wood is dark brown, very hard, and durable. It is used locally for railroad cross-ties, house posts, and other durable construction.

Mirto — See *Chalcas exotica* or *Murraya paniculata*.

Monkey Apple — See *Dialium guianense*.

Monkey Comb — See *Apeiba aspera* or *Apeiba Tibourbou*.

Mora or Palo de Mora — See *Chlorophora tinctoria*.

Mora oleifera (Tr.) Ducke — Leguminosae — “Alcornoque” — Very tall trees to 100 ft. in height, and 3 ft. in trunk diameter, sometimes forming nearly pure stands back of the mangrove swamps of the Pacific coast. The wood is reddish brown, hard, heavy, durable; and easy to work. Sometimes used for cross-ties, or other durable construction.

Morado — See *Peltogyne purpurea*.

Morillo — See *Trophis racemosa*.

Mosquitoxylon jamaicense Krug & Urb. — Anacardiaceae — “Jobillo”, “Carbonero” — Tall trees, to 80 ft. and 24” in trunk diameter, fairly frequent in Atlantic coast lowland forests. The wood is described as “pink, deepening to red-orange, with yellowish streaks — Fairly lustrous, moderately hard and heavy; texture rather fine, uniform; grain straight to very irregular; not very easy to work, but take a smooth finish; not highly resistant to decay”. (Record).

Mouriria parvifolia Benth. — Melastomaceae — “Arracheche”, “Cierito”, “Kenna”, “Solacra” — Small to medium sized Atlantic forest trees, to about 45 ft. The white flowers are produced in February.

Muntingia calabura L. — Elaeocarpaceae — “Pacito”, “Majaguillo” — Shrubs or small trees, to about 40 ft., fairly frequent in lowland forests. The wood is described as “pale brown, — fairly lustrous, — light — firm, very easily worked, finishing smoothly; poorly resistant to decay”. (Record).

Murciélago — See *Cornutia grandifolia*.

Murraya paniculata L. — See “Mirto”.

Myrcia sp. var. — Myrtaceae — “Pimiento” — Small trees, 12 to about 20 ft. Common to the dry, intermediate Pacific highland areas from 2,000 to about 4,500 ft.

Myrmecodendron sp. var. = *Acacia* — Leguminosae — “Cachito”, “Cuernito” — Common Pacific lowland “Bull Horn Acacias”, typically small trees, to 15 ft. and about 4” trunk diameter.

Myroxylon balsamum (L.) Harms. var. *Pereirae* (Royle) Harms. — See *Toluifera* for description.

Namagua — See *Poulsenia armata*.

Nance — See *Byrsonima coriacea* var. *spicata* or *Byrsonima crassifolia*.

Nance Blanco — See *Byrsonima crassifolia*.

Nance Colorado — See *Byrsonima crassifolia*.

Nance Macho — See *Clethra lanata* or *Clethra panamensis*.

Naranjillo — See *Swartzia darienensis*.

Nazareno — See *Peltogyne purpurea*.

Nectandra globosa Mez. — Lauraceae — “Sigua” — Shrubs or trees, to 45 ft., common to the Pacific coast lowlands. The fragrant white flowers are produced in February. The wood is described as “rather light and soft, rather coarse textured straight grained; easy to work, pale olive, lustrous”. (Kluge).

Nectandra panamensis Mez. — Lauraceae — “Sigua” — Trees, to 60 ft. and about 14” in trunk diameter, fairly frequent in pastures and Pacific lowland forest. The white flowers are produced in November.

Nectandra ramonensis Standl. or *Nectandra Salicina* C. K. Allen — Lauraceae — “Sigua” or “Sigua Canelo” — Small trees, seen only in Panamá at El Valle de Anton, at about 2,000 ft. elevation. The white flowers are produced in February.

Nectandra Whitei (Woods) Allen — See *Ocotea Whitei* for description.

Neca amplifolia D. Sm.

Neca Psychotrioides D. Sm. or *Neca laefevirens* Standl. — Nyctaginaceae — Trees, to 65 ft. in height, and about 12” in trunk diameter, seen in Panama only in the forested hills north of El Valle at 3,000 ft., but probably to be expected on the Atlantic coasts.

Negrilo — See *Annona Spraguei*.

Negrilo Colorado — See *Lecythis* sp.

Nispero — See *Manilkara darienensis* or *Achras calicola* or *Pouteria chiricana*.

Nispero Amarillo — See *Dipholis minutiflora*.

Nispero Blanco — See *Ficus* sp. var.

Nispero Colorado — See *Pouteria chiricana*.

Nispero Negro — See *Minquartia guianensis*.

Nipe — See *Sapium* sp. var.

Nune — See *Hura crepitans*.

Oabo — See *Calocarpum mammosum*.

Ochroma lagopus Sw. — Bombacaceae — “Balsa” — Very common lowland trees, to 60 ft. in height, and 3 ft. in trunk diameter. The large, conspicuous white flowers are produced from December to February. The white wood is one of the lightest known, and is used for plane models, rafts, and in refrigeration as a cork substitute.

Ocotea atirrensis Mez. & D. Dm. — Lauraceae — “Sigua” — Trees, to 45 ft. in height, fairly common near El Valle de Anton. The pale yellow flowers are produced in December.

Ocotea cuneata Mez. — Lauraceae — “Bambito” — Tall trees, to over 90 ft. and 24” in trunk diameter, frequent in Chiriqui highland forests above 5,000 ft. The wood is much used locally for general construction purposes.

Ocotea Endresiana Mez. — Lauraceae — Tall trees, to 90 ft. and 24" in trunk diameter, frequent in highland forests in Chiriqui at 7,000 ft. elevation.

Ocotea palmana Mez. & D. Sm. — Lauraceae — "Ira Mangle" — Tall trees, to 80 ft., fairly frequent in the highland forests north of El Valle de Anton, at 3,000 ft. elevation.

Ocotea veraguensis (Meissner) Mez. — Lauraceae — "Bambito", "Bambita", "Canelo", "Sigua Canelo" — Common trees, 30-75 ft., found from sea level to 6,000 ft. on the Pacific slope. The greyish white flowers are produced in February. Wood used for cabinet work.

Ocotea Whitei Woodson = *Nectandra Whitei* — Lauraceae — "Bambito Colorado" — Tall trees, to 90 ft., frequent in Chiriqui highland forests above 5,000 ft. The light reddish-brown wood much resembles Philippine mahogany, and is much used for local construction purposes. It finishes and works well, and makes very attractive furniture.

Ojoche Macho — See *Trophis racemosa*.

Oliganthes discolor (HBK) Sch. — Compositae — Trees, to 50 ft. The white flowers are produced in November.

Olivo — See *Sapium* sp. var.

Olivo Macho — See *Sapium thelocarpum*.

Olla de Mono — See *Lecythis* sp.

Olleto — See *Eschweilera panamensis*.

Ollito — See *Eschweilera panamensis*.

Olmedia aspera R. & P. — Moraceae — Small trees, 25-30 ft., seen in Panamá only north of El Valle de Anton, at 3,000 ft. elevation, but probably also in Atlantic forests. The fleshy green and orange flowers are produced in March.

Oncoba laurina (Presl) Warb — Flacourtiaceae — "Guavo Cimarrón", "Amarillo Carbonero", "Carbonero" — Small lowland trees; to 45 ft. The yellow wood is hard, heavy; and finishes well.

Oreja de Mula — See *Miconia Argentea*.

Oreopanax restitum A.C. Smith.

Oreopanax xalapensis (HBK) Dec. & Pl. — Araliaceae — Trees, 60 ft. in height, fairly frequent in Chiriqui highland forests at 7,000 ft. elevation. The white flowers are produced in January.

Orey — See *Campnosperma panamensis*.

Ormosia coccinea (Aubl.) Jacks. — Leguminosae — "Alcornoque", "Pernillo de Monte" — Tall trees; to 90 ft. and 3 ft. in trunk diameter, frequent in Atlantic lowland forests. The wood is reported as coarse and unattractive.

Ouratea lucens (HBK) Engler — Ochnaceae — "Wild Pigeon Plum" — Shrubs or small trees, to about 30 ft.

Pachira aquatica Aubl. — Bombacaceae — "Provision Tree" — Common small to medium sized trees, to 60 ft., of Atlantic coast tidal estuaries. The large russet fruits contain chestnut-like seeds which are sometimes eaten.

Pachira vilesula Pittier — Bombacaceae — “Fruta de Mono”, “Mamey de Mono”, “Mano de Mono” — Small to medium sized trees, to 60 ft., common to tidal estuaries of the vicinity of Chepo, and in Darien. The wood of both species is reported as useless.

Pacito -- See *Muntingia calabura*.

Paico — See *Cordia heterophylla*, or *Eugenia vallis*.

Palma Negra — See *Astrocaryum Standleyanum*.

Palo Bobo — See *Erythrina glauca*.

Palo Chanco — See *Hieronyma alchorneoides*.

Palo Colorado — See *Calderonia Klugei*.

Palo Cuadrado — See *Macrocnemum glabrescens*.

Palo de Agua — See *Bravaisia floribunda* or *Trinchanthera gigantea*.

Palo de Buba — See *Jacaranda copaia*.

Palo de Guaco — See *Crataeva Tapia*.

Palo de la Cruz -- See *Brownea macrophylla*.

Palo de Leche — See *Brosimum utile* or *Brosimum caloxylon*.

Palo de Paraiso — See *Couroupita odoratissima*.

Palo de Sal — See *Pelliciera rhizophorae*.

Palo de vaca — See *Brosimum utile*.

Palo de Velas — See *Parmentiera cereifera*.

Palo Malin — See *Vochysia ferruginea*.

Paloma — See *Citharexylum macrodenium*.

Palo Negro — See *Miconia argentea*.

Palo Sabre — See *Erythrina rubrinervia*.

Palo Santo — See *Erythrina glauca* or *Triplaris americana*.

Panamá — See *Sterculia apetala* or *Sterculia* sp.

Panama Redwood — See *Platymiscium pinnatum*.

Panopsis costaricensis Standl. — Proteaceae — Trees, to 60 ft., seen in Panamá only in the highlands of Chiriqui province above 5,000 ft.

Pantano -- See *Hieronyma alchorneoides*.

Papaturro Blanco — See *Coccoloba caraca'a* or *Coccoloba uvifera*.

Papelillo — See *Miconia argentea*.

Parathesis glabra D. Sm. — Myrsinaceae — Small trees, to 30 ft., seen in Panamá only in the highlands of Chiriqui province above 5,000 ft. The rose-pink flowers are produced in January.

Parathesis Seibertii Lundell — Myrsinaceae — Small trees, to 30 ft., known only from highland Chiriqui forests at 6,000 ft.

Parmentiera cereifera Seem. — Bignoniaceae — “Vela”, “Palo de Velas” — Small to medium sized bushy trees of the Atlantic lowland forests, rarely exceeding 40 ft. in height and 12” in trunk diameter. The fruits resembling long yellow wax candles are produced in abundance from the trunk and lower branches.

Paterno -- See *Swartzia panamensis* or *Inga paterna*.

Pavilla — See *Didymopanax morototoni*.

Pavo — See *Didymopanax morototoni*.

- Pegle — See *Vochysia ferruginea*.
- Peñecillo — See *Apeiba aspera* or *Apeiba Tibourbou*.
- Pelliciera rhizophorae* Pl. & Tr. — Theaceae — “Palo de Sal” — Small trees, to about 60 ft. and 12” in trunk diameter, common in mangrove swamps. The wood is not used, so far as known.
- Peltogyne purpurea* Pittier — Leguminosae — “Nazareno”, “Morado” — Tall trees of the lowland forests of Darien province, sometimes exceeding 100 ft. in height. The wood is dark purple, hard, heavy, close grained and durable.
- Pentaclotbra macroloba* (Willd.) Kuntze — Leguminosae — “Gavilán” — Very large trees of Atlantic lowland forests, sometimes exceeding 100 ft. in height. The wood is described as “rather dark brown, uniform or somewhat striped; luster medium to silky — hard, heavy, tough and strong, texture medium; grain straight to roey; easy to cut, inclined to chip in planing, but can be finished with a natural gloss”. (Record).
- Pentagonia macrophylla* Benth. — Rubiaceae — Trees, to 65 ft. in height and 12” in trunk diameter. Seen only in the wet forests north of El Valle de Anton at 3,000 ft.
- Pera arborea* Mutis — Euphorbiaceae — “Feli”, “Wild Olive” — Medium to large trees, fairly common in lowland forests. The strong white timber is reported by Standley as being used locally for construction purposes.
- Persea castilloides* Pittier — Moraceae — “Caucho” — Trees, 30 to 45 ft., reported from Bocas del Toro province by Pittier.
- Pernilla de Casa — See *Erythrina rubrinervia*.
- Pernillo de Monte — See *Ormosia caccinea*.
- Persca americana* Mill. — Lauraceae — “Aguacate” — Trees, 20 to 60 ft., cultivated or persistent in old clearings. The pale yellow flowers are produced in December, followed by the familiar “Avocado” fruits.
- Persca caerulea* R. & P. — Lauraceae — Trees, 30-40 ft., fairly frequent in the Pacific lowlands, to about 2,000 ft. The white flowers are produced in May.
- Persca Schiedeana* Nees — Lauraceae — “Aguacatillo” — Very large trees, exceeding 90 ft. in height, and 4 ft. in trunk diameter, common to Chiriquí highland forests above 6,000 ft. The wood is described as hard, but coarse and unattractive. It has some local use in construction.
- Phoebe costaricana* Mez. & Pittier — Lauraceae — “Sigua Blanca” — Small to medium sized trees, of common distribution throughout the country. The wood is very similar to that of *Nectandra*.
- Phyllocarpus septentrionalis* Donn. Sm. — Leguminosae — Tall trees, to 90-120 ft. in height of the wet lowland forest of the Atlantic coast. The blood-red flowers are very showy from a distance.
- Pichy Pang — See *Colubrina* sp.
- Pilón — See *Andira inermis* or *Hieronyma alchorneoides*

Pimiento -- See *Myrcia* sp.

Pinta Mozo -- See *Vismia dealbata* or *Vismia macrophylla*.

Piratinera panamensis Pittier = *Brosimum panamensis* (Pitt.) Standl. --- Moraceae --- "Cacique Carey" --- Trees, to 75 ft. in height and 24" in trunk diameter, known in Panamá only from forests of the San Blas coast. Closely related to the well known South American letterwood, which it resembles.

Piscidia piscipula (L.) Sarg. --- Leguminosae --- Trees 60-80 ft., in deciduous woodland near Madden dam.

Pithecolobium arboreum (L.) Urban --- Leguminosae --- Trees. to about 80 ft. Chiriqui lowlands.

Pithecolobium oblongatum Benth. --- Leguminosae --- Small trees, to 30 ft. in height, and 10" in trunk diameter, common to sea beaches. The white flowers are produced in December, followed by conspicuous red twisted seed pods.

Pithecolobium rufescens --- See Cojoba for description.

Pithecolobium saman --- See Samanea for description.

Pithecolobium vahlianum (DC) Benth. = *Pithecolobium longifolium* (H. & B.) Standl. --- Leguminosae --- "Azote Caballo" --- Small trees, to about 40 ft. and 18" in trunk diameter, frequent along the banks of streams in the lowlands. The very fragrant pink flowers are produced in November and December.

Pito --- See *Erythrina glauca*.

Pittoniopsis trichantha Griseb. --- Rubiaceae --- "Candelo" --- Small trees, to 30 ft., common to lowland thickets of the Pacific coast. The white flowers are produced in April.

Platymiscium pinnatum (Jacq.) Dugand --- Leguminosae --- "Quira", "Panama Redwood" --- Deciduous. Common lowland trees of both coasts, to 60 ft. in height and 18" in trunk diameter. The orange flowers are produced from December to April, while the trees are bare of leaves. The reddish-brown wood is irregularly and attractively striped, and is used for decorative furniture, and outdoor durable construction.

Platypodium elegans Vogel --- Leguminosae --- "Caracuera" --- Tall lowland trees, to 75 ft. in height and 4 ft. in trunk diameter. The wood is described as "hard, heavy, tough and strong; --- texture rather fine; grain somewhat roey, not difficult to work, finishing very smoothly, and taking a good polish". (Record).

Plumeria Rubra forma acutifolia (Ait.) Woods. --- Apocynaceae "Caracucha" --- Small to medium sized trees, deciduous, to about 40 ft. and 10" in trunk diameter, very common on rocky lowland hillsides of the dry Pacific coast to about 2,000 ft. elevation. The white or yellow wood is fairly hard, close grained, compact; and easy work. The fragrant conspicuous white flowers are produced from February to April, while the trees are leafless.

Pochote --- See *Bombacopsis quinatum*.

Podocarpus Allenii Standl. — Podocarpaceae — “Alfajillo” — Trees, to 75 ft. in height, and 30” in trunk diameter; very common on the slopes of Cerro Campana above 2,000 ft. The white or yellowish wood is firm, straight grained, and easy to work.

Pogonopus speciosus (Jacq.) K. Schum. — Rubiaceae — “Chorcha de Gallo” — Small trees, to about 25 ft., fairly common in lowland moist forest. The brownish wood is fine-textured, and easy to work. The broad blood red bracts subtending the flowers make them very conspicuous and attractive during December and January.

Pomarosa — See *Eugenia Jambos* or *Syzygium Jambos*.

Poroporo — See *Cochlospermum vitifolium*.

Posoqueria latifolia (Rudge) Roem. & Schult. — Rubiaceae — “Boca Vieja”, “Boca de Vieja”, “Borajo”, “Fruta de Mono”; “Fruta de Murciélago”, “Huevo de Mono” — Small trees, to 25 ft. in height and about 8” in trunk diameter. The conspicuous fragrant white flowers are produced at intervals throughout the year. Common throughout the lowlands to about 2,500 ft.

Poulsenia armata (Miq.) Standl. — Moraceae — “Cocua”, “Maragua”, “Mastate”, “Namagua” — Trees, to 100 ft. in height; having milky latex. The wood is described as “brownish, or oatmeal-colored upon exposure. Luster rather high. — Rather light in weight, but firm and tough; texture coarse; grain straight to irregular; saws woolly when fresh; easy to cut, but rather difficult to finish smoothly. is perishable on contact with the ground”. (Record).

Pourouma aspera Trecul. — Moraceae — “Mangabe” — Tall trees, to 75 ft., frequent in the Atlantic coast forests to about 3,000 ft.

Pouteria campechiana (HBK) Baehni. — Sapotaceae — See *Lucuma salicifolia* for description.

Pouteria chiricana Standl. — Sapotaceae — “Nispero” or “Nispero colorado” — Large tree of the Chiriqui lowlands.

Pouteria Schlerocarpa (Pitt.) Cronquist — Large tree of the San Blas coast.

Prioria copaifera Gris. — Leguminosae — “Cativo”, “Amansa Mujer”, “Cautivo”, “Camibar” — Tall; handsome trees; to 100 ft. in height, and 3-4 ft. in trunk diameter, occurring in nearly pure stands in low lying lands back of the mangrove swamps of both coasts. The light, firm, white or greyish brown wood is irregularly stained with dark grey or black from the numerous gum ducts. Extensively used for plywood.

Protium asperum Standl. — Burseraceae — “Caraño” — Trees, 30 to 65 ft. in height, and about 12” in trunk diameter, fairly frequent in forests to the Atlantic lowlands.

Protium panamense (Rose) I.M. Johnston — Burseraceae — “Copa” — Trees, 30-50 ft., fairly frequent in lowland forests of both coasts.

Protium sessiliflorum (Rose) Standl. — Burseraceae — “Anime”
Described as small to medium sized trees, along lowland river courses. The wood, according to Record, is “pinkish brown; used for kindling, as it ignites readily”.

Provision Tree -- See *Pachira aquatica*.

Psidium guajava L. — Myrtaceae — “Guayava Peluda” — Small trees, to about 30 ft. and 10” in trunk diameter, frequently planted for the fruit, and widely naturalized particularly in intermediate highland areas above 2,000 ft.

Psidium molle Bertol. — Myrtaceae — “Guayabita Arraijan”, “Guayabito Aseyjan” — Shrubs, to about 10 ft., common in pastures of the Pacific slope, to about 4,000 ft.

Psychotria panamensis Standl. or *Psychotria Allenii* Standl. — Rubiaceae — Trees, to 60 ft., seen in Panama only above 5,000 ft. in Chiriqui Province.

Pterocarpus officinalis Jacq. — Leguminosae — “Sangre de Drago”, “Bloodwood”, “Huevos de Gato” — Common trees of the tidal swamps of both coasts, to 60 ft. in height, and about 12” in trunk diameter. The sap is blood red, flowing freely when the bark is cut. The yellow flowers are produced in June. The wood is described as yellowish or whitish, moderately hard, compact; not difficult to work. (Record).

Puesilde — See *Quassia amara*.

Pu-pu-chiru -- See *Vitex masoniana* (Darien).

Quararibea asterolepis Pittier — Bombacaceae — “Guayabillo”, “Bobito”, “Cinco Dedos”, “Guayabo” — Trees; to about 45 ft.; from the Pacific lowlands near Chepo, probably also in Darien. The wood is described as “medium density, rather hard; nearly white; suggested holly”. (Kluge).

Quassia amara L. — Simarubaceae — “Guavito”, “Guabito”, “Crusete”, “Guevito Amargo”, “Puesilde” — Shrubs or small trees; to 25 ft., frequent in thickets of the Pacific coast to 2,000 ft. The bitter wood is used locally as a tonic and febrifuge.

Quercus sp. var. — Fagaceae — “Mamacillo”, “Roble de Tierra Fría”, “Encino”; “Roble Negro” — Several species of true Oaks occur in the forests of Chirique Province above about 4,500 ft., often reaching 90 ft. in height, and 4-5 ft. in trunk diameter. The wood resembles that of some northern species, and is hard; heavy and durable. It has some local use in durable construction.

Querendo — See *Helicostylis latifolia*.

Queravangué — See *Conostegia xalapensis*.

Quipo — *Cavanillesia platanifolia*.

Quira — See *Platymiscium pinnatum*.

Quita Manteca — See *Conostegia xalapensis*.

Rain Tree -- See *Samanea saman*.

Randia armata (Sw.) DC — Rubiaceae — “Rosetillo” — Small trees, to 30 ft., fairly frequent about the Zone, and in the forests

north of El Valle de Anton to 3,000 ft. The white flowers are produced on short lateral spurs in May.

Raspa — See *Licania arborea*.

Raspalengua — See *Casearia arguta* or *Casearia corymbosa* or *Conostegia xalapensis*.

Rayado — See *Xylopia macrantha*.

Rhammus capraefolia Schl. — Rhamnaceae — Trees, to 75 ft., known in Panama only from Chiriqui highland forests about 7,000 ft. The brown flowers are produced in January.

Rhedia edulis Tr. & Pl. — Guttiferae — Madroño — Trees, to about 25 ft., fairly frequent in the dry woodlands south of El Valle de Anton at 2,000 ft. The agreeable orange fruit is produced in May.

Rhedia edulis Triana & Planch. — Guttiferae — “Machari”, “Madroño”, “Fruta de Mono” — Trees, 30-45 ft. in height, and 10-12” in trunk diameter, frequent in lowland forests of both slopes. The timber has some local use for tool handles, construction and carpentry.

Rhizophora mangle L. — Rhizophoraceae — “Mangle” — Very common stilt-rooted trees of the coastal mangrove swamps, averaging 30-40 ft. in height near Panama City, but in uncut protected estuaries reaching 75 ft. or more in height. The fine grained, reddish-brown wood is very hard and heavy, and is used for durable construction of various kinds. It is most frequently burned for charcoal, producing what is reputed locally as being the best grade. The bark is much used in local tanning, the resultant leather being red-brown, and rather brittle.

Roble — or Roble de Sabana — See *Tabebuia rosea*.

Roble Negro — See *Quercus* sp.

Roble de Tierra Fria — See *Quercus* sp.

Rondeletia amoena (Pl.) Hemsl. — Rubiaceae — “Candelo” — Trees, 20-40 ft. in height, fairly frequent in Chiriqui highland forests above 5,000 ft. The pink flowers are produced from January to March.

Rondeletia platysepala Standl. — See “Candelo” tree, 18 ft. in height.

Rosa del Monte — See *Brownea macrophylla*.

Rosetillo — See *Randia armata*.

Roupala complicata HBK — Protetceae — Trees, 25-45 ft. in height fairly frequent in the Pacific lowlands to 2,000 ft. The white flowers are produced from late January to May.

Ruda — See *Zanthoxylum* sp. var.

Saba — See *Carapa Slateri* or *Dialyanthera otoba*.

Sabto — See *Cordia alba*.

Sahumerio — See *Styrax* sp. var.

Sajinillito — See *Eurya* sp. var. = *Cleyera theaeoides*.

Sajanillo — See *Eurya* sp. var.

Salamo --- See *Calycophyllum candidissimum*.

Saman --- See *Samanea saman*.

Samanea saman (Jacq.) Merrill = *Pithecolobium saman* — Leguminosae — “Rain Tree”, “Saman”, “Guango” — Large spreading trees of the dry Pacific lowlands, reaching 65 ft. in height, and 4 ft. in trunk diameter. Due to the low branching habit, and great spread they are often found in pastures for cattle shade. Although the dark wood is hard, heavy and tough, it is seldom used, since the trees have more value for other purposes.

Sambogum --- See *Clusia* sp. var. or *Symphonia globulifera*.

Sandbox --- See *Hura crepitans*.

Sangre --- See *Licania platypus*.

Sangre de Drago --- See *Pterocarpus officinalis*.

Sangre de Perro --- See *Vismia ferruginea*.

Sangrillo --- See *Croton panamensis* or *Vismia guianensis*.

Sangrillo Negro --- See *Dialium guianense*.

Sapindus saponaria L. — Sapindaceae — “Limoncillo”, “Jaboncillo” — Common trees to 40 ft., in forests of the lowlands on both coasts. The wood is described as yellowish or brownish, without very distinct heartwood; streaked or veined with white parenchyma markings. Luster rather low. Hard, heavy and strong; — texture coarse; grain usually irregular; working properties rather poor; durability low”. (Record).

Sapium sp. var. — Euphorbiaceae — “Olivo”, “Ñipe” — Small to medium sized trees of the Pacific lowlands, to about 2,500 ft., averaging 40 ft. in height, and 10-12” in trunk diameter. All parts of the plant contain milky sap, which is frequently used smeared on twigs to catch birds. The white wood has no known uses.

Sapium thelocarpum Schum. & Pitt. — Euphorbiaceae — “Olivo Macho” — Reported by Kluge from forests of the Bayano watershed. The wood is described as pale yellow, straight grained, light, soft, of uniform texture.

Saurauia excelsa Willd. — Saurauiaceae — “Frío” — Small trees, 30 ft. in height, known in Panama only from Chiriqui highland forests above 5,000 ft. The white flowers are produced in January.

Saurauia pauciserrata Hems. — Saurauiaceae — “Frío” — Trees, to 45 ft. in height, seen in the forests north of El Valle de Anton at about 3,000 ft. The white fragrant flowers are produced in May.

Saurauia Zetekiana Standl. — Saurauiaceae — Trees, 30-40 ft., of the Atlantic lowland forests, to about 3,000 ft. The white flowers are produced in May.

Saurauia Zetekiana Standl. — Saurauiaceae — Trees, 30-40 ft., of the Atlantic lowland forests, to about 3,000 ft. The white flowers are produced in July.

Schizolobium parahybum (Vell.) Blake — Leguminosae — “Indio” — Tall Atlantic forest trees, 65-75 ft., found also on the Pacific coast from Chorrera to Cerro Campana, and in Darien. The very conspicuous yellow flowers are produced from December to February,

when the trees are leafless. The wood is pale brown, or sometimes pinkish, often hard and heavy, but not uniformly so. No local uses are known.

Schoepfia Schreberi Gmel. — Olacaceae — Small trees, 25 ft. in height, infrequent in thickets of the Pacific lowlands. The small red flowers are produced in nearly sessile axillary clusters in November and December.

Sciadodendron excelsum Griseb. — Araliaceae — “Jobo de Lagarto”, “Mangabe” — Deciduous. Common trees of the dry Pacific lowlands, 30 to 50 ft. in height and 24” in trunk diameter. The greenish white flowers are produced in February and April. The wood is described as “rather light, firm, coarse-textured, fairly straight grained, tough, of harsh feel, pale brown in color”. (Kluge).

Sequarra — See *Eugenia* sp. var.

Sickingia Klugei Standl. — Rubiaceae — “Alcareto” — See *Calderonia* for description.

Sickingia Maxonii Standl. — Rubiaceae — “Alcareto” — Trees of the wet Atlantic lowland forests, to 50 ft. in height, and 12” in diameter.

Sigua — This name seems to be applied to nearly all genera and species of the Lauraceae, particularly to species of *Nectandra*, *Ocotea* and *Phoebe*.

Sigua Blanca — See *Nectandra* sp. or *Phoebe costaricana*.

Sigua Canelo — See *Nectandra ramonensis* or *Ocotea veraguensis*.

Siparuna pauciflora (Beurl.) A. DC. — Monimiaceae — Trees, to 30 ft. fairly common in highland forests north of El Valle de Anton at 3,000 ft.

Siparuna guianensis Aubl. or *Siparuna, nicaraguensis* Hemsl.

Sloanea megaphylla Pittier — Elaeocarpaceae — “Mameycillo Colorado”, “Cacaco” — Tall trees of the Atlantic lowland coastal forests, to 80 ft. in height and 16” in trunk diameter. The wood is reported to have been used in Colon for the understructure of the old wharves.

Sloanea platyphylla Standl. = *Sloanea medulosa* — Elaeocarpaceae — “Casaco” — Trees, to 60 ft., infrequent in forests north of El Valle de Anton at 3,000 ft. The tan flowers, striped red, are produced in May.

Solacra — See *Mouriria parvifolia*.

Solanum Hayesii Fernald — Solanaceae — Trees, to 30 ft. Seen in clearings and along streams north of El Valle de Anton at 3,000 ft. The white flowers are produced in December.

Solanum hispidum Pers. — Solanaceae — Trees, 20 ft. Seen in highland clearings in Chiriqui above 5,000 ft.

Sommeria grandis (Bartl.) Standl. — Rubiaceae — Highland trees, 35-75 ft. in height, seen in Panama north of El Valle de Anton at 3,000 ft., and Chiriqui Province above 5,000 ft. The white flowers are produced from January to March.

Spanish Elm — See *Colubrina* sp.

Spondia mombim L. — Anacardiaceae — “Jobo” — Trees, to 40 ft. in height, and 12” in trunk diameter, common to the lowland of both coasts. Deciduous in dry situations. The white flowers are produced in April. The soft white wood does not seem to have any local uses.

Spondia purpurea L. — Anacardiaceae — “Ciruela”, “Jobito” — Deciduous. Small trees, to 25 ft., commonly planted for living fence posts in the Pacific lowlands.

Stachyarrena sp. — Rubiaceae — “Cabazuelo” — Shrubs or small trees, to 30 ft. The wood is reported as “pinkish brown, more or less streaked; hard, heavy, fine textured, straight grained, and easily worked”. (Record).

Star Apple — See *Chrysophyllum cainito* or *Chrysophyllum argenteum*.

Stemmadenia Donnell-Smithii (Rose) Woodson — Apocynaceae — “Huevos de caballo” — Trees, 50-60 ft. with yellow flowers — Chiriqui lowlands.

Sterculia apetala (Jacq.) Karst. — “Panama”, “Castaño” — Very common lowland trees, to 80 ft. and 3 ft. in trunk diameter above the prominently developed buttresses. The tan, maroon striped flowers are produced in March. The nearly colorless wood is light and soft, and does not seem to have any local uses.

Sterculia sp. — Sterculiaceae — Tall trees, to over 90 ft., and three feet in trunk diameter, seen only in the forests north of El Valle de Anton, at 2,000-3,000 ft. elevation. The leaves are simple, rather than 3-5 lobed as in *S. apetala*. Wood unknown.

Styrax sp. var. — Styracaceae — “Sahumerio” — Small trees, averaging 30 ft. in height. Wood is described as being of about the consistency of that of *Liquidambar*. (Record).

Swartzia darienensis Pittier — Leguminosae — “Naranjillo”, “Cornudo”, “Cutaro” — Common lowland trees of the Pacific slope, 30-45 ft. in height, found to about 3,000 ft. elevation. The attractive orchid-like yellow flowers are produced in June and July, being followed by bright orange fruits. The wood is hard and heavy, yellowish, fine textured and probably durable.

Swartzia panamensis Benth. — Leguminosae — Tree to 90 ft. with pendulous clusters of showy yellow flowers — Maden area.

Sweetia panamensis Benth. — “Malvecino” — Leguminosae — Tall lowland forest trees, to over 90 ft. The brown or olive timber is used locally for railway crossties and other heavy durable construction.

Swietenia macrophylla King — Meliaceae — “Caoba”, “Caoba Blanca”, “Mahogany” — Deciduous — Common lowland forest trees, to 80 ft. in height and 4-5 ft. in trunk diameter. Found in the Pacific slope to about 3,000 ft. and often logged there in recent years. Considerable quantities are felled yearly in the forested hills of back Pacora and Chepo, and in Darien and Chiriqui provinces. Although considered inferior to Honduras, or West Indian mahogany, the at-

tractive light brown wood works well, and finishes as excellent cabinet work or furniture, and is much used locally, almost to the exclusion of other cabinet woods.

Symphonia globulifera L. f. — Guttiferae — “Cerillo”, “Barillo”, “Bogum”, “Cero”, “Sambogum” — Tall trees, to 80 ft. in height and 3-4 ft. in trunk diameter. Often with bracing or stilt roots. The bark contains a yellow latex which is used locally for treating ulcers. Ascends to 3,000 ft., and may occasionally be found in Pacific forests nearly to sea level. The blood red flowers often litter forest trails, although they are not conspicuous on the tree since they are borne among the foliage high overhead. The wood is described as “yellowish greyish or greenish brown, hard and moderately heavy — texture coarse; feel rather harsh; grain straight to irregular, working and finishing qualities good; durability fair”. (Record).

Syzygium Jambos — See *Eugenia Jambos*.

Tabaco or Tabacon — See *Triplaris* or *Grias*.

Tabebuia chrysantha (Jacq.) Nicholson — “Guayacan” — Trees, to 40-50 ft. Deciduous at flowering time. The yellow flowers are produced from February to April while the trees are leafless.

Tabebuia guayacan (Seem.) Hemsl. — Bignoniaceae — “Guayacan” Deciduous at flowering time. Tall handsome trees, to 80 ft. and 24” in trunk diameter, common to the lowlands of both coasts, ascending to about 3,000 ft. The golden yellow conspicuous flowers are produced from February to April while the trees are leafless. The wood is olive brown, somewhat cross grained and difficult to work, exceedingly hard, heavy and durable, resembling *Lignum Vitae*. It is often used locally for outdoor durable construction where great strength is required.

Tabebuia heterotricha (DC) Hemsl. — Bignoniaceae — Pacific slope trees, to about 60 ft. in height, and 12” in trunk diameter. Deciduous at flowering time. The golden yellow flowers resemble those of the former two species, but the calyxes are densely wooly. Seemingly rare.

Tabebuia Palmeri Rose — Bignoniaceae — Pacific lowland trees, to about 45 ft, superficially resembling *T. rosea*. Seemingly rare. The flowers are lavender, with a yellow inner corolla.

Tabebuia rosea (Bertol.) DC. — Bignoniaceae — “Roble” or “Roble de Sabana” — Usually deciduous at flowering time. Common trees, to 60-75 ft. in height and 24” in trunk diameter, found on both coasts to about 2,000 ft. elevation. They are most frequent near places of poor drainage, and will stand some slight salinity, being often found in the higher land fringing mangrove swamps. The flowers are very variable in color, pink being typical, but pure white flowered specimens have been seen. They flower from February to about April while the trees are bare of leaves, individual trees lasting for about two weeks. The close-grained hard heavy wood somewhat resembles oak, hence the common name. It is used to a considerable extent locally for construction and carpentry.

Tabegua - See *Viola panamensis*.

Tabernaemontana arborea Rose --- Apocynaceae --- Tall trees of the Atlantic coast forests, being found to 3,000 ft. elevation. They average 65-80 ft. in height and 24" in trunk diameter. The fragrant white flowers are produced in June. The wood is light yellowish or reddish brown, hard, heavy, fine grained and durable. It is sometimes used locally for railway crossies and durable construction.

Tabernaemontana grandifolia Jacq. or *Tabernaemontana pendula* Woodson --- Apocynaceae --- "Huvo de Gato" --- Small trees, to about 18 ft. in height and 4-5" in trunk diameter, common to thickets of the Pacific slope to about 2,500 ft. elevation.

Talauma Allenii --- See *Mangolia Allenii* for description.

Talauma gloriensis Pittier --- Trees, 90 ft. in height.

Talauma sambuensis Pittier --- Magnoliaceae --- Reported as very large trees, to over 90 ft. in height. The wood is firm, straight grained, yellowish to purplish. (Record). Known only from Darien.

Tamarindo --- See *Tamarindus indica* or *Pithecolobium arboreum*.

Tamarindo de Montaña --- See *Dialium guianense*.

Tamarindus indica L. --- Leguminosae --- "Tamarindo" --- Trees, to 50 ft. in height, and up to 24" in trunk diameter, native of the Asiatic tropics, frequently planted for their fruits, which are used to prepare a popular cooling drink.

Tapia sp. --- Anacardiaceae --- "Bagamani" --- Small to medium sized trees. The wood of some species is said to resemble Birch.

Tar gum tree --- See *Clusia* sp. var.

Tecoma stans (L.) Juss. --- Bignoniaceae --- "Copete" --- Shrubs or small trees, to about 18 ft. in height, and 6" in trunk diameter, found in Pacific coast lowland thickets, particularly near sea beaches. The conspicuous yellow flowers are produced during the dry season, from December to March.

Terminalia Amazonia (Gmel.) Exell. --- Combretaceae --- "Amarillo Real", "Amarillo", "Carboncillo" --- Tall lowlands trees of the Pacific slope, to about 80 ft. in height, and 24-36" in trunk diameter. The wood is yellowish, usually streaked with red, moderately hard and heavy, durable, working and finishing well. Much used locally for ships work and durable construction.

Terminalia lucida Hoffm. --- Combretaceae --- Tall Pacific coast trees with pale, guava-like bark that peels off in irregular sheets.

Terminalia sp. --- Combretaceae --- "Carba Suela" --- Reported by Kluge from the Bayano drainage. May be identical with *T. obovata*.

Terminalia Scemanni Tr. & Pl. --- Theaceae --- "Manglillo" --- Shrubs or trees, to about 20 ft., fairly frequent in thickets of the dry Pacific lowlands.

Terminalia Tepezapote C. & S. --- Theaceae --- "Manglillo" --- Very common small to medium sized trees, to 50 ft. in height, and 12" in trunk diameter, found in low dry forest of intermedite highland

areas from 2,000 to about 4,500 ft. The pale pink flowers are produced in May.

Tetragastris panamensis (Engler) Kuntle. — Burseraceae — trees 30-60 ft. San José Island.

Tetrathylacium Johansennii Standl. — Flacourtiaceae — Trees, to 30 ft., seen in the highland forests north of El Valle de Anton at 3,000 ft. elevation.

Tirra — See *Chaetoptelea Mexicana*.

Toluijera pereirae (Klotsch) Baill. — Leguminosae — “Bálsamo” — Tall, slender trees of the Pacific lowland forests, to 75 ft. or more in height, although averaging less. The hard, heavy reddish-brown wood is very durable, and is used locally for construction purposes and railway cross-ties.

Topobea Regeliana Cogn. — Melastomaceae — Small to medium sized trees of the Atlantic coast forests, being found from sea level to about 4,000 ft. The young plants are strangler epiphytes, after the habit of many species of *Ficus* and *Clusia*, eventually developing independent trunks of their own. They are deciduous during the dry season, bearing conspicuous rose red flowers.

Torrubia panamensis Standl. — Nyctaginaceae — Small trees, to 30 ft. in height, seen in the forests north of El Valle de Anton at about 3,000 ft.

Totumito — See *Enallagma cucurbitina*.

Totumõ — See *Crescentia cujete*.

Trema micrantha (L.) Blume — Ulmaceae — “Capulin Macho” — Very common weedy trees, sometimes reaching 65 ft. in height, usually found in second growth scrub from sea level to 5,000 ft.

Thichanthera gigantea HBK — Acanthaceae — “Palo de Agua” — Giant shrubs, or trees, often with multiple trunks, to 40 ft. in height, fairly common on the fringes of mangrove swamps, and on the margins of rivers on both coasts. The reddish brown flowers are produced during February and March. The wood is described as being of about the consistency of Maple. (Record).

Trichilia tuberculata (Tr. & Pl.) C. DC — Meliaceae — “Alfaje” — Tall slender trees of the Pacific coast lowlands. The wood is brownish, straight grained, rather hard and heavy, of about the consistency of black Birch. (Kluge).

Triplaris americana L. — Holygonaceae — “Vara Santa”, “Guayabo Hormiguero”, “Palo Santo”, “Hormigo”, “Tabaco”, “Tabacon” — Very common lowland trees, 18 to 40 ft. in height, rarely exceeding 10” in trunk diameter. The very conspicuous pink or red winged fruits are produced in March or April. The trunks are inhabited by stinging ants. The wood is white, hard, and fine grained, and is sometimes used for carpentry and construction purposes.

Trompito — See *Alibertia edulis*.

Trophis racemosa (L.) Urban — Moraceae — “Gallote”, “Lechoso”, “Morillo”, “Ojoche Macho” — Common lowland trees, to

50 ft. The wood is described by Record as "dark brown, — suggesting Elm — fairly lustrous — hard, heavy, tough and strong; texture medium; grain straight to irregular; not difficult to work, finishing smoothly; heartwood fairly durable".

Unonopsis sp. — Annonaceae — "Yaya Blanca" — Medium sized Atlantic lowland trees.

Uva de Playa — See *Cocoloba uvifera*.

Uvero — See *Cocoloba uvifera*.

Uvito — See *Ardisia revoluta*.

Vaquero — See *Dendropanax arboreum*.

Vara Santa — See *Triplaris americana*.

Varita de San José — See *Duranta repens*.

Vela — See *Parmentiera cerifera*.

Virola panamensis Hemsl. or = *Virola sebifera* Aubl. — Myrsinaceae — "Copidijo", "Bogabani", "Bogamani", "Fruta Dorado", "Gorgoran", "Malagueta de Montaña", "Tabegua" — Tall trees of the Atlantic lowland forests. The wood is pale brown, light, easy to work, but not very durable. It is sometimes used for carpentry and construction!

Vismia dealbata HBK — Guttiferae — "Pinta Mozo" — Common lowland shrubs or small trees.

Vismia ferruginea HBK — Guttiferae — "Sangre de Perro" — Small trees.

Vismia guianensis (Aubl.) Pers. — Guttiferae — "Sangrillo" — Small trees, to 30 ft. and about 6" in trunk diameter.

Vismia macrophylla (Benth.) Kuntze — Guttiferae — "Pinta Mozo" — Small trees, to 40 ft., in dry intermediate highland woods from 1,500 to 4,000 ft. All species are more or less frequent on the dry Pacific coast in thickets and cut over land. Most have blood red sap, containing much resin.

Vitex Cooperi Standl — Verbenaceae — "Cuajada" — Chiriquí lowlands.

Vitex floridula Duchase, & Walp. — Verbenaceae — "Cuajado" — Medium to tall trees of the Atlantic coast forest, often growing in the deciduous association with Cuipo. The blue flowers are produced from February to May while the trees are leafless. The hard, greenish yellow wood is used locally for construction purposes.

Vitex Masoniana Pittier — Verbenaceae — "Cuajado", "Pu-Pu-chiru" (Darien) — Trees 75 ft., blue flowers, which are produced in June, when the tree is in full leaf.

Vochysia ferruginea Mart. — Vochysiaceae — “Pegte”, “Flor de Mayo”, “Mocri”, “Palo Malin”, “Yemeri Macho”, “Yemeri Wood” — Very common tall trees of the lowlands of both coasts, to about 3,000 ft. In heavy forest they average 75 ft. in height, and 24” in trunk diameter. But are much smaller in thickets of the dry grasslands. The orange conspicuous flowers are produced in April and May. The wood is pinkish, of medium density, fairly strong, and is suitable to general carpentry.

Vochysia hondurensis Sprague — Vochysiaceae — Trees 60-90 ft. in height, common to Bocas del Toro lowlands. Easily distinguished by the three leaves at each node.

Warscewiczia coccinea (Vahl.) Kl. — Rubiaceae — Small to medium-sized trees, to about 40 ft. in height, with very showy blood-red-bracts. Common to wet, lowland forests, in western Veraguas and eastern Chiriqui.

West Indian Satinwood — See *Zanthoxylum* sp.

White Cedar — See *Dialyanthera otoa* or *Hura crepitans*.

Wild Cashew — See *Anacardium excelsum*.

Wild Coffee — See *Colubrina* sp.

Wild Jasmine — See *Aegiphila martinicensis* or *Hima anthus articulata*.

Wild Olive — See *Pera arborea*.

Wild Pigeon Plum — See *Ouratea lucens*.

Ximenia americana L. — Olacaceae — Small trees, to about 30 ft., common to brushy places of the Pacific lowlands. “The close-grained yellow wood is said to have been employed as a substitute for Sandlewood (*Santalum*) which it somewhat resembles”. (Standley). The small fragrant white flowers are produced in March.

Xylopia frutescens (Aubl.) — or *Xylopia aromatica* (Lam.) Eichl. — Anonaceae — “Malagueño Hembra” — Slender trees, to 30 ft. of the Pacific lowlands, to about 2,500 ft. The fragrant white flowers are produced in May, followed by red fruits.

Xylopia macrantha Tr. & Pl. — Annonaceae — “Coroba”, “Rayado” — Slender trees of the Atlantic lowlands.

Xylopia xylopioides (Dunal.) Standl. or *Xylopia aromatica* (Lam.) Eichl. — Annonaceae — “Malagueto Macho” — Trees, to 40 ft. of the Pacific lowlands.

Yaya Blanca — See *Unonopsis* sp.

Yemeri Macho — See *Vochysia ferruginea*.

Yemeri Wood — See *Vochysia ferruginea*.

Yca — See *Bernoullia flammea*.

Zanthoxylum sp. var. — Rutaceae — “Acabu”, “Alcabu”, “Arcabu”, “Ruda”, “Alcavu”: “West Indian Satinwood” — Several

species of medium sized to fairly large trees of the Pacific coast lowlands. The trunks are armed with characteristic broad conical spines, which are easily detached with a knife. The fine grained pale yellow wood works and finishes well, and has some local use in construction and carpentry.

Zapatero — See *Hieronyma alchorneoides*.

Zaragoza — See *Conocarpus erecta*.

Zorro — See *Astronium graveolens*.

Zschokkea panamensis — See *Lacmellea*.

Zuelania Guidonia (SW) Britt & Millsp. — Flacourtiaceae — “Caraño” — Trees, 30 to 75 ft. in height, infrequent in Atlantic lowland forests. The wood is fine textured, yellow, hard and heavy.

Zygia longifolia (H. & B.) B. & R. = *Pithecolobium longifolium* (H. & B.) Standl — Leguminosae — “Azota Caballo” — Trees, to 40 ft., fairly common along streams of the Pacific lowlands. The white flowers are produced in February.