

FOREST AND WOOD PRODUCTS PROGRAM
ILLUSTRATED BOOKLET OF 25 FOREST SPECIES OF PUTUMAYO, COLOMBIA



FOREST AND WOOD PRODUCTS PROGRAM
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List of Scientific Names of the 25 Species Studied in the Alto Mecaya-Putumayo Forest Nucleus

| SCIENTIFIC NAME | COMMON NAME | FAMILY |
|--|-----------------------|-----------------|
| <i>Brosimum potabile</i> Ducke | Lechero amarillo | MORACEAE |
| <i>Buchenavia capitata</i> (Vahl) Eichler | Guayacán mochilero | COMBRETACEAE |
| <i>Calycorectes</i> sp. | Hobo | MYRTACEAE |
| <i>Croton matourensis</i> Aubl. | Tabaquillo-Tablero | EUPHORBIACEAE |
| <i>Cryosophyllum sanguinolentum</i> (Pierre) Baehni ssp. Balata (Ducke) Pennington | Caimo balata | SAPOTACEAE |
| <i>Erisma uncinatum</i> Warm. | Arenillo | VOCHYSIACEAE |
| <i>Eschweilera</i> cf. <i>coriacea</i> (DC.) Mart. ex Bertg. | Fono blanco | LECYTHIDACEAE |
| <i>Guarea cinnamomea</i> Harms | Bilibil | MELIACEAE |
| <i>Hymenaea oblongifolia</i> Huber var. <i>palustris</i> (Ducke) Lee & Langenheim | Roble | CAESALPINIACEAE |
| <i>Inga acrocephala</i> Steud. | Guamo Churimo | MIMOSACEAE |
| <i>Ocotea</i> cf. <i>oblonga</i> . (Meisn) Mez. | Amarillo o laurel | LAURACEAE |
| <i>Ormosia nobilis</i> Tul. var. <i>santaremnensis</i> (Ducke) Rudd | Chocho | FABACEAE |
| <i>Osteophloeum platyspermum</i> (A. D.C.) Warb | Caracolí | MYRISTICACEAE |
| <i>Parkia multijuga</i> Benth. | Guarango blanco | MIMOSACEAE |
| <i>Parkia nitida</i> Miq. | Guarango rayao | MIMOSACEAE |
| <i>Pradosia</i> cf. <i>cochlearia</i> (Lecomte) Pennington | Caimo amarillo | SAPOTACEAE |
| <i>Pseudolmedia laevis</i> (R. & P.) Macbr. | Leche chiva | MORACEAE |
| <i>Qualea ingens</i> Warm | Cancho Amarillo | VOCHYSIACEAE |
| <i>Qualea sprucei</i> Warm. | Cancho gurre | VOCHYSIACEAE |
| <i>Tachigali paniculata</i> Aubl. | Guamo hojiancho | CAESALPINIACEAE |
| <i>Trattinickia lawrancei</i> Stad. ex Swart. | Caraño | BURSERACEAE |
| <i>Virola parvifolia</i> Ducke | Sangretoro, pategallo | MYRISTICACEAE |
| <i>Vochysia biloba</i> Ducke | Guasicaspi blanco | VOCHYSIACEAE |
| <i>Vochysia latifolia</i> Stafleu | Guasicaspi rojo | VOCHYSIACEAE |
| <i>Vochysia vismiifolia</i> Spr. Ex Warm | Gomo | VOCHYSIACEAE |

List of Family Names of the 25 Species Studied in the Alto Mecaya-Putumayo Forest Nucleus

| FAMILY | SCIENTIFIC NAME | COMMON NAME |
|-----------------|--|-----------------------|
| BURSERACEAE | <i>Trattinickia lawrancei</i> Stad. ex Swart. | Caraño |
| CAESALPINIACEAE | <i>Hymenaea oblongifolia</i> Huber var. <i>palustris</i> (Ducke) Lee & Langenheim | Roble |
| | <i>Tachigali paniculata</i> Aubl. | Guamo hojiancho |
| COMBRETACEAE | <i>Buchenavia capitata</i> (Vahl) Eichler | Guayacán mochilero |
| EUPHORBIACEAE | <i>Croton matourensis</i> Aubl. | Tabaquillo-Tablero |
| FABACEAE | <i>Ormosia nobilis</i> Tul. var. <i>santaremnensis</i> (Ducke) Rudd | Chocho |
| LAURACEAE | <i>Ocotea cf. oblonga</i> . (Meisn) Mez. | Amarillo o laurel |
| LECYTHIDACEAE | <i>Eschweilera cf. coriacea</i> (DC.) Mart. ex Bertg. | Fono blanco |
| MELIACEAE | <i>Guarea cinnamomea</i> Harms | Bilibil |
| MIMOSACEAE | <i>Inga acrocephala</i> Steud. | Guamo Churimo |
| | <i>Parkia nitida</i> Miq. | Guarango rayao |
| | <i>Parkia multijuga</i> Benth. | Guarango blanco |
| MORACEAE | <i>Brosimum potabile</i> Ducke | Lechero amarillo |
| | <i>Pseudolmedia laevis</i> (R. & P.) Macbr. | Leche chiva |
| MYRISTICACEAE | <i>Osteophloeum platyspermum</i> (A. D.C.) Warb | Caracolí |
| | <i>Virola parvifolia</i> Ducke | Sangretoro, pategallo |
| MYRTACEAE | <i>Calycorectes sp.</i> | Hobo |
| SAPOTACEAE | <i>Crysophyllum sanguinolentum</i> (Pierre) Baehni ssp. <i>Balata</i> (Ducke) Pennington | Caimo balata |
| | <i>Pradosia cf. cochlearia</i> (Lecomte) Pennington | Caimo amarillo |
| VOCHYSIACEAE | <i>Erisma uncinatum</i> Warm. | Arenillo |
| | <i>Qualea ingens</i> Warm | Cancho Amarillo |
| | <i>Qualea sprucei</i> Warm. | Cancho gurre |
| | <i>Vochysia biloba</i> Ducke | Guasicaspi blanco |
| | <i>Vochysia latifolia</i> Stafleu | Guasicaspi rojo |
| | <i>Vochysia vismiifolia</i> Spr. Ex Warm | Gomo |

List of Common Names of the 25 Species Studied in the Alto Mecaya-Putumayo Forest Nucleus

| COMMON NAME | SCIENTIFIC NAME | FAMILY |
|-----------------------|--|-----------------|
| Amarillo o laurel | <i>Ocotea cf. oblonga.</i> (Meisn) Mez. | LAURACEAE |
| Arenillo | <i>Erisma uncinatum</i> Warm. | VOCHYSIACEAE |
| Bilibil | <i>Guarea cinnamomea</i> Harms | MELIACEAE |
| Caimo amarillo | <i>Pradosia cf. cochlearia</i> (Lecomte) Pennington | SAPOTACEAE |
| Caimo balata | <i>Cryosophyllum sanguinolentum</i> (Pierre) Baehni ssp. Balata (Ducke) Pennington | SAPOTACEAE |
| Cancho Amarillo | <i>Qualea ingens</i> Warm | VOCHYSIACEAE |
| Cancho gurre | <i>Qualea sprucei</i> Warm. | VOCHYSIACEAE |
| Caracolí | <i>Osteophloeum platyspermum</i> (A. D.C.) Warb | MYRISTICACEAE |
| Caraño | <i>Trattinickia lawrancei</i> Stad. ex Swart. | BURSERACEAE |
| Chocho | <i>Ormosia nobilis</i> Tul. var. <i>santaremnensis</i> (Ducke) Rudd | FABACEAE |
| Fono blanco | <i>Eschweilera cf. coriacea</i> (DC.) Mart. ex Bertg. | LECYTHIDACEAE |
| Gomo | <i>Vochysia vismiifolia</i> Spr. Ex Warm | VOCHYSIACEAE |
| Guamo Churimo | <i>Inga acrocephala</i> Steud. | MIMOSACEAE |
| Guamo hojiancho | <i>Tachigali paniculata</i> Aubl. | CAESALPINIACEAE |
| Guarango blanco | <i>Parkia multijuga</i> Benth. | MIMOSACEAE |
| Guarango rayao | <i>Parkia nitida</i> Miq. | MIMOSACEAE |
| Guasicaspi blanco | <i>Vochysia biloba</i> Ducke | VOCHYSIACEAE |
| Guasicaspi rojo | <i>Vochysia latifolia</i> Stafleu | VOCHYSIACEAE |
| Guayacán mochilero | <i>Buchenavia capitata</i> (Vahl) Eichler | COMBRETACEAE |
| Hobo | <i>Calycorectes sp.</i> | MYRTACEAE |
| Leche chiva | <i>Pseudolmedia laevis</i> (R. & P.) Macbr. | MORACEAE |
| Lechero amarillo | <i>Brosimum potabile</i> Ducke | MORACEAE |
| Roble | <i>Hymenaea oblongifolia</i> Huber var. <i>palustris</i> (Ducke) Lee & Langenheim | CAESALPINIACEAE |
| Sangretoro, pategallo | <i>Virola parvifolia</i> Ducke | MYRISTICACEAE |
| Tabaquillo-Tablero | <i>Croton matourensis</i> Aubl. | EUPHORBIACEAE |

Family: Moraceae

Common name: Lechero amarillo

Scientific name: *Brosimum potabile* Ducke

Leaves



Bark - alburnum



Base of trunk



Cross-section



LECHERO AMARILLO

SCIENTIFIC NAME: *Brosimum potabile* Ducke

FAMILY: Moraceae

POPULAR LOCAL NAMES: “*Lechero amarillo.*”

TREE: Reaches height of 30 m, height of trunk 18 m, D.B.H. 1.0 m. Crown globoid, foliage dense, alternate branching.

TRUNK: Cylindrical, angular in sections, and straight, bearded, with modifications to the base, swollen with thick, lenticellate, reddish, protruding roots, which extend widely, visible at great distances.

OUTER BARK (Dead): Coffee color, thin rhytidome, turns orangish when scraped, appearance rough, bearded, breaks easily when struck with machete, abundant lenticels in horizontal lines, bright and colorful, large, when the rhytidome is scratched.

INNER BARK (Living): Color cream, thick: 2 cm, texture brittle outside and fibrous inside, white latex exudate that flows slowly in teardrops, thick, massive, pleasant tasting.

LEAVES: Simple, alternate, with amplexicaul joined stipules, narrow elliptical to oblong, lanceolate, slightly asymmetrical, wide in the middle, tapered apex, base obtuse, upper side glabrous, underside yellow tomentose, with thick, abundant white latex.

FLOWERS: Subgloboid inflorescences, 1.5-2 cm wide, whitish green.

FRUIT: Pseudodrupe, globoid, 1.5-2 cm long and 0.8-1 cm wide. Color yellow. The fruits are eaten by monkeys.

ECOLOGY AND DISTRIBUTION: Species loves partial shade, grows on terra firma in clayey soil in the Colombian, Peruvian, and Brazilian Amazon.

USES: Beams, bodywork, floors, construction, wild animal consumption.

Table of Physico-Mechanical Properties

Scientific name: *Brosimum potabile* Ducke

Common name: Lechero amarillo

Family: MORACEAE

Key: LA

| DENSITY (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|---------------------------------|--|--|--------------------------------------|
| GREEN 0.78 | RADIAL 4.14 | RADIAL 6.30 | AIR-DRY 9 |
| AIR-DRY 0.54 | TANGENTIAL 6.58 | TANGENTIAL 8.80 | GREEN 74 |
| ANHYDROUS 0.53 | LONGITUDINAL 0.04 | LONGITUDINAL 0.15 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.45 | VOLUMETRIC 10.76 | VOLUMETRIC 15.25 | 1.43 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION N PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|----------------------------|---------------------------|--|
| SPL 247.19 | SPL 150.82 | SPL 12.78 | RADIAL 41.14 | MEAN RADIAL 160.83 | RADIAL 48.67 | MOR 842.77 |
| MOR 421.41 | MOR 161.46 | MOR 30.78 | TANGENTIAL 45.14 | MEAN TANGENTIAL 161 | TANGENTIAL 46.75 | |
| MOE X 1000 99.325 | MOE X 1000 143.266 | | AVERAGE SIDES 43.14 | AVERAGE SIDES 160.92 | AVERAGE SIDES 47.71 | |
| | | | | MEAN ENDS 181.17 | AVERAGE ENDS 30.75 | |
| MC (%) 70 | MC (%) 90 | MC (%) 98 | MC (%) 139 | MC (%) 95 | MC (%) 122 | MC (%) 114 |

Where: SPL: stress at proportional limit.

MOR: modulus of rupture.

MOE: modulus of elasticity.

Family: Combretaceae

Common name: Guayacán mochilero

Scientific name: *Buchenavia capitata* (Vahl) Eichler

Leaves



Bark - alburnum



Base of trunk



Cross-section



GUAYACÁN MOCHILERO

SCIENTIFIC NAME: *Buchenavia capitata* (Vahl) Eichler

FAMILY: Combretaceae

POPULAR LOCAL NAMES: “*Guayacán mochilero.*”

TREE: Reaches height of 35 m, height of trunk 22 m, D.B.H. 1.0 m. Crown subgloboid, umbrella-shaped, foliage sparse, opposite branching, verticillate, sigmoid branches.

TRUNK: Cylindrical, alternate with twisted sectors, with a slightly cymose general appearance, scarce knots.

OUTER BARK (Dead): Brownish gray color, appearance smooth, dented, because of the detachment of isolated sheets, lenticels tiny, sometimes large, average number, distributed in discontinuous vertical lines.

INNER BARK (Living): Color yellow, turning brown after cutting, white bands, thick: 1.5 cm, texture laminar, compact, consistency coriaceous.

LEAVES: Simple, alternate, without stipules, grouped at the ends of the branches, spatulate to arched; apex shiny green, and the underside glabrous; veins barely evident. Terminal twig sinuous, striated, circular section, glabrous.

FLOWERS: Inflorescences in clusters, terminal, small actinomorphic flowers, color white-greenish.

FRUIT: Ellipsoidal drupes 2-2.8 cm long and 0.6-0.9 cm wide, red and brown on the ground. Eaten by Guianan brown capuchin monkeys, woolly monkeys, tapirs, agouti pacas, curassows, turkey hens.

ECOLOGY AND DISTRIBUTION: Species loves full shade, very slow growing, scarce, grows on terra firma in clayey soil in the Colombian, Peruvian, and Brazilian Amazon.

USES: Posts, beams, floors, construction, poles, wild animal consumption.

Table of Physico-Mechanical Properties

Scientific name: *Buchenavia capitata* (Vahl) Eichler

Common name: Guayacán mochilero

Family: COMBRETACEAE

Key: GM

| DENSITY (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|---------------------------------|---|--|--------------------------------------|
| GREEN 1.05 | RADIAL 2.26 | RADIAL 3.97 | AIR-DRY 9 |
| AIR-DRY 0.75 | TANGENTIAL 4.05 | TANGENTIAL 6.86 | GREEN 62 |
| ANHYDROUS 0.72 | LONGITUDINAL 0.02 | LONGITUDINAL 0.17 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.65 | VOLUMETRIC 6.33 | VOLUMETRIC 11.00 | 1.73 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|------------------------------|----------------------------|--|
| SPL 583.65 | SPL 376.81 | SPL 71.06 | RADIAL 93.42 | MEAN RADIAL 635 | RADIAL 159.67 | MOR 1268.24 |
| MOR 892.87 | MOR 394.64 | MOR 126.67 | TANGENTIAL 101.51 | MEAN TANGENTIAL 619.17 | TANGENTIAL 153 | |
| MOE X 1000 125.585 | MOE X 1000 156.307 | | AVERAGE SIDES 97.46 | AVERAGE SIDES 627.08 | AVERAGE SIDES 156.33 | |
| | | | | MEAN ENDS 703.67 | AVERAGE ENDS 108.83 | |
| MC (%) 93 | MC (%) 74 | MC (%) 71 | MC (%) 78 | MC (%) 67 | MC (%) 80 | MC (%) 76 |

Where: SPL: stress at proportional limit.
MOR: modulus of rupture.
MOE: modulus of elasticity.

Family: Myrtaceae

Common name: Hobo

Scientific name: *Calycorectes sp.*

Leaves



Base of trunk



Bark



Cross-section



HOBO

SCIENTIFIC NAME: *Calycorectes sp.*

FAMILY: Myrtaceae

POPULAR LOCAL NAMES: “Hobo”

TREE: Reaches height of 35 m, height of trunk 15 m, D.B.H. 50 cm. Crown globoid, foliage dense, opposite branching.

TRUNK: Angular, straight, slightly canaliculate at the base, elephant's foot modifications to the base, thick, protruding roots.

OUTER BARK (Dead): Color coffee-grayish, appearance rough, thin, comes off in long sheets, abundant tiny lenticels.

INNER BARK (Living): Color reddish-yellow, thin, 3 mm, texture fibrous-coriaceous, pleasant odor reminiscent of guava.

LEAVES: Simple, opposite, distichous, tapered apex, with translucent points, base acute, new leaves yellowish-green, fragrant when crushed.

FLOWERS: Inflorescences in clusters, axillary, with abundant small white flowers.

FRUIT: Globoid berry, yellow, edible pulp, sweet and floury, with two or three seeds. Eaten by long-tailed monkeys, parrots, and agouti pacas.

ECOLOGY AND DISTRIBUTION: Species loves full shade, scarce, very slow growing, grows on terra firma in clayey soil, reported in the Colombian and Peruvian Amazon.

USES: Fruit eaten by humans and animals, very heavy, hard wood for floors, posts.

*Information obtained in the region.

Table of Physico-Mechanical Properties

Scientific name: *Calycorectes sp.*

Common name: Hobo

Family: MYRTACEAE

Key: HOBO-HO

| DENSITY (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|---------------------------------|---|--|--------------------------------------|
| GREEN 1.09 | RADIAL 3.56 | RADIAL 5.65 | AIR-DRY 8 |
| AIR-DRY 1.00 | TANGENTIAL 7.60 | TANGENTIAL 11.33 | GREEN 32 |
| ANHYDROUS 0.99 | LONGITUDINAL 0.08 | LONGITUDINAL 0.16 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.82 | VOLUMETRIC 11.23 | VOLUMETRIC 17.14 | 2.00 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULA R TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|--|--------------------------------|------------------------------|----------------------------|--|
| SPL 475.42 | SPL 427.23 | SPL 95.21 | RADIAL 103.60 | MEAN RADIAL 803.33 | RADIAL 208.17 | MOR 945.88 |
| MOR 1044.30 | MOR 485.49 | MOR 184.87 | TANGENTIAL 106.67 | MEAN TANGENTIAL 780.50 | TANGENTIAL 202.5 | |
| MOE X 1000 149.683 | MOE X 1000 185.749 | | AVERAGE SIDES 105.13 | AVERAGE SIDES 791.92 | AVERAGE SIDES 205.33 | |
| | | | | MEAN ENDS 793.33 | AVERAGE ENDS 181 | |
| MC (%) 41 | MC (%) 48 | MC (%) 43 | MC (%) 52 | MC (%) 49 | MC (%) 49 | MC (%) 49 |

Where: SPL: stress at proportional limit.

MOR: modulus of rupture.

MOE: modulus of elasticity.

Family: Euphorbiaceae

Common name: Tabaquillo-Tablero

Scientific name: *Croton matourensis* Aubl.

Leaves



Bark - alburnum



Base of trunk



Cross-section



TABAQUILLO - TABLERO

SCIENTIFIC NAME: *Croton matourensis* Aubl.

FAMILY: Euphorbiaceae

POPULAR LOCAL NAMES: “*Tabaquillo-tablero.*”

TREE: Reaches height of 28 m, height of trunk 20 m, D.A.P. 90 cm. Crown umbrella-shaped, dense foliage, underside silver, opposite branching.

TRUNK: Cylindrical, straight, modifications to the base, thick, protruding roots.

OUTER BARK (Dead): Color white-grayish, appearance slightly rough, small lenticels, irregularly distributed.

INNER BARK (Living): Color pink-reddish, thick: 1.5 cm, texture brittle outside and fibrous inside, fibrous, whitish inclusions, exudations resinous, blood-red, characteristic pleasant odor.

LEAVES: Simple, alternate, with filiform stipules, free, large, persistent; upper side light green, pubescent, and silver on the underside, with two glands at the base of the limb, with reddish exudate.

FLOWERS: In terminal clusters, long, 8-10 cm, pubescent, small yellowish-white flowers.

FRUIT: Capsule, trilocular, dehiscent, explosive, 0.5 - 0.8 cm in diameter, small, black oblong seeds which are eaten by birds.

USES: Boards, poles, furniture.

* Information obtained in the region.

Table of Physico-Mechanical Properties:Scientific name: *Croton matourensis* Aubl.

Common name: Tabaquillo tablero

Family: EUPHORBIACEAE

Key: TB

| DENSITY (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|---------------------------------|---|--|--------------------------------------|
| GREEN 0.68 | RADIAL 1.84 | RADIAL 3.77 | AIR-DRY 11 |
| AIR-DRY 0.37 | TANGENTIAL 3.21 | TANGENTIAL 5.65 | GREEN 115 |
| NHYDROUS 0.35 | LONGITUDINAL 0.01 | LONGITUDINAL 0.13 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.32 | VOLUMETRIC 5.06 | VOLUMETRIC 9.56 | 1.55 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|------------------------------|---------------------------|--|
| SPL 234.46 | SPL 186.51 | SPL 19.73 | RADIAL 47.21 | MEAN RADIAL 180 | RADIAL 67.17 | MOR 946.03 |
| MOR 386.67 | MOR 204.16 | MOR 38.83 | TANGENTIAL 57.57 | MEAN TANGENTIAL 207.50 | TANGENTIAL 62.17 | |
| MOE X 1000 82.397 | MOE X 1000 144.837 | | AVERAGE SIDES 52.39 | AVERAGE SIDES 193.75 | AVERAGE SIDES 64.67 | |
| | | | | MEAN ENDS 280.83 | AVERAGE ENDS 44.42 | |
| MC (%) 141 | MC (%) 135 | MC (%) 118 | MC (%) 161 | MC (%) 150 | MC (%) 151 | MC (%) 156 |

Where: SPL: stress at proportional limit.

MOR: modulus of rupture.

MOE: modulus of elasticity.

Family: Sapotaceae

Common name: Caimo balata

Scientific name: *Crysophyllum sanguinolentum*

(Pierre)_Baehni ssp. Balata (Ducke) Pennington

Leaves



Bark - alburnum



Base of trunk



Cross-section



CAIMO BALATA

SCIENTIFIC NAME: *Crysophyllum sanguinolentum* (Pierre) Baehni spp. Balata (Ducke) Pennington

FAMILY: Sapotaceae

POPULAR LOCAL NAMES: “*Caimo balata.*”

TREE: Reaches height of 32 m, height of trunk 20 m, D.B.H. 1.0 m. Crown umbrella-shaped, foliage dense, alternate branching.

TRUNK: Cylindrical, angular by sections, straight, modifications to the base in anchor shoots (1.3 m), extended, thick, branched.

OUTER BARK (Dead): Color coffee-reddish, appearance rough, slightly fissured, comes off in large sheets, abundant large lenticels, distributed in vertical lines, whitish.

INNER BARK (Living): Color of brick outside and pink inside, thick: 2.5 cm, texture floury outside and fibrous inside, white fiber inclusions, abundant creamy white latex exudate, thick mass, slow-flowing, pleasant taste.

LEAVES: Simple, alternate, without stipules, petiole having canals for effluents or draining, 23 cm long by 11 cm wide. Dark green on the upper side and whitish with prominent veins on the underside. Terminal twig, grayish circular section, striated.

FLOWERS: Inflorescences on fasciculi, bracteolate flowers, axillary, color white, small and abundant.

FRUIT: Round berry, color light brown, large, 5 ellipsoid seeds with linear scar. Eaten by monkeys and tapirs.

ECOLOGY AND DISTRIBUTION: Species loves full shade, scarce, grows on terra firma in clayey soil in the Colombian, Peruvian, and Brazilian Amazon and in Guyana.

USES: Boards for houses, floors, furniture, fruit eaten by humans and wild animals.

Table of Physico-Mechanical Properties

Scientific name: *Crysophyllum sanguinolentum* (Pierre) Baehni ssp. balata (Ducke) Pennington.

Common name: Caimo balata

Family: SAPOTACEAE

Key: BA

| DENSITY (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|---------------------------------|---|--|--------------------------------------|
| GREEN 1.01 | RADIAL 3.54 | RADIAL 6.41 | AIR-DRY 12 |
| AIR-DRY 0.70 | TANGENTIAL 3.94 | TANGENTIAL 6.31 | GREEN 75 |
| ANHYDROUS 0.67 | LONGITUDINAL 0.10 | LONGITUDINAL 0.35 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.58 | VOLUMETRIC 7.58 | VOLUMETRIC 13.08 | 1.01 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|---------------------------|----------------------------|--|
| SPL 395.33 | SPL 262.24 | SPL 47.85 | RADIAL 77.85 | MEAN RADIAL 419 | RADIAL 142.25 | MOR 1164.29 |
| MOR 759.38 | MOR 302.61 | MOR 81.31 | TANGENTIAL 81.98 | MEAN TANGENTIAL 395 | TANGENTIAL 105.92 | |
| MOE X 1000 128.326 | MOE X 1000 156.266 | | AVERAGE SIDES 79.91 | AVERAGE SIDES 407 | AVERAGE SIDES 124.08 | |
| | | | | MEAN ENDS 461 | AVERAGE ENDS 76.08 | |
| MC (%) 75 | MC (%) 79 | MC (%) 60 | MC (%) 93 | MC (%) 79 | MC (%) 83 | MC (%) 86 |

Where: SPL: stress at proportional limit.

MOR: modulus of rupture.

MOE: modulus of elasticity.

Family: Vochysiaceae

Common name: Arenillo

Scientific name: *Erisma uncinatum*. Warm.

Leaves



Bark - alburnum



Base of trunk



Cross-section



ARENILLO

SCIENTIFIC NAME: *Erisma uncinatum* Warm.

FAMILY: Vochysiaceae

POPULAR LOCAL NAMES: “*Arenillo.*”

TREE: Reaches height of 32 m, height of trunk 22 m, D.B.H. 1.2 m. Crown subgloboid, foliage dense, color light green, opposite branching.

TRUNK: Cylindrical, straight, bearded protuberances on the trunk, base straight, roots somewhat protruding, thick.

OUTER BARK (Dead): Color gray, whitish, appearance squamose, thick.

INNER BARK (Living): Color yellow outside and reddish inside, thick: 1.5 cm, texture fibrous, brittle, comes off in short strips.

LEAVES: Simple, opposite, with filiform stipules at the base of the leaf, oblong-elliptical, 9-17 cm long, 4-11 cm wide, apex obtuse, short, base moderately narrow, upper side glabrous, glossy, underside opaque with prominent veins.

FLOWERS: In terminal panniculi, flowers with large bracts, blue violet, shiny, very abundant.

FRUIT: In samara with 4 vestigial wings, coffee-colored, some 7 cm long and 2.5 cm wide.

ECOLOGY AND DISTRIBUTION: Species loves partial shade, grows on terra firma in clayey soil in the Colombian, Peruvian, and Brazilian Amazon.

USES: Cabinet making, walls, ceilings, beds, ornamental, melliferous.

* Information obtained in the region.

Table of Physico-Mechanical Properties

Scientific name: *Erisma uncinatum* Warm.

Common name: Arenillo

Family: VOCHYSIACEAE

Key: AR

| DENSITY (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|---------------------------------|--|--|--------------------------------------|
| GREEN 0.86 | RADIAL 1.96 | RADIAL 4.41 | AIR-DRY 9 |
| AIR-DRY 0.55 | TANGENTIAL 4.81 | TANGENTIAL 6.07 | GREEN 81 |
| ANHYDROUS 0.53 | LONGITUDINAL 0.08 | LONGITUDINAL 0.25 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.47 | VOLUMETRIC 6.84 | VOLUMETRIC 10.72 | 1.60 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|------------------------------|---------------------------|--|
| SPL 372.41 | SPL 155.08 | SPL 43.40 | RADIAL 63.54 | MEAN RADIAL 286.17 | RADIAL 79.25 | MOR 541.28 |
| MOR 587.72 | MOR 222.01 | MOR 71.02 | TANGENTIAL 59.41 | MEAN TANGENTIAL 280.33 | TANGENTIAL 77 | |
| MOE X 1000 83.179 | MOE X 1000 83.608 | | AVERAGE SIDES 61.47 | AVERAGE SIDES 283.25 | AVERAGE SIDES 78.13 | |
| | | | | MEAN ENDS 313.50 | AVERAGE ENDS 45.67 | |
| MC (%) 101 | MC (%) 155 | MC (%) 134 | MC (%) 145 | MC (%) 139 | MC (%) 155 | MC (%) 152 |

Where: SPL: stress at proportional limit.
MOR: modulus of rupture.
MOE: modulus of elasticity.

Family: Lecythidaceae

Common name: Fono blanco

Scientific name: *Eschweilera cf. Coriacea*
(DC) Mart ex Bertg.

Leaves



Bark - alburnum



Base of trunk



Cross-section



FONO BLANCO

SCIENTIFIC NAME: *Eschweilera cf. coriacea* (DC.) Mart. ex Berg.

FAMILY: Lecythidaceae

POPULAR LOCAL NAMES: “*Fono blanco.*”

TREE: Reaches height of 35 m, height of trunk 20 m, D.B.H. 1.2 m. Crown subgloboid, wide, dense foliage, alternate branching.

TRUNK: Cylindrical, straight, modifications to the base in large, thick anchor shoots.

OUTER BARK (Dead): Color coffee-grayish, appearance slightly fissured, comes off in long, narrow sheets, abundant small, whitish lenticels, distributed in vertical lines.

INNER BARK (Living): Color yellow, thick: 1.5 cm, texture fibrous in long strips, odor reminiscent of lard.

LEAVES: Simple, alternate, without stipules, chartaceous, obovate, tapered apex, base acute, glabrous, or with middle vein slightly puberulous, secondary veins barely evident.

FLOWERS: Inflorescences in multiflorous panniculi, flowers with white or yellowish petals, staminal hood rolled and double.

FRUIT: Depressed globoid pyxidium, abruptly constricted, under the calycine annulus, coffee-colored, 6 cm in diameter and 4 cm in height, seeds: large, coffee-colored, eaten by long-tailed monkeys, agouti pacas.

ECOLOGY AND DISTRIBUTION: Species loves full shade, grows on terra firma, in clayey soil in the Colombian, Peruvian, and Brazilian Amazon.

USES: Construction, posts, beams, seeds eaten by animals and humans.

Table of Physico-Mechanical Properties

Scientific name: *Eschweilera cf. coriaceae* (DC.) Mart. Ex Bertg.

Common name: Fono blanco **

Family: LECYTHIDACEAE

Key: FB

| DENSITY (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|---------------------------------|---|--|--------------------------------------|
| GREEN 1.12 | RADIAL 4.26 | RADIAL 7.09 | AIR-DRY 10 |
| AIR-DRY 0.90 | TANGENTIAL 5.79 | TANGENTIAL 9.70 | GREEN 53 |
| ANHYDROUS 0.88 | LONGITUDINAL 0.17 | LONGITUDINAL 0.22 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.74 | VOLUMETRIC 10.21 | VOLUMETRIC 17.02 | 1.37 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|----------------------------|----------------------------|--|
| SPL 583.88 | SPL 325.67 | SPL 66.37 | RADIAL 87.08 | MEAN RADIAL 723.50 | RADIAL 157 | MOR 484.93 |
| MOR 873.08 | MOR 367.19 | MOR 117.27 | TANGENTIAL 87.54 | MEAN TANGENTIAL 690 | TANGENTIAL 138.83 | |
| MOE X 1000 139.282 | MOE X 1000 193.306 | | AVERAGE SIDES 87.31 | AVERAGE SIDES 706.75 | AVERAGE SIDES 147.92 | |
| | | | | MEAN ENDS 654.33 | AVERAGE ENDS 111 | |
| MC (%) 61 | MC (%) 71 | MC (%) 58 | MC (%) 71 | MC (%) 66 | MC (%) 70 | MC (%) 71 |

Where: SPL: stress at proportional limit.

MOR: modulus of rupture.

MOE: modulus of elasticity.

** All the wood of this species had abundant small perforations caused by insect attacks.

Family: Meliaceae

Common name: Bilibil

Scientific name: *Guarea cinnamomea* Harms

Leaves



Bark - alburnum



Base of trunk



Cross-section



BILIBIL

SCIENTIFIC NAME: *Guarea cinnamomea* Harms

FAMILY: Meliaceae

POPULAR LOCAL NAMES: "*Bilibil*."

TREE: Reaches height of 30 m, height of trunk 20 m, D.B.H. 1.0 m. Crown globoid, foliage dense, alternate branching.

TRUNK: Angular, twisted, elephant's foot modifications to the base, thick, protruding roots

OUTER BARK (Dead): Color coffee-chestnut, appearance rough, comes off in large sheets, cork-like, abundant, large, irregularly-distributed lenticels.

INNER BARK (Living): Color reddish, thick: 2 cm, texture fibrous, yields short strips, white fibrous inclusions.

LEAVES: Compound, paripinnate, alternate, with the terminal leaf bud in the shape of a hand, like the last pair of rudimentary leaflets, without stipules, up to 70 cm long, 3-11 pairs of leaflets, oblong or narrow elliptical, tapered apex, base fully cuneate, upper side glabrous, underside slightly pubescent-tomentose, characteristic, pleasant odor.

FLOWERS: Inflorescences racemose, axillary, flowers small, white with tomentose sepals.

FRUIT: Dehiscent capsule, ovoid or subpyriform, 4-6 cm in diameter, smooth or slightly ribbed, color greenish-yellow, with seeds consisting of red nuts with a red scar. The fruits and seeds are eaten by Guianan brown capuchin monkeys, turkey hens, Humboldt's woolly monkeys, tucanets, and agouti pacas.

ECOLOGY AND DISTRIBUTION: Species loves partial shade, grows on terra firma in clayey soil in the Colombian and Peruvian Amazon.

USES: Carpentry, heavy wood, boards, floors, animal consumption

Table of Physico-Mechanical Properties

Scientific name: *Guarea cinnamomea* Harms.

Common name: Bilibil

Family: MELIACEAE

Key: BL

| DENSITY (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|---------------------------------|---|--|--------------------------------------|
| GREEN 1.06 | RADIAL 3.20 | RADIAL 6.33 | AIR-DRY 13 |
| AIR-DRY 0.76 | TANGENTIAL 4.73 | TANGENTIAL 8.57 | GREEN 72 |
| ANHYDROUS 0.72 | LONGITUDINAL 0.06 | LONGITUDINAL 0.26 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.62 | VOLUMETRIC 7.99 | VOLUMETRIC 15.17 | 1.35 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|------------------------------|----------------------------|--|
| SPL 484.30 | SPL 273.68 | SPL 56.70 | RADIAL 91.08 | MEAN RADIAL 462.33 | RADIAL 125.33 | MOR 1277.58 |
| MOR 783.54 | MOR 319.67 | MOR 103.46 | TANGENTIAL 85.08 | MEAN TANGENTIAL 457.33 | TANGENTIAL 102 | |
| MOE X 1000 138.002 | MOE X 1000 197.291 | | AVERAGE SIDES 88.08 | AVERAGE SIDES 459.83 | AVERAGE SIDES 113.67 | |
| | | | | MEAN ENDS 504.50 | AVERAGE ENDS 87.17 | |
| MC (%) 67 | MC (%) 65 | MC (%) 55 | MC (%) 86 | MC (%) 69 | MC (%) 61 | MC (%) 56 |

Where: SPL: stress at proportional limit.
MOR: modulus of rupture.
MOE: modulus of elasticity.

Family: Caesalpinaceae

Common name: Roble

Scientific name: *Hymenaea oblonguifolia* var. *palustris* (Ducke) Lee and Long

Leaves



Bark - alburnum



Base of trunk



Cross-section



ROBLE [oak]

SCIENTIFIC NAME: *Hymenaea oblongifolia* var. *palustris* (Ducke) Lee and Long

FAMILY: Caesalpinaceae

POPULAR LOCAL NAMES: "Roble."

TREE: Reaches height of 35 m, height of trunk 22 m, D.A.P. 1 cm. Crown umbrella-shaped, foliage dense, ferruginous on the underside, alternate branching.

TRUNK: Cylindrical, straight, bearded, with modifications to the base in the form of an elephant's foot, thick, protruding roots.

OUTER BARK (Dead): Color coffee light-grayish, appearance finely fissured, bearded, large abundant lenticels, irregular distribution.

INNER BARK (Living): Color reddish, thick: 2 cm, texture fibrous laminated, short strips, fibrous, whitish inclusions, dark, watery exudate, crystallizes over time.

LEAVES: Compound, paripinnate, alternate, with stipules, 2 leaflets, narrow oblong, acute apex, base inequilateral, upper side disperse pubescent, underside densely brown honey-colored tomentose.

FLOWERS: Inflorescences in long, dense panicle with small creamy white to light pink flowers.

FRUIT: Indehiscent legume, ovoid, subcompressed, smooth, with 1-3 oblong seeds covered by a fine yellow dust that is edible and highly nutritious and medicinal. The fruits and seeds are eaten by long-tailed monkeys, agouti pacas, plundered by parrots and macaws.

ECOLOGY AND DISTRIBUTION: Species loves full shade, very slow-growing, scarce, grows on terra firma in clayey soil in the Colombian and Peruvian Amazon.

USES: Cabinet making, construction, human and wild animal consumption, medicinal.

* Information obtained in the region.

Table of Physico-Mechanical Properties

Scientific name: *Hymenaea oblongifolia* Huber var *palustris* (Ducke) Lee & Langenheim.

Common name: Roble

Family: CAESALPINIACEAE

Key: ROBLE-RB

| CONTRACTION (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|-------------------------------------|--|--|--------------------------------------|
| GREEN 1.07 | RADIAL 2.32 | RADIAL 3.87 | AIR-DRY 8 |
| AIR-DRY 0.91 | TANGENTIAL 5.31 | TANGENTIAL 8.18 | GREEN 38 |
| ANHYDROUS 0.88 | LONGITUDINAL 0.07 | LONGITUDINAL 0.22 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.78 | VOLUMETRIC 7.70 | VOLUMETRIC 12.26 | 2.15 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|------------------------------|----------------------------|--|
| SPL 690.98 | SPL 468.82 | SPL 112.75 | RADIAL 117.86 | MEAN RADIAL 873.33 | RADIAL 197.67 | MOR 1431.10 |
| MOR 1208.31 | MOR 488.79 | MOR 197.39 | TANGENTIAL 149.74 | MEAN TANGENTIAL 813.67 | TANGENTIAL 162.92 | |
| MOE X 1000 173.059 | MOE X 1000 215.496 | | AVERAGE SIDES 133.80 | AVERAGE SIDES 843.50 | AVERAGE SIDES 180.29 | |
| | | | | MEAN ENDS 1069.67 | AVERAGE ENDS 151.08 | |
| MC (%) 45 | MC (%) 51 | MC (%) 47 | MC (%) 51 | MC (%) 54 | MC (%) 52 | MC (%) 58 |

Where: SPL: stress at proportional limit.
MOR: modulus of rupture.
MOE: modulus of elasticity.

Family: Mimosaceae

Common name: Guamo churimo

Scientific name: *Inga acrocephala* Steud.

Leaves



Bark - alburnum



Base of trunk



Cross-section



GUAMO CHURIMO

SCIENTIFIC NAME: *Inga acrocephala* Steud.

FAMILY: Mimosaceae

POPULAR LOCAL NAMES: "Guamo Churimo."

TREE: Reaches height of 35 m, height of trunk 22 m, D.B.H. 1.2 m. Crown globoid, dense foliage, ferruginous, alternate branching.

TRUNK: Cylindrical, in angular, straight sections. Modifications to the base with roots protruding above the surface in the shape of an elephant's foot, thick.

OUTER BARK (Dead): Color light brown, appearance rough, dented at the base, comes off in large sheets, abundant white lenticels, small, irregular distribution.

INNER BARK (Living): Color purple or blood-red, thick: 2 cm, texture fibrous, exudate in slow-flowing, blood-red resin, used for coloring.

LEAVES: Compound, paripinnate, alternate, with stipules, without winged rachises, with glands on each pair of leaflets. Terminal twig, angular, pubescent, lenticellate.

FLOWERS: Inflorescences in lateral umbels, white flowers, with many stamens, bright and colorful, abundant, aromatic.

FRUIT: Large green legume, indehiscent, several seeds covered with a white, sweet pulp. Food for Guianan brown capuchin monkeys, woolly monkeys, titis, which may spread the seeds.

ECOLOGY AND DISTRIBUTION: Species loves partial shade, grows on low hills, on terra firma in clayey soil in the Colombian, Peruvian, and Brazilian Amazon.

USES: Fine wood for construction, homes, shade, fruit eaten by humans and other mammals.

*Information obtained in the region.

Table of Physico-Mechanical Properties

Scientific name: *Inga acrocephala* Steud.

Common name: Guamo Churimo

Family: MIMOSACEAE

Key: GCH

| DENSITY (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|---------------------------------|---|--|--------------------------------------|
| GREEN 0.92 | RADIAL 1.93 | RADIAL 4.15 | AIR-DRY 13 |
| AIR-DRY 0.72 | TANGENTIAL 5.14 | TANGENTIAL 8.74 | GREEN 54 |
| ANHYDROUS 0.68 | LONGITUDINAL 0.09 | LONGITUDINAL 0.44 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.59 | VOLUMETRIC 7.16 | VOLUMETRIC 13.32 | 2.09 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|------------------------------|----------------------------|--|
| SPL 449.10 | SPL 263.49 | SPL 37.99 | RADIAL 77.80 | MEAN RADIAL 522.17 | RADIAL 157.75 | MOR 871.18 |
| MOR 880.30 | MOR 294.32 | MOR 105.34 | TANGENTIAL 96.89 | MEAN TANGENTIAL 530.83 | TANGENTIAL 137.75 | |
| MOE X 1000 136.718 | MOE X 1000 204.637 | | AVERAGE SIDES 87.35 | AVERAGE SIDES 526.50 | AVERAGE SIDES 147.75 | |
| | | | | MEAN ENDS 559.33 | AVERAGE ENDS 97.33 | |
| MC (%) 36 | MC (%) 44 | MC (%) 43 | MC (%) 51 | MC (%) 45 | MC (%) 37 | MC (%) 59 |

Where: SPL: stress at proportional limit.

MOR: modulus of rupture.

MOE: modulus of elasticity.

Family: Lauraceae

Common name: Amarillo, laurel

Scientific name: *Ocotea cf. oblonga*

Leaves and fruit



Bark - alburnum



Base of trunk



Cross-section



AMARILLO LAUREL

SCIENTIFIC NAME: *Ocotea cf. oblonga (Meissn.) Mez.*

FAMILY: Lauraceae

POPULAR LOCAL NAMES: "Amarillo" or "laurel."

TREE: Reaches height of 28 m, height of trunk 18 m, D.B.H. 80 cm. Crown globoid, foliage dense, alternate branching.

TRUNK: Angular, twisted, straight, elephant's foot modifications to the base, thick, protruding roots.

OUTER BARK (Dead): Dark coffee color, dented appearance at the base, rough, lenticels abundant, large, irregular distribution.

INNER BARK (Living): Brick color, oxidizes and darkens in the air, thick: 1.5 cm, texture floury outside and fibrous inside, inclusions yellow points, pleasant odor reminiscent of turpentine.

LEAVES: Simple, alternate, without stipules, obovate, characteristic odor, color light green on the upper side and whitish on the underside, veins prominent and arched. Terminal twig: tetragonal, grayish.

FLOWERS: On inflorescences in axillary panniculi, flowers small, greenish white, abundant and aromatic.

FRUIT: A monospermous berry, ovoid, rough, black when mature, barely established on a protruding red cupule; one coffee-colored seed; fruits eaten by turkey hens, tucanets, agouti pacas.

ECOLOGY AND DISTRIBUTION: Species loves full shade, very slow growing, grows on terra firma in clayey soil in the Colombian and Peruvian Amazon.

USES: Cabinet making, furniture, wildlife consumption, essential oils.

* Information obtained in the region.

Table of Physico-Mechanical Properties

Scientific name: *Ocotea cf. Oblonga* (Meisn) Mez.

Common name: Amarillo o laurel

Family: LAURACEAE

Key: AM

| CONTRACTION (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|-------------------------------------|---|--|--------------------------------------|
| GREEN 0.77 | RADIAL 2.52 | RADIAL 4.27 | AIR-DRY 8 |
| AIR-DRY 0.63 | TANGENTIAL 4.55 | TANGENTIAL 6.83 | GREEN 41 |
| ANHYDROUS 0.61 | LONGITUDINAL 0.10 | LONGITUDINAL 0.21 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.54 | VOLUMETRIC 7.17 | VOLUMETRIC 11.31 | 1.61 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|------------------------------|----------------------------|--|
| SPL 504.58 | SPL 295.69 | SPL 47.05 | RADIAL 73.10 | MEAN RADIAL 359.83 | RADIAL 107.08 | MOR 935.82 |
| MOR 816.69 | MOR 322.58 | MOR 81.04 | TANGENTIAL 82.85 | MEAN TANGENTIAL 353.50 | TANGENTIAL 96 | |
| MOE X 1000 132.724 | MOE X 1000 182.956 | | AVERAGE SIDES 77.98 | AVERAGE SIDES 356.67 | AVERAGE SIDES 101.54 | |
| | | | | MEAN ENDS 399.83 | AVERAGE ENDS 74 | |
| MC (%) 46 | MC (%) 61 | MC (%) 43 | MC (%) 80 | MC (%) 59 | MC (%) 62 | MC (%) 89 |

Where: SPL: stress at proportional limit.
MOR: modulus of rupture.
MOE: modulus of elasticity.

Family: Fabaceae

Common name: Chocho

Scientific name: *Ormosia nobilis* Tul. Var. *santaremensis* (Ducke) Rudd

Leaves



Bark - alburnum



Base of trunk



Cross-section



CHOCHO

SCIENTIFIC NAME: *Ormosia nobilis* Tul. var. *santaremensis* (Ducke) Rudd.

FAMILY: Fabaceae

POPULAR LOCAL NAMES: “Chocho.”

TREE: Reaches height of 28 m, height of trunk 18 m, D.B.H. 70 cm. Crown subglobose, dense foliage, ferruginous, alternate branching.

TRUNK: Cylindrical-straight, some protuberances, modifications to the base in poorly-developed shoots, like an elephant's foot, thick, protruding roots.

OUTER BARK (Dead): Color brownish-gray, bearded, appearance rough, comes off in small sheets, coriaceous, abundant small, whitish lenticels, irregularly distributed.

INNER BARK (Living): Color yellow, thick: 1.5 cm, texture fibrous, whitish fibrous inclusions, odor reminiscent of beans.

LEAVES: Compound, imparipinnate, with filiform stipules, deciduous, 40-50 cm long, with oblong-elliptical leaflets, apex obtuse to tapered, base obtuse, upper side vivid and glabrous, underside pubescent, ferruginous, with odor reminiscent of beans when crushed. Terminal twig tetragonal, pubescent, lenticellate.

FLOWERS: Axillary, racemose inflorescences, small flowers, lilac- to purple-colored.

FRUIT: Dehiscent legume, coriaceous, oblong, compressed with crimson red seeds used for handicrafts.

ECOLOGY AND DISTRIBUTION: Species loves partial shade, grows on terra firma, in clayey soil in the Colombian and Peruvian Amazon.

USES: Wood for construction, floors, beams, carpentry, handicrafts.

Table of Physico-Mechanical Properties

Scientific name: *Ormosia nobilis* Tul. Var. Santaremnensis (Ducke) Rudd

Common name: Chocho

Family: FABACEAE

Key: CHO

| CONTRACTION (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|-------------------------------------|---|--|--------------------------------------|
| GREEN 0.98 | RADIAL 3.24 | RADIAL 4.54 | AIR-DRY 8 |
| AIR-DRY 0.46 | TANGENTIAL 6.05 | TANGENTIAL 8.16 | GREEN 151 |
| ANHYDROUS 0.44 | LONGITUDINAL 0.07 | LONGITUDINAL 0.12 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.39 | VOLUMETRIC 9.36 | VOLUMETRIC 12.83 | 1.98 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|------------------------------|---------------------------|--|
| SPL 285.72 | SPL 167.44 | SPL 34.37 | RADIAL 53.03 | MEAN RADIAL 273 | RADIAL 62.92 | MOR 735.99 |
| MOR 532.60 | MOR 196.69 | MOR 59.90 | TANGENTIAL 60.32 | MEAN TANGENTIAL 256.17 | TANGENTIAL 59.75 | |
| MOE X 1000 84.999 | MOE X 1000 92.008 | | AVERAGE SIDES 56.68 | AVERAGE SIDES 264.58 | AVERAGE SIDES 61.33 | |
| | | | | MEAN ENDS 319.42 | AVERAGE ENDS 37.75 | |
| MC (%) 155 | MC (%) 175 | MC (%) 156 | MC (%) 189 | MC (%) 182 | MC (%) 179 | MC (%) 115 |

Where: SPL: stress at proportional limit.

MOR: modulus of rupture.

MOE: modulus of elasticity.

Family: Myristicaceae

Common name: Caracolí

Scientific name: *Osteophloeum platyspermum*

(A.D.C.) Warb.

Leaves



Bark - alburnum



Base of trunk



Cross-section



CARACOLÍ

SCIENTIFIC NAME: *Osteophloeum platyspermum* (A. D.C.) Warb

FAMILY: Myristicaceae

POPULAR LOCAL NAMES: “*Caracolí.*”

TREE: Reaches height of 35 m, height of trunk 22 m, D.B.H. 1.20 m. Crown subgloboid, umbrella-shaped, dense foliage, verticillate branching.

TRUNK: Cylindrical, straight, modifications to the base in poorly developed shoots, in the shape of an elephant's foot, wide and widespread.

OUTER BARK (Dead): Dark coffee colored, appearance rough, depressions from sheets that have fallen off.

INNER BARK (Living): Cream colored, oxidizes to dark yellow, thick: 1.5 cm, texture fibrous, inside laminated, outside brittle, yellowish, watery exudate, rapid-flowing and abundant, bitter tasting.

LEAVES: Simple, alternate, without stipules, oblong-obovate, slightly rounded, emarginate apex, base thin, upper side glabrous, underside slightly lepidote and whitish-bluish, yellowish watery exudate. Terminal twig: rounded, blackish, smooth, flexible, puberulent.

FLOWERS: Inflorescences in panniculi, solitary flowers, yellowish with tomentose calyx.

FRUIT: Dehiscent capsules, 2-2.5 cm long, carinate, with one oblong seed with red lacinate aril. The seeds and fruit are eaten by monkeys and agouti pacas.

ECOLOGY AND DISTRIBUTION: Species loves partial shade, grows on terra firma and in areas susceptible to flooding, in clayey and loamy soils in the Colombian and Peruvian Amazon.

USES: Tongue-and-groove boards, carpentry, boards, floors, wild animal consumption.

Table of Physico-Mechanical Properties:Scientific name: *Osteophloeum platyspermum* (A.D.C.) Werb

Common name: Caracoli **

Family: MYRISTICACEAE

Key: CR

| DENSITY (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|---------------------------------|---|--|--------------------------------------|
| GREEN 0.74 | RADIAL 3.00 | RADIAL 4.41 | AIR-DRY 7 |
| AIR-DRY 0.50 | TANGENTIAL 6.55 | TANGENTIAL 8.80 | GREEN 76 |
| ANHYDROUS 0.48 | LONGITUDINAL 0.10 | LONGITUDINAL 0.20 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.42 | VOLUMETRIC 9.65 | VOLUMETRIC 13.41 | 2.04 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|------------------------------|---------------------------|--|
| SPL 184.07 | SPL 144.65 | SPL 18.79 | RADIAL 55.44 | MEAN RADIAL 234.17 | RADIAL 46 | MOR 740.98 |
| MOR 384.48 | MOR 171.93 | MOR 37.54 | TANGENTIAL 65.07 | MEAN TANGENTIAL 225.17 | TANGENTIAL 41.25 | |
| MOE X 1000 104.539 | MOE X 1000 133.373 | | AVERAGE SIDES 60.26 | AVERAGE SIDES 229.67 | AVERAGE SIDES 43.63 | |
| | | | | MEAN ENDS 333.25 | AVERAGE ENDS 36.33 | |
| MC (%) 91 | MC (%) 82 | MC (%) 79 | MC (%) 102 | MC (%) 73 | MC (%) 91 | MC (%) 155 |

Where: SPL: stress at proportional limit.

MOR: modulus of rupture.

MOE: modulus of elasticity.

** All the wood of this species had abundant small perforations caused by insect attacks.

Family: Mimosaceae

Common name: Guarango blanco

Scientific name: *Parkia multijuga* Benth.

Leaves



Bark - alburnum



Base of trunk



Cross-section



GUARANGO BLANCO

SCIENTIFIC NAME: *Parkia multijuga* Benth.

FAMILY: Mimosaceae

POPULAR LOCAL NAMES: “*Guarango blanco.*”

TREE: Reaches height of 35 m, height of trunk 20 m, D.B.H. 1.20 m. Crown umbrella-shaped, foliage sparse and fine, opposite branching.

TRUNK: Shape: cylindrical, somewhat twisted in sections, modifications to the base in large anchor shoots, inequilateral.

OUTER BARK (Dead): Color coffee-reddish, appearance rough, with awns, lenticels whitish, small, abundant, irregular distribution.

INNER BARK (Living): Color yellowish outside and whitish inside, thick: 1.5 cm, texture fibrous, yields short strips, with inclusions in reddish points, watery exudate, thick, eaten by long-tailed monkeys, odor reminiscent of beans.

LEAVES: Compound, bipinnate, alternate or in verticils at the ends of the twigs, up to 70 cm long, with 12-35 pairs of pinnas, leaflets 30-60 pairs, per pinna, oblong, apex rounded or retuse; rachises with glands, somewhat terete, slightly ribbed, puberulous and glabrescent.

FLOWERS: Somewhat ramificated inflorescence, below the leaves, heads globoid, white, 2-5 cm in diameter, flowers hermaphroditic.

FRUIT: Indehiscent legume, amply falcated, 15-32 cm long and 7-9 cm wide, with 8-13 large, black, elongated seeds.

ECOLOGY AND DISTRIBUTION: Species loves partial shade, scarce, grows on terra firma in clayey soil in the Colombian, Peruvian, and Brazilian Amazon.

USES: Construction, floors, homes, fuel, shade, and as an ornamental, seeds for handicrafts.

* Information obtained in the region.

Table of Physico-Mechanical Properties

Scientific name: *Parkia multijuga* Benth.

Common name: Guarango blanco

Family: MIMOSACEAE

Key: GB

| CONTRACTION (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|-------------------------------------|---|--|--------------------------------------|
| GREEN 0.71 | RADIAL 2.97 | RADIAL 4.38 | AIR-DRY 8 |
| AIR-DRY 0.50 | TANGENTIAL 5.02 | TANGENTIAL 7.01 | GREEN 65 |
| ANHYDROUS 0.48 | LONGITUDINAL 0.13 | LONGITUDINAL 0.28 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.43 | VOLUMETRIC 8.11 | VOLUMETRIC 11.67 | 1.60 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|------------------------------|---------------------------|--|
| SPL 235.10 | SPL 127.61 | SPL 33.19 | RADIAL 56.84 | MEAN RADIAL 226.5 | RADIAL 69.08 | MOR 476.75 |
| MOR 402.30 | MOR 184.68 | MOR 51.45 | TANGENTIAL 63.90 | MEAN TANGENTIAL 243.42 | TANGENTIAL 60.33 | |
| MOE X 1000 75.321 | MOE X 1000 120.455 | | AVERAGE SIDES 60.37 | AVERAGE SIDES 234.96 | AVERAGE SIDES 64.71 | |
| | | | | MEAN ENDS 268.83 | AVERAGE ENDS 34.17 | |
| MC (%) 102 | MC (%) 122 | MC (%) 107 | MC (%) 144 | MC (%) 152 | MC (%) 140 | MC (%) 115 |

Where: SPL: stress at proportional limit.
MOR: modulus of rupture.
MOE: modulus of elasticity.

Family: Mimosaceae

Common name: Guarango rayao

Scientific name: *Parkia nitida* Miq.

Leaves



Bark - alburnum



Base of trunk



Cross-section



GUARANGO RAYAO

SCIENTIFIC NAME: *Parkia nitida* Miq.

FAMILY: Mimosaceae

POPULAR LOCAL NAMES: “*Guarango rayao.*”

TREE: Reaches height of 35 m, height of trunk 22 m, D.B.H. 1.1 m. Crown umbrella-shaped, foliage sparse and fine, alternate branching.

TRUNK: Cylindrical, straight, with modifications to the base in tall anchor shoots, inequilateral.

OUTER BARK (Dead): Color coffee-grayish, appearance slightly fissured, large, abundant lenticels, distribution in vertical lines.

INNER BARK (Living): Color orangish outside and yellow inside, thick: 2 cm, texture floury outside and fibrous inside. Yellow, fibrous inclusions, thick, whitish exudate, eaten by long-tailed monkeys, and turns to gum over time.

LEAVES: Compound, opposite, bipinnate, with stipules, with small secondary leaflets, glands on the rachises. Terminal twig, circular to tetragonal section, angular, lenticellate, hairs ferruginous, knotted, lenticels reddish, odor reminiscent of beans.

FLOWERS: Inflorescences not ramificated, terminal, heads globoid, white, flowers hermaphroditic, small.

FRUIT: Leguminous, somewhat curved, 30 cm long, black when mature, large black oblong seeds.

ECOLOGY AND DISTRIBUTION: Species loves partial shade, grows on terra firma in clayey soil in the Colombian, Peruvian, and Brazilian Amazon.

***USES:** The seeds are edible, used for handicrafts, the wood is semi-heavy, used in construction, as fuel, for shade, and as an ornamental.

* Information obtained in the region

Table of Physico-Mechanical Properties

Scientific name: *Parkia nitida* Miq.

Common name: Guarango rayao

Family: MIMOSACEAE

Key: GR

| CONTRACTION (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|-------------------------------------|---|--|--------------------------------------|
| GREEN 0.77 | RADIAL 1.75 | RADIAL 5.29 | AIR-DRY 12 |
| AIR-DRY 0.43 | TANGENTIAL 3.91 | TANGENTIAL 7.50 | GREEN 113 |
| ANHYDROUS 0.42 | LONGITUDINAL 0.12 | LONGITUDINAL 0.38 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.36 | VOLUMETRIC 5.78 | VOLUMETRIC 13.17 | 1.76 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|------------------------------|---------------------------|--|
| SPL 192.90 | SPL 120.43 | SPL 19.94 | RADIAL 52.69 | MEAN RADIAL 193 | RADIAL 51.33 | MOR 414.87 |
| MOR 373.88 | MOR 149.28 | MOR 36.46 | TANGENTIAL 54.67 | MEAN TANGENTIAL 180.67 | TANGENTIAL 47.33 | |
| MOE X 1000 76.010 | MOE X 1000 99.886 | | AVERAGE SIDES 53.68 | AVERAGE SIDES 186.83 | AVERAGE SIDES 49.33 | |
| | | | | MEAN ENDS 262 | AVERAGE ENDS 32.25 | |
| MC (%) 116 | MC (%) 133 | MC (%) 116 | MC (%) 189 | MC (%) 112 | MC (%) 131 | MC (%) 164 |

Where: SPL: stress at proportional limit.
MOR: modulus of rupture.
MOE: modulus of elasticity.

Family: Sapotaceae

Common name: Caimo amarillo

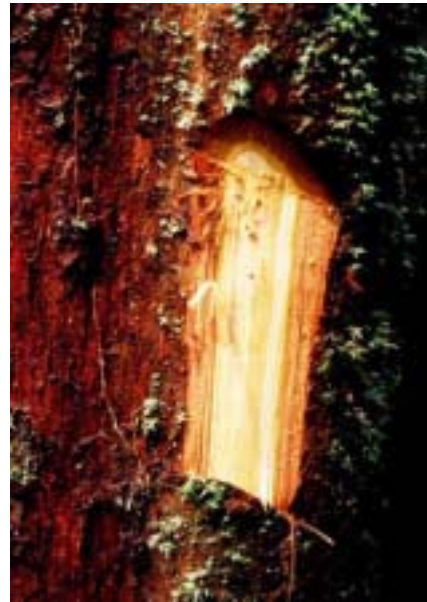
Scientific name: Pradosia cf. cochlearia

(Lecomte) Pennington

Leaves



Bark - alburnum



Base of trunk



Cross-section



CAIMO AMARILLO

SCIENTIFIC NAME: *Pradosia cf. cochlearia* (Lecomte) Pennington

FAMILY: Sapotaceae

POPULAR LOCAL NAMES: “*Caimo amarillo.*”

TREE: Reaches height of 30 m, height of trunk 20 m, 1.1 m of D.B.H. Crown globoid, foliage dense, opposite branching.

TRUNK: Cylindrical, canaliculate at the base, modifications to the base in anchor shoots, equilateral, thick.

OUTER BARK (Dead): Color coffee-grayish, appearance fissured, abundant small, irregularly distributed lenticels.

INNER BARK (Living): Color of brick, thick: 1.5 cm, texture fibrous, laminar, yellowish latex exudate in teardrops, slow-flowing, solidifies rapidly and acquires a putty-like texture.

LEAVES: Simple, opposite, with a pair of deciduous stipules grouped at the ends of the branches, oblanceolate, apex retuse or rounded, base thin, color dark green on the upper side and light green on the underside, exudate yellow.

FLOWERS: Califlorous or ramiflorous inflorescences, axillary, bisexual flowers, small and white.

FRUIT: Drupaceous, asymmetrical, fine, cartilaginous endocarp, single seeds, nut smooth and shiny with large scar. The fruits are eaten by common woolly monkeys, Guianan brown capuchin monkeys, tapirs, and agouti pacas.

ECOLOGY AND DISTRIBUTION: Species loves full shade, very slow-growing, grows on terra firma in clayey soil in the Colombian and Peruvian Amazon.

USES: Construction, homes, fuel, fruit eaten by humans and wild animals.

Table of Physico-Mechanical Properties

Scientific name: *Pradosia cf. Cochlearia* (Lecomte) Pennington

Common name: Caimo amarillo

Family: SAPOTACEAE

Key: C

| CONTRACTION (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|-------------------------------------|---|--|--------------------------------------|
| GREEN 1.13 | RADIAL 2.56 | RADIAL 5.01 | AIR-DRY 10 |
| AIR-DRY 0.90 | TANGENTIAL 4.81 | TANGENTIAL 8.81 | GREEN 49 |
| ANHYDROUS 0.88 | LONGITUDINAL 0.07 | LONGITUDINAL 0.22 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.76 | VOLUMETRIC 7.44 | VOLUMETRIC 14.04 | 1.77 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|------------------------------|----------------------------|--|
| SPL 594.10 | SPL 418.12 | SPL 85.66 | RADIAL 106.73 | MEAN RADIAL 799.50 | RADIAL 163.08 | MOR 1274.96 |
| MOR 1046.07 | MOR 457.75 | MOR 175.05 | TANGENTIAL 128.70 | MEAN TANGENTIAL 782.33 | TANGENTIAL 151.42 | |
| MOE X 1000 170.450 | MOE X 1000 244.574 | | AVERAGE SIDES 117.71 | AVERAGE SIDES 790.92 | AVERAGE SIDES 157.25 | |
| | | | | MEAN ENDS 799 | AVERAGE ENDS 131.42 | |
| MC (%) 50 | MC (%) 60 | MC (%) 53 | MC (%) 59 | MC (%) 56 | MC (%) 59 | MC (%) 52 |

Where: SPL: stress at proportional limit.

MOR: modulus of rupture.

MOE: modulus of elasticity.

Family: Moraceae

Common name: Leche chiva

Scientific name: *Pseudolmedia laevis* (R. & P.) Macbr.

Leaves



Bark - alburnum



Base of trunk



Cross-section



LECHE CHIVA

SPECIES: *Pseudolmedia laevis* (R. & P.) Macbr.

FAMILY: Moraceae

POPULAR LOCAL NAMES: “*Leche chiva*.”

TREE: Reaches height of 35 m, height of trunk 20 m, D.A.P. 75 cm. Crown globoid, foliage dense, alternate branching.

TRUNK: Cylindrical, with awns and knots by sectors, modifications to the base in the form of moderately-developed, thick shoots.

OUTER BARK (Dead): Color light brown with greenish tones. Appearance finely fissured longitudinally and dented. Tiny lenticels all over the trunk, irregular distribution.

INNER BARK (Living): Color in tones ranging from yellow-sandy to reddish after cutting, thickness: average, 0.7 cm Texture floury outside and fibrous inside. Yellowish latex exudate that turns orangish over time, sticky, flows in teardrops after cutting.

LEAVES: Simple, alternate, with stipules, lanceolate to oblong, generally wide toward the apex, base acute and apex tapered, with latex.

FLOWERS: Inflorescences, axillary, sessile, staminate, 7-10 mm. in diameter, pistillate 2-2.5 mm. in diameter, color greenish yellow.

FRUIT: Pseudodrupe, succulent, color red. Eaten by common woolly monkeys, howler monkeys, and birds such as curassows, which may be the dispersers.

ECOLOGY AND DISTRIBUTION: Shade-loving species that grows in partial shade on terra firma in clayey soil in the Colombian and Peruvian Amazon.

***USES:** Sawmills, construction, medicinal.

* Information obtained in the region.

Table of Physico-Mechanical Properties

Scientific name: *Pseudolmedia laevis* (R.&P.) Macbr.

Common name: Leche chiva

Family: MORACEAE

Key: LC

| DENSITY (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|---------------------------------|---|--|--------------------------------------|
| GREEN 1.06 | RADIAL 2.73 | RADIAL 4.78 | AIR-DRY 9 |
| AIR-DRY 0.76 | TANGENTIAL 6.88 | TANGENTIAL 10.08 | GREEN 68 |
| ANHYDROUS 0.74 | LONGITUDINAL 0.29 | LONGITUDINAL 0.43 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.63 | VOLUMETRIC 9.90 | VOLUMETRIC 15.29 | 2.10 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|------------------------------|----------------------------|--|
| SPL 466.87 | SPL 330.86 | SPL 48.32 | RADIAL 72.47 | MEAN RADIAL 451.50 | RADIAL 121.67 | MOR 762.78 |
| MOR 693.69 | MOR 340.91 | MOR 88.51 | TANGENTIAL 83.74 | MEAN TANGENTIAL 454.83 | TANGENTIAL 126.25 | |
| MOE X 1000 131.347 | MOE X 1000 192.529 | | AVERAGE SIDES 78.10 | AVERAGE SIDES 453.17 | AVERAGE SIDES 123.96 | |
| | | | | MEAN ENDS 485.83 | AVERAGE ENDS 85.75 | |
| MC (%) 81 | MC (%) 98 | MC (%) 87 | MC (%) 95 | MC (%) 100 | MC (%) 101 | MC (%) 96 |

Where: SPL: stress at proportional limit.
MOR: modulus of rupture.
MOE: modulus of elasticity.

Family: Vochysiaceae

Common name: Cancho amarillo

Scientific name: *Qualea ingens* Warm.

Leaves



Bark - alburnum



Base of trunk



Cross-section



CANCHO AMARILLO

SCIENTIFIC NAME: *Qualea ingens* Warm

FAMILY: Vochysiaceae

POPULAR LOCAL NAMES: “*Cancho amarillo.*”

TREE: Reaches height of 30 m, height of trunk 20 m, D.B.H. 80 cm. Crown globoid, dense foliage, opposite branching.

TRUNK: Cylindrical, straight, with some protuberances, modifications to the base in poorly developed shoots.

OUTER BARK (Dead): Color gray-chestnut, appearance rough, dented at the base, comes off in short sheets, abundant small lenticels, irregular distribution.

INNER BARK (Living): Color brownish-yellow, thick: 1.5 cm, texture fibrous. Characteristic pleasant odor.

LEAVES: Simple, opposite, large, 2 pairs large stipules changed into crater-shaped glands, obovate, 7-10 cm long, 4-6 cm wide, apex short-tapered, base obtuse and rounded, glabrous on both sides, color yellowish-green, central vein protruding on both sides, pubescent dark-coffee colored, secondary veins parallel, abundant, and very close. Tomentose, tetragonal coffee-colored branches.

FLOWERS: On inflorescences in terminal panniculi 6-10 cm long, sepals silvery, petals white with a purple macula toward the base and another, yellow macula in the center.

FRUIT: Dehiscent capsules, thick, trilobulate, 4-5 cm long and 2-2.5 cm wide, with numerous winged seeds 2-3 cm long.

ECOLOGY AND DISTRIBUTION: Species loves partial shade, grows on terra firma in clayey soil in the Colombian and Peruvian Amazon.

USES: Boards, beams, strips, floors, bodywork, furniture, ornamental, melliferous.

* Information obtained in the region.

Table of Physico-Mechanical Properties

Scientific name: *Qualea ingens* Warm.

Common name: Cancho amarillo

Family: VOCHYSIACEAE

Key: CH1

| DENSITY (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|---------------------------------|---|--|--------------------------------------|
| GREEN 0.96 | RADIAL 3.98 | RADIAL 6.09 | AIR-DRY 8 |
| AIR-DRY 0.65 | TANGENTIAL 7.62 | TANGENTIAL 10.54 | GREEN 80 |
| ANHYDROUS 0.64 | LONGITUDINAL 0.12 | LONGITUDINAL 0.27 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.53 | VOLUMETRIC 11.72 | VOLUMETRIC 16.91 | 1.73 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|----------------------------|----------------------------|--|
| SPL 405.85 | SPL 309.42 | SPL 41.04 | RADIAL 70.66 | MEAN RADIAL 378.83 | RADIAL 112 | MOR 1165.16 |
| MOR 654.70 | MOR 321.40 | MOR 74.62 | TANGENTIAL 75.69 | MEAN TANGENTIAL 367 | TANGENTIAL 111.5 | |
| MOE X 1000 132.194 | MOE X 1000 198.965 | | AVERAGE SIDES 73.18 | AVERAGE SIDES 372.92 | AVERAGE SIDES 111.75 | |
| | | | | MEAN ENDS 403 | AVERAGE ENDS 64.42 | |
| MC (%) 93 | MC (%) 95 | MC (%) 75 | MC (%) 99 | MC (%) 90 | MC (%) 98 | MC (%) 81 |

Where: SPL: stress at proportional limit.

MOR: modulus of rupture.

MOE: modulus of elasticity.

Family: Vochysiaceae

Common name: Cancho gurre

Scientific name: *Qualea sprucei* Warm.

Leaves



Bark - alburnum



Base of trunk



Cross-section



CANCHO GURRE

SCIENTIFIC NAME: *Qualea sprucei* Warm.

FAMILY: Vochysiaceae

POPULAR LOCAL NAMES: “*Cancho gurre.*”

TREE: Reaches height of 25 m, height of trunk 18 m, D.B.H. 70 cm. Crown subgloboid, foliage dense, verticillate branching.

TRUNK: Cylindrical, straight, with modifications to the base in poorly-developed, widespread swellings.

OUTER BARK (Dead): Coffee colored, appearance rough, comes off in small sheets, abundant tiny, whitish, irregularly distributed lenticels.

INNER BARK (Living): Color brownish-gray, turns dark coffee in air, thick: 1.5 cm, texture fibrous, dark watery exudate, turns to gum over time and on exposure to the air, odorless. (Gurre refers to the odor of the wood, similar to the Gurre.)

LEAVES: Simple, opposite, 2 pairs, stipules changed into crater-shaped glands, near the base of the petiole, elliptical, 5-7 cm long and 2.5-3 cm wide, tapered apex, central vein having canals for effluents or draining on the upper side, pubescent and very prominent on the underside, with secondary veining parallel, very close together, upper side light green and glossy, underside yellowish-green, glabrous, and shiny. Terminal twig tetragonal, striated, new foliage yellowish-green, pubescent on both sides.

FLOWERS: Inflorescences in panniculi, with small bracteoles, white flowers, with a lilac-colored petal, with a light longitudinal stripe.

FRUIT: Woody capsule, dehiscent, ovoid, trilobulate, 3-5 cm long and 2.5-3 cm wide. The green fruits are plundered by primates in the summer. They contain numerous winged seeds.

ECOLOGY AND DISTRIBUTION: Species loves partial shade, slow-growing, scarce, grows on terra firma in clayey soil in the Colombian and Peruvian Amazon.

***USES:** Boards, construction, strips, ornamental, melliferous.

* Information obtained in the region.

Table of Physico-Mechanical Properties

Scientific name: *Qualea sprucei* Warm.

Common name: Cancho gurre

Family: VOCHYSIACEAE

Key: CG

| CONTRACTION (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|-------------------------------------|---|--|--------------------------------------|
| GREEN 1.08 | RADIAL 3.02 | RADIAL 6.29 | AIR-DRY 12 |
| AIR-DRY 0.71 | TANGENTIAL 4.72 | TANGENTIAL 9.07 | GREEN 84 |
| ANHYDROUS 0.69 | LONGITUDINAL 0.05 | LONGITUDINAL 0.23 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.59 | VOLUMETRIC 7.79 | VOLUMETRIC 15.59 | 1.48 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|------------------------------|----------------------------|--|
| SPL 500.18 | SPL 333.90 | SPL 60.03 | RADIAL 75.22 | MEAN RADIAL 449.33 | RADIAL 143.33 | MOR 435.93 |
| MOR 666.81 | MOR 367.25 | MOR 97.23 | TANGENTIAL 85.43 | MEAN TANGENTIAL 437.67 | TANGENTIAL 126.17 | |
| MOE X 1000 129.339 | MOE X 1000 186.017 | | AVERAGE SIDES 80.33 | AVERAGE SIDES 443.50 | AVERAGE SIDES 134.75 | |
| | | | | MEAN ENDS 467.50 | AVERAGE ENDS 81.42 | |
| MC (%) 89 | MC (%) 77 | MC (%) 71 | MC (%) 88 | MC (%) 77 | MC (%) 78 | MC (%) 89 |

Where: SPL: stress at proportional limit.

MOR: modulus of rupture.

MOE: modulus of elasticity.

Family: Caesalpiniaceae

Common name: Guamo Hojiancho

Scientific name: *Tachigali* cf. *paniculata* Aubl.

Leaves



Bark - alburnum

Base of trunk



Cross-section



GUAMO HOJIANCHO

SCIENTIFIC NAME: *Tachigali paniculata* Aubl.

FAMILY: Caesalpiniaceae

POPULAR LOCAL NAMES: “*Guamo hojiancho*.”

TREE: Reaches height of 30 m, height of trunk 24 m, D.B.H. 1.2 m. Crown umbrella-shaped, dense foliage, alternate branching.

TRUNK: Angular, twisted, with awns, modifications to the base in the form of asymmetrical swellings, short, 1.2 m, thick.

OUTER BARK (Dead): Color coffee-reddish, appearance rough, comes off in sheets, with awns, abundant lenticels, in parallel longitudinal rows.

INNER BARK (Living): Color pink, thick: 1.5 cm, texture fibrous inside and brittle outside, hard, whitish, linear inclusions, watery exudate, turns to gum over time.

LEAVES: Compound, paripinnate, alternate, with leafy stipules, 3 groups, 5-7 pairs of oblong-obovate leaflets, gradually-tapering apex, base asymmetrical and rounded, rachises slightly winged, petiole not bulging.

FLOWERS: Inflorescences in panniculi, ash colored-puberulent, petals yellow, pilose.

FRUIT: Oblong legumes, indehiscent, 6-9 cm long and 1.5-2 cm wide, glabrescent and short pedunculate.

ECOLOGY AND DISTRIBUTION: Species loves partial shade, grows on terra firma in clayey soil in the Colombian and Peruvian Amazon.

USES: Strips, ordinary boards, firewood, shade, fuel, and forage.

* Information obtained in the region.

Table of Physico-Mechanical Properties of:Scientific name: *Tachigali paniculata* Aubl.

Common name: Guamo hojiancho

Family: CAESALPINIACEAE

Key: GH

| CONTRACTION (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|-------------------------------------|---|--|--------------------------------------|
| GREEN 0.72 | RADIAL 2.25 | RADIAL 4.75 | AIR-DRY 11 |
| AIR-DRY 0.39 | TANGENTIAL 3.20 | TANGENTIAL 5.59 | GREEN 116 |
| ANHYDROUS 0.37 | LONGITUDINAL 0.07 | LONGITUDINAL 0.28 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.33 | VOLUMETRIC 5.52 | VOLUMETRIC 10.62 | 1.19 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|------------------------------|---------------------------|--|
| SPL 198.87 | SPL 134.95 | SPL 23.77 | RADIAL 48.70 | MEAN RADIAL 154.17 | RADIAL 63.42 | MOR 538.78 |
| MOR 418.74 | MOR 173.72 | MOR 40.90 | TANGENTIAL 50.85 | MEAN TANGENTIAL 159.67 | TANGENTIAL 58.50 | |
| MOE X 1000 78.627 | MOE X 1000 110.985 | | AVERAGE SIDES 49.78 | AVERAGE SIDES 156.92 | AVERAGE SIDES 60.96 | |
| | | | | MEAN ENDS 226.67 | AVERAGE ENDS 32.75 | |
| MC (%) 114 | MC (%) 134 | MC (%) 102 | MC (%) 168 | MC (%) 101 | MC (%) 131 | MC (%) 157 |

Where: SPL: stress at proportional limit.
MOR: modulus of rupture.
MOE: modulus of elasticity.

Family: Burseraceae

Common name: Caraño

Scientific name: *Trattinickia lawrancei* Stad. Ex

Swart

Leaves



Bark - alburnum



Base of trunk



Cross-section



CARAÑO

SCIENTIFIC NAME: *Trattinickia lawrancei* Stad. ex Swart

FAMILY: Burseraceae

POPULAR LOCAL NAMES: “*Caraño.*”

TREE: Reaches height of 30 m, height of trunk 20 m, D.B.H. 1.0 m. Crown umbrella-shaped, dense foliage, ferruginous, alternate branching.

TRUNK: Angular and straight, with elephant's foot modifications to the base, thick roots, protruding.

OUTER BARK (Dead): Dark coffee colored, appearance rough, dented at the base, comes off in small sheets, abundant large lenticels in vertical lines.

INNER BARK (Living): Color orangish, brick after oxidation, thick: 2 cm, texture floury outside and fibrous inside, exudate, resin with odor reminiscent of incense that crystallizes as it dries.

LEAVES: Compound, alternate, imparipinnate, without stipules, 7-13 leaflets, subcoriaceous, lanceolate, entire, upper side rough. Leaf buds greenish, large, resinous exudate.

FLOWERS: Terminal panniculi, puberulous, yellowish-white, aromatic.

FRUIT: Globoid drupes, black, seed with crustaceous pyrene, coffee colored corrugated surface.

ECOLOGY AND DISTRIBUTION: Species loves partial shade, grows on low hills, on terra firma, in clayey soil in the Colombian and Peruvian Amazon.

USES: Wood for construction, floors, tongue-and-groove boards, aromatic smoke.

* Information obtained in the region.

Table of Physico-Mechanical Properties

Scientific name: *Trattinickia lawrancei* Stad. Ex Swart.

Common name: Caraño

Family: BURSERACEAE

Key: CÑ

| CONTRACTION (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|-------------------------------------|---|--|--------------------------------------|
| GREEN 0.78 | RADIAL 3.17 | RADIAL 4.98 | AIR-DRY 13 |
| AIR-DRY 0.50 | TANGENTIAL 4.38 | TANGENTIAL 6.91 | GREEN 90 |
| ANHYDROUS 0.46 | LONGITUDINAL 0.07 | LONGITUDINAL 0.14 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.41 | VOLUMETRIC 7.62 | VOLUMETRIC 12.02 | 1.46 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|------------------------------|---------------------------|---|
| SPL 244.95 | SPL 153.20 | SPL 28.07 | RADIAL 49.93 | MEAN RADIAL 180.67 | RADIAL 66.17 | MOR 638.29 |
| MOR 425.86 | MOR 182.77 | MOR 44.00 | TANGENTIAL 52.25 | MEAN TANGENTIAL 186.67 | TANGENTIAL 63.17 | |
| MOE X 1000 73.953 | MOE X 1000 100.919 | | AVERAGE SIDES 51.09 | AVERAGE SIDES 183.67 | AVERAGE SIDES 64.67 | |
| | | | | MEAN ENDS 234.83 | AVERAGE ENDS 30.50 | |
| MC (%) 99 | MC (%) 109 | MC (%) 85 | MC (%) 140 | MC (%) 107 | MC (%) 104 | MC (%) 134 |

Where: SPL: stress at proportional limit.

MOR: modulus of rupture.

MOE: modulus of elasticity.

Family: Myristicaceae

Common name: Sangretoro, pategallo

Scientific name: *Virola parvifolia* Ducke

Leaves and fruit



Bark - alburnum



Base of trunk



Cross-section



SANGRETORO PATEGALLO

SCIENTIFIC NAME: *Viola parvifolia* (Ducke)

FAMILY: Myristicaceae

POPULAR LOCAL NAMES: “*Sangretoro, pategallo*”

TREE: Reaches height of 28 m, height of trunk 20 m, D.A.P. 90 cm. Crown subgloboid, dense foliage, verticillate branching.

TRUNK: Cylindrical, straight, with modifications to the base with supporting roots or tall flat stilts, 1.5 m.

OUTER BARK (Dead): Color coffee and grayish in young sections, appearance fissured, breaks easily, like glass, thin.

INNER BARK (Living): Color pink inside and yellowish outside, thickness average, 1 cm, texture fibrous, inclusions reddish points, reddish, yellowish, abundant watery exudations, characteristic odor.

LEAVES: Simple, alternate, without stipules, oblong-elliptical, acute apex, obtuse base, upper side light green and underside grayish-green or brown, tomentose with starred trichomes, characteristic odor, with watery yellowish exudate.

FLOWERS: On inflorescences in brown tomentose staminate panniculi, yellowish-white flowers, ferruginous; small tomentose pistillate inflorescences.

FRUIT: Dehiscent capsule, large, glabrescent, carinate, with an oblong seed with red lacinate aril, eaten by monkeys and agouti pacas.

ECOLOGY AND DISTRIBUTION: Species loves partial shade, grows on terra firma or in shoals in clayey or loamy soil in the Colombian and Peruvian Amazon.

USES: Construction, tongue-and-groove boards, wild animal consumption, medicinal.

* Information obtained in the region.

Table of Physico-Mechanical Properties

Scientific name: *Virola parvifolia* Ducke

Common name: Sangretoro, pategallo

Family: MYRISTICACEAE

Key: ST

| CONTRACTION (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|-------------------------------------|---|--|--------------------------------------|
| GREEN 0.87 | RADIAL 2.96 | RADIAL 5.30 | AIR-DRY 11 |
| AIR-DRY 0.51 | TANGENTIAL 4.97 | TANGENTIAL 8.45 | GREEN 106 |
| ANHYDROUS 0.49 | LONGITUDINAL 0.01 | LONGITUDINAL 0.13 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.42 | VOLUMETRIC 7.94 | VOLUMETRIC 13.87 | 1.60 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|------------------------------|---------------------------|--|
| SPL 260.27 | SPL 160.49 | SPL 15.55 | RADIAL 60.08 | MEAN RADIAL 202.83 | RADIAL 61.58 | MOR 690.77 |
| MOR 478.22 | MOR 182.56 | MOR 38.55 | TANGENTIAL 60.35 | MEAN TANGENTIAL 201.83 | TANGENTIAL 52.58 | |
| MOE X 1000 108.944 | MOE X 1000 132.167 | | AVERAGE SIDES 60.22 | AVERAGE SIDES 202.33 | AVERAGE SIDES 57.08 | |
| | | | | MEAN ENDS 221.33 | AVERAGE ENDS 36.33 | |
| MC (%) 93 | MC (%) 111 | MC (%) 125 | MC (%) 133 | MC (%) 113 | MC (%) 135 | MC (%) 135 |

Where: SPL: stress at proportional limit.
MOR: modulus of rupture.
MOE: modulus of elasticity.

Family: Vochysiaceae

Common name: Guasicaspi blanco

Scientific name: *Vochysia biloba* Ducke

Leaves



Bark - alburnum



Base of trunk



Cross-section



GUASICASPI BLANCO

SCIENTIFIC NAME: *Vochysia biloba* Ducke.

FAMILY: Vochysiaceae.

POPULAR LOCAL NAMES: “*Guasicaspi blanco.*”

TREE: Reaches height of 30 m, height of trunk 20 m, D.B.H. 90 cm. Crown umbrella-shaped, foliage dense, color whitish below, verticillate branching.

TRUNK: Cylindrical, straight, with awns, with modifications to the base with shallow roots, wide, thick.

OUTER BARK (Dead): Color cream, appearance slightly fissured, bearded, abundant large, whitish lenticels, distribution horizontal.

INNER BARK (Living): Color reddish outside and yellowish inside, thickness: average, 0.7 cm, texture brittle, floury, inclusions vertical white fibers, yellowish, watery exudate, turns to gum in 3 hours.

LEAVES: Simple, opposite, with deciduous stipules, obovate, apex profoundly truncated, dark green on the upper side and ferruginous-tomentose on the underside, with the veins barely evident on the upper side and markedly protruding and fine on the underside.

FLOWERS: Terminal or axillary inflorescences, dense-flowered, with yellow flowers.

FRUIT: Elongated oblong capsule, dehiscent, glabrous, with small, winged seeds.

ECOLOGY AND DISTRIBUTION: Species loves partial shade, rapid growing, grows on terra firma in clayey soil in the Colombian, Peruvian, and Brazilian Amazon.

USES: Carpentry, tongue-and-groove boards, construction, housing, ornamental, melliferous.

*Information obtained in the region.

Table of Physico-Mechanical Properties

Scientific name: *Vochysia biloba* Ducke

Common name: Guasicaspi blanco

Family: VOCHYSIACEAE

Key: GS2

| CONTRACTION (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|-------------------------------------|---|--|--------------------------------------|
| GREEN 0.78 | RADIAL 2.82 | RADIAL 4.09 | AIR-DRY 7 |
| AIR-DRY 0.44 | TANGENTIAL 7.16 | TANGENTIAL 9.71 | GREEN 112 |
| ANHYDROUS 0.43 | LONGITUDINAL 0.01 | LONGITUDINAL 0.10 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.37 | VOLUMETRIC 9.99 | VOLUMETRIC 13.90 | 2.41 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|------------------------------|---------------------------|--|
| SPL 233.81 | SPL 133.74 | SPL 15.79 | RADIAL 44.37 | MEAN RADIAL 202.67 | RADIAL 47.67 | MOR 1173.28 |
| MOR 459.94 | MOR 159.91 | MOR 36.11 | TANGENTIAL 49.48 | MEAN TANGENTIAL 189.67 | TANGENTIAL 43.33 | |
| MOE X 1000 88.421 | MOE X 1000 107.244 | | AVERAGE SIDES 46.93 | AVERAGE SIDES 196.17 | AVERAGE SIDES 45.50 | |
| | | | | MEAN ENDS 244.17 | AVERAGE ENDS 24.17 | |
| MC (%) 135 | MC (%) 176 | MC (%) 201 | MC (%) 216 | MC (%) 173 | MC (%) 200 | MC (%) 97 |

Where: SPL: stress at proportional limit.

MOR: modulus of rupture.

MOE: modulus of elasticity.

Family: Vochysiaceae

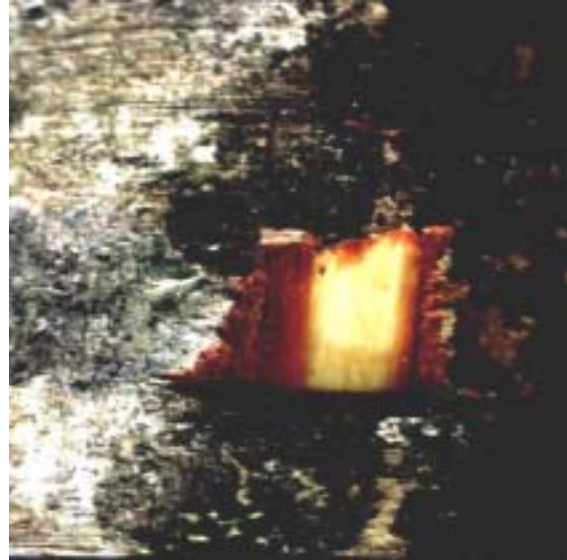
Common name: Guasicaspi rojo

Scientific name: *Vochysia latifolia* Stafleu

Leaves



Bark - alburnum



Base of trunk



Cross-section



GUASICASPI ROJO

SCIENTIFIC NAME: *Vochysia latifolia* Stafleu

FAMILY: Vochysiaceae

POPULAR LOCAL NAMES: “*Guasicaspi rojo*.”

TREE: Reaches height of 28 m, height of trunk 18 m, D.B.H. 90 cm. Crown umbrella-shaped, foliage dense, ferruginous, verticillate branching.

TRUNK: Cylindrical, straight, modifications to the base shoots average development.

OUTER BARK (Dead): Color grayish, appearance cracked, comes off in long sheets, small, abundant large whitish lenticels, distribution irregular.

INNER BARK (Living): Reddish-blood-colored, thick: 1.5 cm, texture brittle outside and fibrous inside, exudations: watery, crystalline, turn to gum in 12 hours.

LEAVES: Simple, opposite, large, with pilose stipules, prominent veins, dark green on the upper side, ferruginous on the underside, watery exudate. Terminal twig: tetragonal.

FLOWERS: In terminal panniculi, long, flowers with yellow corollas, with tubular nectary.

FRUIT: Dehiscent capsules with three thin valves, black inside and brown outside, with numerous winged seeds dispersed by the wind.

ECOLOGY AND DISTRIBUTION: Species loves partial shade, in primary forests, grows on terra firma in clayey soil in the Colombian and Peruvian Amazon.

USES: Planks, construction, carpentry, ornamental.

* Information obtained in the region.

Table Physico-Mechanical Properties

Scientific name: *Vochysia latifolia* stafleu

Common name: Guasicaspi rojo

Family: VOCHYSIACEAE

Key: GS1

| CONTRACTION (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|-------------------------------------|---|--|--------------------------------------|
| GREEN 0.87 | RADIAL 2.12 | RADIAL 4.21 | AIR-DRY 12 |
| AIR-DRY 0.54 | TANGENTIAL 5.97 | TANGENTIAL 9.87 | GREEN 94 |
| ANHYDROUS 0.52 | LONGITUDINAL 0.11 | LONGITUDINAL 0.20 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.45 | VOLUMETRIC 8.19 | VOLUMETRIC 14.28 | 2.36 |

| STATIC FLEXION | COMPRESSION PARALLEL TO THE GRAIN | COMPRESSION PERPENDICULAR TO THE GRAIN | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|-----------------------|-----------------------------------|--|-----------------------------|-------------------------|-------------------------|---|
| SPL 377.01 | SPL 227.46 | SPL 30.59 | RADIAL 59.46 | MEAN RADIAL 318.67 | RADIAL 107.83 | MOR 1075.07 |
| MOR 679.57 | MOR 261.74 | MOR 59.46 | TANGENTIAL 61.44 | MEAN TANGENTIAL 284 | TANGENTIAL 94.42 | |
| MOE X 1000 119.671 | MOE X 1000 134.728 | | AVERAGE SIDES 60.45 | AVERAGE SIDES 301.33 | AVERAGE SIDES 101.13 | |
| | | | | MEAN ENDS 374 | AVERAGE ENDS 53.58 | |
| MC (%) 95 | MC (%) 140 | MC (%) 64 | MC (%) 118 | MC (%) 139 | MC (%) 102 | MC (%) 110 |

Where: SPL: stress at proportional limit.

MOR: modulus of rupture.

MOE: modulus of elasticity.

Family: Vochysiaceae

Common name: Gomo

Scientific name: *Vochysia vismiifolia* Spr Ex Warm.

Leaves



Bark - alburnum



Base of trunk



Cross-section



GOMO

SCIENTIFIC NAME: *Vochysia vismiifolia* Spr. Ex Warm

FAMILY: Vochysiaceae

POPULAR LOCAL NAMES: “Gomo.”

TREE: Reaches height of 30 m, height of trunk 22 m, D.B.H. 1.1 m. Crown umbrella-shaped, dense foliage, ferruginous, verticillate branching.

TRUNK: Cylindrical, straight, elephant's foot modifications to the base, thick shallow roots.

OUTER BARK (Dead): Color coffee-grayish, appearance rough, bearded, abundant large lenticels.

INNER BARK (Living): Color pink outside and yellowish inside, thick: 1.5 cm, texture: floury-brittle, inclusions in whitish points, yellowish watery exudate, turns to abundant crystalline gum in 6 hours.

LEAVES: Simple, opposite, with deltoid stipules; elliptical, 8-12 cm by 3-4 cm, tapered apex, base cuneate, color light green on the upper side, light coffee on the underside; yellowish watery exudate. Terminal twig: tetragonal, pubescent, lenticellate.

FLOWERS: In terminal panniculi, narrow, 9-20 cm long, flowers with yellow oblong petals, abundant, small.

FRUIT: Dehiscent capsules, subgloboid, trilocular, one winged seed per loculus, coffee-colored.

ECOLOGY AND DISTRIBUTION: Species loves partial shade, regular growth, grows on terra firma, but sometimes found on flood plains, in the Colombian and Peruvian Amazon.

USES: Furniture, boards, poles, floors, ornamental, melliferous.

*Information obtained in the region.

Table of Physico-Mechanical Properties

Scientific name: *Vochysia vismifolia* Spr. Ex Warm

Common name: Gomo

Family: VOCHYSIACEAE

Key: GO

| DENSITY (g/cm ³) | NORMAL CONTRACTION (GREEN – AIR-DRY) (%) | TOTAL CONTRACTION (GREEN – KILN DRY) (%) | MOISTURE CONTENT (%) |
|---------------------------------|---|--|--------------------------------------|
| GREEN 0.75 | RADIAL 2.74 | RADIAL 4.95 | AIR-DRY 12 |
| AIR-DRY 0.41 | TANGENTIAL 4.07 | TANGENTIAL 6.97 | GREEN 119 |
| ANHYDROUS 0.39 | LONGITUDINAL 0.04 | LONGITUDINAL 0.13 | TOTAL DIMENSIONAL STABILITY INDEX |
| BASIC 0.34 | VOLUMETRIC 6.85 | VOLUMETRIC 12.05 | 1.41 |

| STATIC FLEXION (Kg/cm ²) | COMPRESSION PARALLEL TO THE GRAIN (Kg/cm ²) | COMPRESSION PERPENDICULAR TO THE GRAIN (Kg/cm ²) | SHEAR (Kg/cm ²) | HARDNESS (Kg) | NAIL REMOVAL (Kg) | TENSION PARALLEL TO THE GRAIN (Kg/cm ²) |
|---|--|---|--------------------------------|----------------------------|---------------------------|--|
| SPL 246.63 | SPL 162.07 | SPL 18.22 | RADIAL 45.70 | MEAN RADIAL 151.50 | RADIAL 52 | MOR 495.78 |
| MOR 444.40 | MOR 185.16 | MOR 29.36 | TANGENTIAL 30.69 | MEAN TANGENTIAL 148 | TANGENTIAL 50.17 | |
| MOE X 1000 83.878 | MOE X 1000 103.106 | | AVERAGE SIDES 38.20 | AVERAGE SIDES 149.75 | AVERAGE SIDES 51.08 | |
| | | | | MEAN ENDS 232.83 | AVERAGE ENDS 29.17 | |
| MC (%) 134 | MC (%) 149 | MC (%) 108 | MC (%) 185 | MC (%) 127 | MC (%) 129 | MC (%) 184 |

Where: SPL: stress at proportional limit.

MOR: modulus of rupture.

MOE: modulus of elasticity.

ANNEX A

General and Dendrological Master Key of Dichotomous Type for the Identification of Tropical Arboreal Species

GROUP A

| | |
|---|------------|
| Simple leaves, alternate, with stipules, with exudate..... | Subgroup 1 |
| Simple leaves, alternate, with stipules, without exudate | Subgroup 2 |
| Simple leaves, alternate, without stipules, without exudate | Subgroup 3 |
| Simple leaves, alternate, without stipules, with exudate | Subgroup 4 |

GROUP B

| | |
|---|------------|
| Simple leaves, opposite, with stipules, with exudate..... | Subgroup 5 |
| Simple leaves, opposite, with stipules, without exudate..... | Subgroup 6 |
| Simple leaves, opposite, without stipules, without exudate..... | Subgroup 7 |
| Simple leaves, opposite, without stipules, with exudate..... | Subgroup 8 |

GROUP C

| | |
|--|-------------|
| Compound leaves, alternate, with stipules, with exudate | Subgroup 9 |
| Compound leaves, alternate, with stipules, without exudate | Subgroup 10 |
| Compound leaves, alternate, without stipules, without exudate..... | Subgroup 11 |
| Compound leaves, alternate, without stipules, with exudate | Subgroup 12 |

GROUP D

| | |
|--|-------------|
| Compound leaves, opposite, with stipules, with exudate | Subgroup 13 |
| Compound leaves, opposite, with stipules, without exudate | Subgroup 14 |
| Compound leaves, opposite, without stipules, without exudate | Subgroup 15 |
| Compound leaves, opposite, without stipules, with exudate | Subgroup 16 |

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SUBGROUP 1

1. Simple alternate leaves, with stipules, with exudate:.....**EUPHORBIACEAE, MORACEAE, SAPOTACEAE.**
- 1.1 Reddish, white, reddish-yellow latex, greenish-yellow, watery latex, with free stipules**EUPHORBIACEAE**
- 1.1.1. Watery reddish latex, with glands, scaly points on the limb, twigs honey-colored, bark comes off in short strips, and soft white wood**1. Tablero-Tabaquillo (Croton matourensis).**
- 1.2 White, creamy, or brown latex, sheathing or semi-sheathing (involucral) stipules, which leave a ring or scar on the twig**MORACEAE**
- 1.2.1 Slow-flowing white latex, abundant and massive, hairless, sheathing stipules, reddish trunk, reddish roots, small leaves with unequal base:**2. Lechero amarillo (Brosimum potable)**
- 1.2.2 Creamy or brown latex that flows slowly in teardrops, semi-sheathing stipules, smooth branches.....**3. Leche chiva (Pseudolmedia laevis)**
- 1.3 White, yellow, or creamy latex, that flows slowly in teardrops, solidifies in the air, and becomes putty-like, with or without stipules, leaves almost always spatulate, bark laminated, trunk with or without shoots **SAPOTACEAE**
- 1.3.1 That flows slowly in teardrops, solidifies in the air, and acquires a putty-like consistency, with epipetiolar stipels, established and pubescent, leaves grouped at the ends of the branches, spatulate, inner bark pink, laminar, base of the trunk with anchor shoots.....**4. Caimo amarillo (Pradosia cochlearia)**

SUBGROUP 3

3. Simple alternate leaves without stipules, without exudate:.....**COMBRETACEAE, LAURACEAE, LECYTHIDACEAE.**
- 3.1 Leaves in two rows (distichous), entire, serrated, or scalloped, without stipules, flexible branches, without incrustations of bark in the alburnum, bark comes off in long strips, with or without shoots, fruit in dry or berrylike pyxidium, dehiscent or indehiscent**LECYTHIDACEAE**

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- 3.1.1 Leaves entire, medium-sized, fibrous bark, yields long strips, with shoots, flexible branches, fruit in dehiscent berrylike pyxidium, basal veins, scattered
..... **5. Fono blanco (*Eschweilera coriacea*)**
- 3.2 Leaves spiral or helicoid.....**LAURACEAE, COMBRETACEAE**
- 3.2.1 Without translucent points, but with odor reminiscent of avocado, cinnamon, or cumin.....**LAURACEAE**
- 3.2.1.1 Pleasant odor reminiscent of cinnamon, yellow-coffee trunk, oblong leaves, with long petioles, abundant lenticels, small shoots, fruit with red cupule when immature and black when mature, which barely covers the fruit, yellowish bark that oxidizes on contact with the air and turns the color of brick.....**6. Laurel amarillo (*Ocotea cf. oblonga*)**
- 3.2.2 Leaves with veins arranged in a feather pattern, twigs sympodial, typical, ending in a cluster of leaves, spatulate, with or without shoots, dry fruit in samara or drupe, bark and wood yellow.....**COMBRETACEAE**
- 3.2.2.1 Small shiny leaves, spatulate, with highly reticulate veins, fibrous yellow bark, yellow wood, fruit in drupe.....**7. Guayacán mochilero (*Buchenavia capitata*)**

SUBGROUP 4

- 4. Simple leaves, alternate, without stipules, with exudate:..... **MYRISTICACEAE, SAPOTACEAE.**
- 4.1 With watery reddish or yellowish exudate, leaves distichous, bark comes off in long strips, branches verticillate, wood soft, with or without supporting or wandering shoots or roots.....**MYRISTICACEAE**
- 4.1.1 Leaves grayish and downy on the underside, thick, poorly-marked veins, verticillate branches, without swellings or supporting or wandering roots, watery yellowish exudate.....**8. Caracolí (*Osteophloeum platyspermum*)**
- 4.1.2 Leaves slender, small, greenish, with star-shaped hairs, with supporting or wandering roots, reddish exudate, elongated fruit containing seed with red aril, elongated
.....**9. Sangre toro (*Virola parvifolia*)**
- 4.2 With exudate in the form of white latex, in all organs, branches not verticillate, wood hard, with shoots, living bark that breaks easily, like glass, and fibrous exterior, helicoid leaves.....**SAPOTACEAE**
- 4.2.1 With white latex exudate, thick, slow-flowing, massive, large leaves with prominent veins on the underside, which is whitish, silvery, with shoots, fibrous brittle inner bark.....**10. Caimo balata (*Crysophyllum sanguinolentum*)**

T. Forestal - Dendrologia Armando Villota Ojeda

SUBGROUP 5

5. Simple leaves, opposite, with stipules, with exudate: **VOCHYSIACEAE**.
- 5.1 Opposite leaves, with sticky exudate, in droplets, on the bark and in small threads on the leaf when it is detached, stipules, two pairs free, or two pairs of glands, opposite lenticellate twigs, veins parallel, together or spread out, flowers yellow, white, or purple, fruit in dehiscent capsule or in samara **VOCHYSIACEAE**.
- 5.1.1 Medium-sized leaves, 7-11 cm long by 4-7 cm wide, apex short-tapered, upper side shiny, dark green, underside slightly tomentose, vein structure spread out and difficult to see, without shoots, fruit a samara, inner bark yellow and thin..... **11. Arenillo, Flormorado (*Erisma uncinatum*)**.
- 5.1.2 Large leaves, 14-20 cm long by 5-7 cm wide, elliptical, apex acute and base cuneate, color dark green and rough on the upper side and pubescent, ferruginous, prominent vein structures, parallel and separate, on the underside, with pilose stipules, terminal twig sinuous, tomentose, tetragonal, yellow flowers and fruit capsule with a "flying" capacity provided by featherlike or winglike extensions that allow for its increased migration ability, dehiscent **12. Guasicaspi rojo (*Vochysia latifolia*)**
- 5.13 Medium-sized leaves, 13-16 cm long by 4-6 cm wide, elliptical, with deltoid stipules, tapered apex, cuneate base, long, petioles having canals for effluents or draining, pink inner bark, with abundant watery exudate which turns into crystalline gum over time and on contact with the air and turns into a flavorless, colorless gel; upper side light green and underside brown, tomentose, vein structure prominent on the underside, base of the trunk straight, verticillate ferruginous branches, terminal twig bearded, ferruginous-tomentose **13. Gomo (*Vochysia vismiifolia*)**
- 5.14 Medium-sized leaves, 12-15 cm long by 5-7 cm wide, obovate, apex emarginate or profoundly truncated, with two rounded lobes, with two pairs of filiform stipules, upper side dark green, underside ferruginous, slightly tomentose, central vein structure having canals for effluents or draining, secondary veins thin, visible, and parallel, inner bark blood-red, with scant crystalline watery exudate that turns to gum, terminal twig tetragonal tomentose **14. Guasicaspi blanco (*Vochysia biloba*)**
- 5.15 Medium-sized leaves, 8-12 cm long by 4-6 cm wide, oblong-elliptical, two pairs of stipules changed into two pairs of crater-shaped glands, at the base of the petiole, apex short-tapered, rounded base, petiole having canals for effluents or draining and blackish, secondary veins very fine and parallel, both upper side and underside, inner bark brownish-yellow, oxidizes in the air, thick, fibrous, with a pleasant odor, terminal twig tetragonal glabrous, flowers white with purple spots, fruit dehiscent capsule without wings..... **15. Cancho amarillo (*Qualea ingens*)**
- 5.1.6 Small leaves, 6-10 cm long by 2-3 cm wide, elliptical, with two pairs of stipules changed into small crater-shaped glands at the base of the petiole, long-tapered, secondary veins very fine, together, and parallel, tetragonal and tomentose twig, inner bark grayish, turns

black over time and on contact with the air, with odor characteristic of an armadillo or gurre. White flowers with red tones, dehiscent capsular fruit without wings
16. **Cancho Gurre (Qualea sprucei)**

SUBGROUP 7

7. Simple leaves, opposite, without stipules, without exudate:.....**MYRTACEAE.**

7.1 Simple leaves, opposite, with translucent points, with a pleasant odor reminiscent of guava, chartaceous, thin bark, comes off in sheets, very hard wood, berry
**MYRTACEAE**

7.1.1 Leaves opposite, distichous, tapered apex, base acute, 5-7 cm long by 2.5-3 cm wide, aromatic when crushed, twig striated, rounded, sturdy, inner and outer bark very thin, comes off in small sheets, fibrous, pleasant odor, trunk twisted and canaliculate, fruit, an oblong berry, yellow, similar to [hog plum].....**17. Hobo (Calycorectes sp.)**

SUBGROUP 9

9. Leaves compound, alternate, with stipules, with reddish exudate, whitish, crystalline, opaque, yellow**CAESALPINIACEAE, FABACEAE, MIMOSACEAE**

9.1 With transparent whitish exudate, leaves paripinnate, with 2 or more pairs of leaflets, without glands, large indehiscent fruit, watery exudate, thick, white, that crystallizes in the air**CAESALPINIACEAE**

9.1.1. Leaves with two leaflets joined together, almost at the base, trunk grayish, cylindrical, living bark reddish, upper sides of leaflets smooth and shiny, with the underside densely tomentose, brown**18. Roble [oak] (Hymenaea oblongifolia)**

9.1.2. With crystalline exudate, turns to gum in the air, leaves paripinnate, without glands, 5-7 pairs of leaflets, large leafy stipules, oblong, with tapered apex, base asymmetrical, fruits indehiscent legumes, small, flowers yellow, inner bark pink, fibrous, trunk twisted
**22. Guamo hojiancho (Tachigali paniculada)**

9.2 With reddish exudate, leaves imparipinnate, leaflets opposite and one terminal, odor of bark and leaves reminiscent of beans, fruit in compressed dehiscent legume, red or red and black seeds, bright and colorful.....**FABACEAE**

9.2.1 With red exudate that oozes slowly in small points, yellow bark, leaves with 7-9 leaflets, oblong-elliptical, tapered apex, trunk straight, upper side light green and more pubescent and ferruginous, fruit in compressed dehiscent legume with bright, colorful red seeds
**19. Chocho (Ormosia nobilis)**

9.3 Pinnate leaves, with interpetiolar glands, fruit in indehiscent legume with arillate seeds, with small shoots, reddish yellow and orangish bark**MIMOSACEAE**

- 9.3.1 With slow-flowing red exudate, massive, blood-red and sticky, coloring, inner bark pink, with a small fruit containing arillate seeds, eaten by long-tailed monkeys. Leaves with glands, 3-5 pairs of leaflets, leaves paripinnate, ferruginous, tomentose, on the underside, without winged rachises winged**20. Guamo churimo (*Inga cf. acrocephala*)**
- 9.3.2 With crystalline, yellowish exudate, bipinnate leaves, very fine, small leaflets, falcated legumes, large, indehiscent, large shoots. Inner bark yellowish
.....**21. Guarango blanco (*Parkia multijuga*)**

SUBGROUP 11

11. Compound leaves, paripinnate, alternate, without stipules, without exudate, dehiscent capsular fruit, with arillate or winged seeds.....**MELIACEAE**
- 11.1 Compound leaves, alternate, paripinnate, without stipules, without exudate, with an extension in the shape of a closed hand at the apex, inner bark pink, thick, fibrous, with characteristic odor, dehiscent fruit capsule, arillate seeds **22. Bilibil (*Guarea cinnamomea*)**

SUBGROUP 12

12. Compound leaves, alternate, without stipules, with exudate: **BURSERACEAE**
- 12.1 With resinous exudation in teardrops, strong odor, bark papery or comes off in sheets, trunk reddish or whitish, leaves imparipinnate, petioles bulging, dehiscent capsular fruit, seeds arillate or fruit drupaceous**BURSERACEAE**
- 12.1.1 With penetrating odor, whitish resin, somewhat fluid, that crystallizes in the air and over time, petiole flat, with edge involute (turned inward), lanceolate leaflets, rough on the underside, fruit drupaceous**24. Caraño (*Trattinickia lawrancei*)**

SUBGROUP 14

14. Compound leaves, opposite, with stipules, without exudate:.....**MIMOSACEAE.**
- 14.1 Leaves opposite or subopposite, bipinnate, with glands in the petiole and petiolule, leaflets and small secondary leaflets inequilateral with stipules**MIMOSACEAE**
- 14.1.1 Leaves 40-50 cm long, dark edge on the upper side and whitish on the underside, unequal leaflets and small secondary leaflets, bearded legume, long, somewhat curved, with tall, branched anchor shoots **25. Guarango rayao (*Parkia nítida*)**

T. Forestal - Dendrologic Armando Villota Ojeda

ANNEX B

Glossary of Terms

| Spanish | English | English Definition |
|-------------------|------------------|--|
| Abaxial | Abaxial | Side away from the stem or axis; back, dorsal, or lower surface of leaf or costa (opposed to adaxial). |
| Especie abundante | Abundant species | A species with a presence of 2-3.99 individuals per hectare with dch \geq 20 cm |
| Acrescente | Accrescent | Increasing in size; growing, as floral parts that increase in size after flowering has occurred. |
| Aclamídeo | Achlamydeous | Not chlamydeous; having neither calyx nor corolla. |
| Acicular | Acicular | Long and thin; needle-shaped. |
| Acródromo | Acrodromous | Describes leaves with two or more primary or strongly developed secondary veins running in convergent arches toward the apex, with arches not recurved at base. |
| Acroscópico | Acroscopic | Toward the apex; applied to the triangular surface of a merophyte in direct contact with the apical cell (opposed to basiscopic). |
| Acrosticoide | Acrostichoid | Resembling the commencement of lines of poetry, an epithet of certain ferns so-called from the distribution of sori on the back of the fronds. |
| Actinomorfo | Actinomorphic | Radially symmetric. |
| Agudo | Acute | Sharp-pointed, with terminal angle less than 90° but greater than 45°. |
| Adaxial | Adaxial | Side toward the stem or axis; ventral or upper surface of a leaf or costa (opposed to abaxial). |
| Adventicio | Adventitious | Plant organs produced in an abnormal or atypical place, e.g., rhizoids arising from leaf or costal cells. |
| Agregado | Aggregate | (Of a flower) formed of floreta collected in a dense cluster but not cohering, as the daisy; (of a fruit) composed of a cluster of carpels belonging to the same flower, as the raspberry. |
| Alado | Alate | Having wings; winged. |
| Alburno | Alburnum | Sapwood. |
| Alóctono | Alien | An organism believed to have been introduced into a location and which has subsequently become naturalized; foreign or exotic. |
| Alcaloides | Alkaloids | Certain plant substances that affect the central nervous system. |
| Aluvial | Alluvial | Relating to something in streams and rivers or |

| Spanish | English | English Definition |
|--------------|----------------|--|
| | | created/deposited by stream action. |
| Alterno | Alternate | Of leaves or other lateral plant organs, borne singly at different heights on the axis; of floral parts, on a different radius, e.g., describing the position of stamens with respect to petals. |
| Amento | Ament | A catkin; a slim spike-like and usually pendent flower cluster like those found on willow, poplar and birch trees. Aments are either male or female. Some plants produce both male and female aments; others produce male aments on one plant and female on another. |
| Amplexicaulo | Amplexicaulous | Clasping the stem, as the base of a leaf. |
| Anádomo | Anadromous | Tending upwards; said of terns in which the lowest secondary segments are on the upper side of the branch of the central stem. |
| Anastomosado | Anastomosed | Connected by anastomosis; fused to form a network (used to describe veins in a leaf blade). |
| Androclino | Androclinium | Same as clinandrium. |
| Andróforo | Androphore | A stalk or column supporting the stamens, formed by the fusion of their filaments. |
| Angiosperma | Angiosperm | Any flowering plant that reproduces by seeds enclosed in a protective seed vessel; the term angiosperm is given to the larger of the two divisions of seed-bearing plants, in contrast to gymnosperms, which lack flowers and in which the seeds are naked. |
| Anguloso | Angular | Having angles or an angular shape. |
| Anisofilio | Anisophyllous | Having leaves of different shapes or sizes. |
| Anillado | Annulate | Having rings or ring-like bands. |
| Antera | Anther | The part of a stamen that produces pollen, usually located at the end of a thin stalk in the center of a flower. |
| Antesis | Anthesis | The period during which a flower opens or the act of a flower opening; coming to full bloom. |
| Antocarpio | Anthocarpous | Having accessory or enlarged tissue, as the apple or strawberry; having flowers and fruit blended into a solid mass. |
| Antrorso | Antrorse | Bent or directed upward or forward (opposed to retrorse). |
| Apículo | Apiculus | A short, abrupt point. |
| Aracnoide | Arachnoid | Covered with, or composed of, long delicate hairs or fibers. |
| Arborescente | Arborescent | Treelike in size and form. |
| Arqueado | Arcuate | Bent or curved like a bow. |
| Aréola | Areola | Small angular or polygonal surface area differing in color or |

| Spanish | English | English Definition |
|--------------|----------------|--|
| | | structure from the surrounding area, forming a pattern or network. |
| Argénteo | Argenteous | Shiny, silver-like. |
| Arilo | Aril | Applied to the coverings or appendages of seeds; also, a usually fleshy appendage or covering of certain seeds. |
| Arista | Arista | A bristle-like appendage of the spikelets of grains or grasses. |
| Aristado | Aristate | Having aristae; awned; bristle-pointed; having a hair-point. |
| spero | Asperulous | Slightly roughened. |
| Asociación | Association | A group of plants or one or more species living together under uniform environmental conditions and having a uniform and distinctive aspect. |
| Asimétrico | Asymmetric | Characterized by asymmetry in the spatial arrangement or placement of parts or components. |
| Atropurpúreo | Atropurpureous | Dark purple, almost black, in color. |
| Atenuado | Attenuate | Tapering gradually to a narrow extremity. |
| Auriculado | Auriculate | Having auricles (small, ear-like lobes, often present at the basal margins of leaf in mosses). |
| Autóctono | Autochthonous | Originating where found. |
| Axilar | Axillary | Pertaining to or growing from the axil. |
| Bacciforme | Bacciform | Having a shape similar to that of a berry. |
| Base | Base | The part of an organ nearest its point of attachment. |
| Basifijo | Basifixed | Attached at or near the base or lower end. |
| Basiscópico | Basisopic | The side directed away from the apex; the triangular surface of a merophyte that is not in contact with the apical cell (opposed to acroscopic). |
| Baya | Berry | A small fruit that is pulpy or succulent throughout, having seeds loosely imbedded in the pulp, as the currant, grape, blueberry. |
| Bilobado | Bilobed | Divided into two lobes or segments; bilobular. |
| Bipinado | Bipinnate | Pinnate, as a leaf, with the divisions also pinnate. |
| Bisexual | Bisexual | With antheridia and archegonia on the same plant, including autoicous, synoicous, paroicous and polyoicous. |
| Fuste | Bole | The trunk of a tree. |
| Borde | Border | The boundary of a surface; edge. |
| Botuliforme | Botuliform | Sausage-shaped. |
| Braquistilo | Brachystlye | Having a short style (opposed to macrostyle). |

| Spanish | English | English Definition |
|---------------|-----------------|--|
| Bractea | Bract | A specialized leaf or leaflike part, usually situated at the base of a flower or inflorescence. |
| Rama | Branch | A lateral division of the stem, or axis of growth. |
| Brevi- | Brevi- | A combing form meaning "short." |
| Nítido | Bright | Lustrous, brilliant and glabrous. |
| Broquidodroma | Brochidodromous | Describes leaves with pinnate venation in which the secondary veins do not terminate at the margins but rather are joined in a series of prominent arches. |
| Botón | Bud | A small axillary or terminal protuberance on a plant, containing rudimentary foliage, the rudimentary inflorescence or both. |
| Buliforme | Bullate | Having the surface covered with irregular and slight elevations, giving a blistered appearance. |
| Manojo | Bunch | A close cluster, as of flowers or leaves; fascicle. |
| Bursícula | Bursicule | Part of the Orchidaceae flowers, in the shape of a bag found in the rostellum. |
| Arbusto | Bush | A low and multi-branched shrub. |
| Caduco | Caducous | Detaching or falling off very early; usually in reference to leaves, leaf tips, or perianths. |
| Caliptra | Calyptra | A membranous covering of haploid tissue over the developing sporophyte, derived largely from the archegonial venter. |
| Caliptriforme | Calyptiform | Having the form of a calyptra, or extinguisher. |
| Cáliz | Calyx | The outermost group of floral parts; the sepals. |
| Acampanado | Campanulate | Bell-shaped. |
| Camptódromo | Camptodromous | A pattern of venation where the secondary veins curve toward the margin without forming loops. |
| Chamizal | Canebrake | A thicket of canes. |
| Canescente | Canescent | Covered by whitish or grayish pubescence. |
| Capilar | Capillary | Slender, hairlike; e.g., capillary bristles. |
| Cabezuela | Capitulum | A dense head of flowers. |
| Capítulo | Capitulum | Any globose or knoblike part, as the flower head. |
| Cápsula | Capsule | A dry, dehiscent fruit, composed of two or more carpels; the sporangium; terminal spore-producing part of the sporophyte. |
| Carinado | Carinate | Sharply folded along the middle, like the keel of a boat; V-shaped in cross-section. |
| | | |

| Spanish | English | English Definition |
|-------------|----------------|--|
| Carpelo | Carpel | A simple pistil, or one of several members composing a compound pistil or fruit; the organ of a plant that bears ovules. |
| Carúncula | Caruncle | An outgrowth surrounding the scar on a seed. |
| Cariópside | Caryopsis | A small, one-seeded, dry fruit in which the fruit and seed are incorporated into a single grain, as in wheat and all other cereal grains. |
| Catádromo | Catadromous | Having the lowest inferior segment of a pinna nearer the rachis than the lowest superior one, said of a mode of branching in ferns; opposed to anadromous. |
| Catáfilo | Cataphyllary | A simplified leaf form, as a bud scale or a scale on a cotyledon or rhizome. |
| Caudado | Caudate | Having a tail-like appendage; a "tail" or narrowed, apical extension of some sepals and petals. |
| Caudícula | Caudicle | The small, stalk-like appendage to the pollinia or pollen masses or orchids. |
| Caulífero | Caulесcent | Having an obvious stem rising above the ground. |
| Caule | Caulis | An herbaceous or woody stem which bears leaves, and may bear flowers. |
| Caulógeno | Caulogenous | Emerging from the stem or branches. |
| Cernuo | Cernuous | Nodding or drooping. |
| Cespitoso | Cespitose | Growing in tufts or clumps; matted. |
| Chalaza | Chalaza | The point of an ovule or seed where the integuments are united to the nucellum. |
| Acanalado | Channeled | Hollowed out like a gutter and semicircular in cross-section (cf. keeled) |
| Cartáceo | Chartaceous | Papery in texture. |
| Cinéreo | Cinereous | Resembling ashes; ash-colored; grayish. |
| Circuncisil | Circumscissile | Opening along a transverse circular line, as a seed vessel. |
| Cirro | Cirrus | A tendril; a long thread-like part by which some plants climb. |
| Clase | Class | A taxonomic classification between division or phylum and order. |
| Clasificar | Classify | To distribute into classes; to arrange according to a system; to arrange in sets according to some method founded on common properties or characters; to insert a new, previously undescribed, plant into its corresponding taxonomic hierarchies. |
| Clatrado | Clathrate | Latticed or pierced with apertures. |
| Claviforme | Claviform | Club-shaped. |

| Spanish | English | English Definition |
|--|----------------------------------|---|
| Cleistogamia | Cleistogamy | Applied to certain small, inconspicuous permanently closed flowers, adapted for self-fertilization, occurring in various plants on the same individuals as the normal large brightly colored flowers, which in such cases are either cross-fertilized or barren; the appearance of cleistogamous flowers. |
| Coléter | Colleter | One of the glandular hairs found on many leaf buds, etc., which secrete the blastocolla, or bad glue. |
| Color | Color | A perceptive element of considerable importance but very difficult to define in botany. |
| Especie común | Common species | A species with a presence of 4 or more individuals per hectare with dch \geq 20 cm |
| Nombre comun,vulgar, regional, popular | Common, regional or popular name | Name given by people to a plant so as to facilitate mutual understanding; accordingly, a given species may have one or several common names or, on the contrary, several species may be known by the same name. |
| Comoso | Comous | Hairy, downy; having a bunch of hair. |
| Compuesto | Composite | Belonging to the order Composit(ae); bearing involucrate heads of many small florets, as the daisy, thistle, and dandelion. |
| Concoloro | Concolorous | Uniform in color. |
| Concrescencia | Concrescence | Growing together; union of like parts. |
| Condilo | Condyle | In the seed of the Menispermaceae, part of the endocarp with an indication of placental origin. |
| Confluente | Confluent | Describing the joining of two organs into one so as to obscure the evidence of union. |
| Conforme | Conform | Having the same form or character. |
| Cónico | Conical | Relating to or resembling a cone. |
| Connado | Connate | Congenitally united, so as to have the form of one compound body or organ, as of leaves united at the base. |
| Connivente | Connivent | Directed or pointing together, though not fused, as the tips of leaf lobes inclined and converging towards one another |
| Contorto | Contorted | Irregularly curved or twisted. |
| Convoluta | Convolute | Rolled together and forming a sheath. |
| Acorazonado | Cordiform | Heart-shaped. |
| Coriáceo | Coriaceous | Thick, leathery. |
| Corchoso | Corky | Cork-like. |
| Corola | Corolla | The whorl of petals of a flower that collectively form an inner floral envelope or layer of the perianth |
| Corteza | Cortex | The external covering of the woody stems, branches and roots |

| Spanish | English | English Definition |
|---------------|-----------------|---|
| | | of plants, as distinct and separate from the wood itself. |
| Costa | Costa | Nerve or midrib of a leaf, always more than one cell thick |
| Cotiliforme | Cotyliform | Cup-shaped. |
| Cobertura | Covering | The indumenta of a seed. |
| Envolventes | Coverings | Stipules that cover the branchlet. |
| Agrietado | Cracked | Broken, without being divided into parts but having fissures appearing on the surface. |
| Craspedódroma | Craspedodromous | Having a vein involving the secondary foliate nerves that extend to the edge of the leaf. |
| Buche | Crow | The crop of a bird. |
| Crenado | Crenate | Having the margin notched or scalloped so as to form rounded teeth, as a leaf. |
| Crestado | Cristate | Crested; bearing a crest-like ridge. |
| Copa | Crown | As in the crown of a tree. |
| Culmo | Culm | A stem or stalk, especially the jointed and hollow stem of grasses. |
| Cumuliforme | Cumuliform | Having the appearance or character of cumulus clouds. |
| Cuneado | Cuneate | Wedge-shaped. |
| Cuneiforme | Cuneiform | Shaped like a wedge. |
| Ciatiforme | Cup-shaped | Having the shape of a cup. |
| Cupulado | Cupulate | Cup-shaped, rounded and swollen. |
| Curvinervias | Curvinervate | Having the ribs or the veins of the leaves curved; curve-veined. |
| Cuspidado | Cuspidate | Ending abruptly in a stout, rigid point. |
| Cutícula | Cuticle | An extracellular cutinized layer on the epidermis of most complex thalloid hepatics, leaves or stems of mosses, setae and capsules of mosses and capsules of hornworts; archaic term for the outer layer of differentiated cells. |
| Esqueje | Cutting | A piece, as a root, stem or leaf, cut from a plant and used for propagation. |
| Ciatio | Cyathium | An inflorescence consisting of a cup-shaped involucre enclosing an apetalous, pistillate flower surrounded by several staminate flowers. |
| Cilíndrico | Cylindrical | Related to or having the shape or properties of a cylinder. |
| Cimbiforme | Cymbiform | Boat-shaped. |

| Spanish | English | English Definition |
|-------------|---------------|---|
| Cima | Cyme | An inflorescence in which the primary axis bears a single central or terminal flower that blooms first. |
| Címula | Cymule | A small cyme, or one of very few flowers. |
| Cistolito | Cystolith | A mass of calcium carbonate concretion, occasionally silica, formed on ingrowths of modified epidermal cell walls in some plants, especially of the Acanthaceae family. |
| Deciduo | Deciduous | Shedding the leaves annually, as certain trees and shrubs. |
| Decompuesto | Decomound | Divided into compound divisions; composed of compounds the parts of which are also compounds, as a bipinnate leaf. |
| Decumbente | Decumbent | With stem prostrate but with ascending tips. |
| Decurrente | Decurrent | With basal leaf margins extending down the stem past the leaf insertion as ridges or narrow wings. |
| Deflexo | Deflexed | Bent backward or downward. |
| Defoliación | Defoliation | The loss of leaves as a result of any physiological or pathological phenomenon; specifically, the dropping of leaves in autumn. |
| Dehiscencia | Dehiscence | The bursting open of a pod or capsule to release the seeds, or of an anther to release pollen. |
| Dendrología | Dendrology | The branch of botany dealing with trees and shrubs. |
| Craso | Dense | Fat and usually succulent. |
| Densidad | Density | The quality of being dense, close, or thick; compactness. |
| Depreso | Depressed | Flattened as viewed from above; complanate. |
| Describir | Describe | To present a plant, either graphically or by using writing or language, with appropriate organographic or ecological characteristics. |
| Determinar | Determine | To place a tag on a sample from an herbarium. |
| Dextrorso | Dextrorse | Twisted to the right, or clockwise when seen from apex; e.g., twist of seta. |
| Diali- | Dialy- | Compound form used in many botanical terms with the sense of "separated" or "nonunited." |
| Dialipétala | Dialypetalous | Having separate petals. |
| Diámetro | Diameter | Any right line passing through the center of a figure or body, as a circle, conic section, sphere, cube, etc., and terminated by the opposite boundaries; a straight line which bisects a system of parallel chords drawn in a curve. |
| Dicasio | Dichasium | A flower cluster with two main stalks or branchlets within the |

| Spanish | English | English Definition |
|---------------|----------------|---|
| | | cluster. |
| Dicotómico | Dichotomic | Divided or dividing into two sharply distinguished parts or classifications. |
| Diclino | Diclinous | Having the stamens and the pistils in separate flowers, either on the same plant or on different plants. |
| Dicotiledóneo | Dicotyledonous | Having two cotyledons or seed lobes; as a dicotyledonous plant. |
| Didinamo | Didymous | Occurring in pairs; paired; twin. |
| Digitado | Digitate | Having deep radiating divisions, like fingers, arising from one point; especially applied to compound leaflets that grow from the top of the leaf stem. |
| Dimidiado | Dimidate | Hooded or hood-shaped; a calyptra split along one side only; also used to describe leaves strongly concave and erect or inflexed at the tips. |
| Dioico | Dioicous | With archegonia and antheridia on separate plants. |
| Difilo | Diphylous | Having two leaves. |
| Diplostemona | Diplostemonous | Having two whorls of stamens, with the outer whorl opposite the sepals and the inner whorl opposite the petals. |
| Dirección | Direction | The line along which an organ lies or faces with reference to the point toward which it is directed. |
| Disco | Disc | Nectariferous organ between the stamens and the ovary. |
| Discoloro | Discolorous | Having two or more colors. |
| Dispersión | Dispersion | The act of dispersing, broadcasting or diffusing something. |
| Diseminación | Dissemination | The act of spreading or extending by dispersion or broadcasting. |
| Disepimento | Dissepiment | One of the partitions formed within ovaries and fruits by the coherent sides of the constituent carpels. |
| Distal | Distal | Situated away from the point of origin or attachment. |
| Dístico | Distichous | Arranged in two rows on opposite sides of a stem and thus in the same plane. |
| Distribución | Distribution | The distribution of plants around the globe. |
| Divaricados | Divaricate | Branching at a wide angle. |
| Dolabriforme | Dolabriform | Axe-shaped. |
| Domacio | Domatium | A small structure located in the axils of the primary veins on the lower surface of leaves in some woody dicotyledons, usually consisting of depressions and being partly enclosed by leaf tissue or hairs. |
| | | |

| Spanish | English | English Definition |
|---------------|-----------------|---|
| Dorsifijo | Dorsifixed | Attached at or by the back; of anthers, when the filament is attached to the abaxial side of the anther. |
| Drupa | Drupe | A juicy, indehiscent fruit with one or a few seeds, each surrounded by a stony layer formed from the fruit wall. |
| Muladar | Dungheap | A heap of dung or refuse. |
| Duplicado | Duplicate | Refers to that which is gathered or collected in 2, 3, 4 or more samples. |
| Equinado | Echinate | Roughened by blunt spiny projections. |
| Endémico | Endemic | Limited to a single country or floristic area. |
| Ensiforme | Ensiform | Sword-shaped. |
| Entero | Entire | Without teeth, more or less smooth on the margin. |
| Epi- | Epi- | Combining form meaning upon, on, over, near, at, before, after. |
| Epígino | Epigynous | Having perianth and stamens inserted above the ovary, i.e., having an inferior ovary. |
| Epifito | Epiphyte | A plant growing on another plant. |
| Equitante | Equitant | Straddling; referring to conduplicate and strongly sheathing leaf bases. |
| Erguido | Erect | The direction assumed by certain organs and organisms. |
| Eroso | Erose | Irregularly notched or ragged, as though gnawed, frequently through abrasion of lamina. |
| Eucamptodroma | Eucamptodromous | Describes leaves having pinnate venation in which the secondary veins do not terminate at the margins but which gradually diminish inside the margin, connected to the superadjacent secondary veins by a series of cross-veins without forming prominent marginal loops. |
| Ex- | Ex- | Prefix used to designate "absence of," or "outside." |
| Excurrente | Excurrent | Extending beyond the apical margin; e.g., an awn formed by a protruding costa. |
| Exótico | Exotic | Of foreign origin or character; introduced from a foreign country or a different region. An exotic plant is one not native to the place where it is growing. |
| Exerto | Exserted | Projecting beyond the surrounding parts; exposed; e.g., capsules or perianths held clear of the tips of perichaetial leaves (cf. emergent). |
| Extra- | Extra- | A prefix meaning "outside," "beyond." |
| Exudado | Exudate | A substance that oozes out from plant pores. |
| Haz | Face | Outward appearance of organs or organ parts. |

| Spanish | English | English Definition |
|--------------|--------------|---|
| Falcado | Falcate | Curved, like the blade of a sickle; strongly curved and turned to one side. |
| Familia | Family | Consists of genera that resemble one another in certain broad characteristics. The family usually consists of numerous genera, though some only consist of one. The family name usually ends with -aceae or -ae. |
| Farinoso | Farinose | Resembling farina; farinaceous; covered with a mealy powder. |
| Fauna | Fauna | The animals of a given region considered as a whole. |
| Fenestrado | Fenestrate | Pierced with openings or perforations; e.g., uni- and plurifenestrate patterns of thickenings of the inner capsule wall cells in various liverworts; also used to describe some types of perforated peristome teeth in mosses. |
| Ferrugíneo | Ferruginous | Iron- or rust-colored. |
| Filamento | Filament | The stalk of a stamen that bears the anther. |
| Filiforme | Filiform | Slender and elongate; filamentous; thread-like. |
| Fimbriado | Fimbriate | Having a border of hairs or filiform processes. |
| Fisurado | Fissured | (Of an organ) having a natural division or groove. |
| Fistuloso | Fistulous | Hollow, like a pipe or reed; fistular. |
| Flabeliforme | Flabelliform | Having the form of a fan; fan-shaped; flabellate. |
| Flocoso | Floccose | Covered with tufts of soft, woolly hairs. |
| Piso | Floor | Stratum or ground. |
| Flósculo | Floscule | A small flower; floret. |
| Flores | Flower | 1. The part of the plant that ordinarily contains the reproductive organs, which are usually surrounded by colorful petals and sepals. A flower containing only stamens is male, or staminate; a flower containing only pistils is female, or pistillate. When a flower contains both pistils and stamens it is called a bisexual, or perfect, flower; if it also has a corolla and calyx, it is called a complete flower. 2. Flower is also generally used to describe any blossom or inflorescence or any plant of which the blossom is the essential feature; a plant grown for its floral beauty. |
| Foliolo | Foliolate | A leaflet; a small part resembling a leaf. |
| Folículo | Follicle | A dry, one-celled seed vessel consisting of a single carpel and dehiscent only by the ventral suture, as in the milkweed and larkspur. |
| Dasonomía | Forestry | The science of planting and caring for forests and the management of growing timber. |
| Silvicultura | Forestry | The science of planting and caring for forests and the |

| Spanish | English | English Definition |
|------------|----------------|---|
| | | management of growing timber. |
| -forme | -form | A combining form meaning "having the form of" |
| Fóvea | Fovea | Small pit or depression . |
| Foveolado | Foveolate | Having foveolae or very small pits; pitted. |
| Fruto | Fruit | The product of fertilization; the fertilized and mature ovary. |
| Fúlcreo | Fulcraceous | Of or pertaining to the fulcra of plants. |
| Hongo | Fungus | Fungus |
| Funículo | Funiculus | The stalk of an ovule; the stem of a seed or its case; funicle. |
| Furfuráceo | Furfuraceous | Scaly; scurfy. |
| Fusco | Fuscous | Dusky, dull dark-brown or brownish-gray. |
| Fusiforme | Fusiform | Spindle-shaped; narrow (more than 3 times as long as wide) and tapered at both ends. |
| Galería | Gallery forest | A narrow woodland developed along a stream because of constant and sufficient moisture through a grassland or other open vegetation. |
| Gamo- | Gamo- | A combining form meaning "joined," "united." |
| Geminado | Geminate | In pairs or twains; two together; binate; twin; as, geminate flowers. |
| Yema | Gemma | Uni- or multicellular, filamentous, globose, ellipsoidal, cylindrical, stellate or discoid brood bodies, relatively undifferentiated, serving in vegetative reproduction. |
| Genículo | Geniculate | Bent at an abrupt angle, like a knee; geniculated. |
| Glabro | Glabrous | Smooth; not papillose, rough or hairy. |
| Glándula | Gland | Any secreting organs of plants or of gland-like bodies. |
| Glauco | Glaucous | Blue-green, blue-gray, gray, or pale yellow-green color; having a waxy or powdery, bluish-white or bluish-gray bloom that can be rubbed off (e.g., glaucous plums or grapes). |
| Globoso | Globose | Spherical. |
| Glumélula | Glomellule | One of the scales frequently found at the base of the ovary in grasses; a lodicule. |
| Gloméruo | Glomerule | A compact flower cluster that forms a head, as in the flowering dogwood. |
| Glucósido | Glucoside | Any of an extensive group of compounds that yield glucose and some other substance when decomposed by a ferment or enzyme. |
| Gluma | Glume | A chaffy bract as in the Gramineae (grass family) and related plants; especially an empty bract at the base of a grass spikelet. |
| Glumela | Glumella | An inner glume or palea. |

| Spanish | English | English Definition |
|-----------------------|--------------------------------------|---|
| Grácil | Gracile | Slender and graceful; opposed to robust. |
| Graminoide | Graminoid | Similar to the leaves of the grasses. |
| Goma | Gum | A viscid sap exuding from stems, often air-hardened. |
| Ginóforo | Gynophore | An elongation of the receptacle of a flower, bearing the gynoecium at its apex, as in some Capparidaceae. |
| Ginóstemo | Gynostemium | The combined stamens and pistil of an orchid. |
| Habitat | Habitat | The natural dwelling place of an animal or plant; the type of environment where a particular species is likely to be found. |
| Apariencia martillada | Hammered distressed appearance | or Said of bark whose surface presents small depressions as would be made by a hammer, caused by detachments of the rhytidome that leave more or less rounded marks similar to the pieces of a jigsaw puzzle. |
| Haploclamídeo | Haplochlamydeous | Having a simple floral envelope. |
| Haustorio | Haustorium | An elongate cell at the base of the foot, most prominent in the embryonic sporophyte, thought to function in absorption during early stages of sporophyte growth; a rootlike attachment in parasitic plants that penetrates and obtains food from the host. |
| Altura | Height | Applied in numerous senses: height of the tree or trunk, diameter of the tree at chest height, height above sea level. |
| Helicoidal | Helicoid | Coiled or spiraled; spirally twisted; said of a spiral segmentation sequence from the apical cell (cf. pendular). |
| Hemi- | Hemi- | Combining form designating a partial or imperfect property or position. |
| Hemiepifito | Hemiepiphyte | An epiphytic plant connected to the ground by epigeous roots. |
| Hemiparásito | Hemiparasite | A parasitic plant that contains some chlorophyll and therefore is capable of photosynthesis. |
| Herborizar | Herborize | To search for plants, or new species of plants, with a view to classifying them. |
| Hermafrodito | Hermaphrodite | Bisexual, bearing both male and female organs in the same flower; having fully developed stamens and pistils in the same flower. |
| Heterostilio | Heterostyled | Having styles of different forms or lengths in the flowers; heterostylous. |
| Hilo | Hilum | The scar on a seed marking its point of attachment, as with beans or peas. |
| Hirsuto | Hirsute | Having coarse, rigid hairs. |
| Híspido | Hispid | Having short, stiff hairs; bristly. |
| Homoblástico | Homoblastic | Arising from cells of the same kind. |
| Homoclamídeo | Homochlamydeous | Refers to a flower in which sepals and petals are so similar that all are called tepals. |
| Homomorfo | Homomorphic | (Of two or more things) having similar sizes, shapes, and/or other characteristics. |
| Hialino | Hyaline | Colorless or transparent. |
| Hidatodo | Hydathode | A specialized leaf structure through which water is exuded. |

| Spanish | English | English Definition |
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| Hipanto | Hypanthium | The part of certain flowers usually formed by the fusion of the lower portions of their petals, sepals and stamens. |
| Hipocrateriforme | Hypocrateriform | Salverform; a tubal flower flaring out into a flat top. |
| Hipógino | Hypogynous | Having the sepals, stamens and petals arising from the portion of a flower situated below the ovary. |
| Idioblasto | Idioblast | A uniquely differentiated cell, distinct from other cells of the same tissue in size, form and/or contents; e.g., ocellus, oil-cell. |
| Igapó | <i>Igapó</i> | Vegetation inundated periodically by wastewater. |
| Imbricado | Imbricate | Closely appressed and overlapping; e.g., with the leaf margins overlapping like shingles on a roof. |
| Imparipinado | Imparipinnate | Odd-pinnate. |
| Incluido | Included | Not projecting beyond the mouth of the corolla, as stamens or a style. |
| Incurvado | Incurved | Curved upward (adaxially) and inward, subjectively stronger than inflexed and weaker than involute; applied to leaf tips and margins. |
| Indehiscente | Indehiscent | Lacking a distinct opening mechanism; spores shed by irregular rupture or breakdown of capsule wall. |
| Indumento | Indumentum | A dense hairy covering. |
| Induplicado | Induplicate | Folded or rolled inward. |
| Indusio | Indusium | A small flap covering the sori, or fruit dots, in ferns; a collection of hairs united so as to form a sort of cup and enclosing the stigma of a flower. |
| Inflorescencia | Inflorescence | The arrangement of flowers on the axis; the flowering part of a plant. |
| Infructescencia | Infructescence | The grouping or arrangement of fruits borne on a plant. |
| Entrelazado | Interwoven | Refers to the enmeshment of organs or organisms. |
| Intraaxilar | Intraaxillary | Situated below the point where a leaf joins the stem. |
| Introrso | Introrse | Turned or facing inward, as anthers that open toward the gynoecium. |
| Involucral | Involucral | Pertaining to an involucre. |
| Involuto | Involute | Rolled upward (adaxially) and tightly inward; applied to leaf margins. |
| Isofilio | Isophyllous | Having stem and branch leaves that are similar. |
| Clave | Key | A means for identifying plants. |
| Labelo | Labellum | A lip, particularly the lip of an orchid; the median, modified petal of an Orchid flower. |
| Laciniado | Laciniate | Fringed with lacinia; subjectively stronger than fimbriate, but not necessarily formed by cell erosion. |
| Lamela | Lamella | Parallel photosynthetic ridges or plates along a leaf blade, costa or thallus; the plates of secondary wall deposition occurring between trabeculae on the dorsal and ventral surfaces of an arthrodontous peristome. |

| Spanish | English | English Definition |
|----------------|----------------|---|
| Lamelada | Lamellate | Composed of or having lamellae. |
| Laminada | Laminated | Compose of, or arranged in, laminae. |
| Lanceolado | Lanceolate | Shaped like the head of a lance; narrow and tapering toward the apex or sometimes at the base, as a leaf. |
| Lanuginoso | Lanuginose | Covered with lanugo, or soft downy hairs. |
| Grande | Large | Classification parameter for describing the size of something. |
| Látex | Latex | A milky, usually white or yellowish fluid produced by plants, such as Asclepias and Euphorbia. |
| Laxo | Lax | Loose; referring to large thin-walled cells, as well as to the nature and spacing of leaves on a stem, or of stems in a tuft. |
| Hojas | Leaf | A photosynthetic outgrowth from the stem; in bryophytes generally consisting of a unistratose lamina with or without a multistratose costa. |
| Hojuela | Leaflet | Subdivision of a compound leaf. |
| Legumbre | Legume | A pod dehiscent into two pieces or valves and having the seed attached at one suture, as that of the pea. |
| Lema | Lemma | A bract in a grass spikelet just below the pistil and stamens. |
| Lenticela | Lenticel | A lens-shaped body of cells, formed on the outside of a woody plant stem, which serves in the exchange of gases between the stem and the outer air. |
| Lepídoto | Lepidote | Covered with scurfy scales of scaly spots. |
| Liana | Liana | A climbing and twining plant, usually woody, found mostly in tropical rainforests, which may climb to the level of the tree canopy; also liane. |
| Lignificado | Lignified | Having a rigid or woody consistency. |
| Liguliforme | Liguliform | Having the shape of a tongue or strap; tongue-shaped. |
| Limbo | Limb | Leaf blade above a differentiated leaf base. |
| Linear | Linear | Long and very narrow with parallel sides, such as a linear leaf. |
| Cerca viva | Living fence | Fence consisting of live trees, either planted or carried to the site by certain animals. |
| Lobado | Lobate | Consisting of, or having, lobes; lobed; as, a lobate leaf. |
| Lobulado | Lobular | Composed of, having the form of, or pertaining to lobules or small lobes. |
| Lóbulo | Lobule | Small lobe; e.g., the smaller segment of an unequally divided leaf in leafy liverworts. |
| Longi- | Longi- | A combining form meaning "long". |
| Luminosidad | Luminosity | The amount of light required by a plant to live. |
| Lunulado | Lunate | Crescent-shaped. |
| Mácula | Macula | Spot or blotch. |

| Spanish | English | English Definition |
|------------------------|---------------------|--|
| Marcescente | Marcescent | Withering without falling off. |
| Aguajal | Marsh | Swamp; low-lying wetland with grassy vegetation; usually a transition zone between land and water. |
| Maduración | Maturation | The act or process of maturing or aging. |
| Medial | Medial | Relating to or situated in or extending toward the middle. |
| Mediano | Medium | Halfway between large and small. |
| Membranáceo | Membranous | Consisting of, of the nature of, or resembling a membrane; thin, soft and translucent. |
| Meri- | Meri- | Combining form meaning "part," "partial." |
| Microsporófilo | Microsporophyll | A leaflike organ bearing microsporangia. |
| Diminuto | Minute | Smallest classification based on the size limits of an organ. |
| Monadelfo | Monadelphous | Having the stamens of a flower, united into one group, as can be seen in hibiscus. |
| Mono- | Mono- | A combining form meaning "alone," "single," "one." |
| Monocotiledóneo | Monocotyledon | An angiospermous plant producing seeds with one cotyledon and an endogenous manner of growth. |
| Monoico | Monoecious | Having male and female flowers on the same plant; hermaphroditic. |
| Monolete | Monolete | Describing spores having a single, unbranched scar. |
| Monopoidal | Monopodial | Having a growth pattern along a single and continuous axis. |
| Morfo- | Morpho- | A combining form meaning "form" or "structure." |
| Mucrón | Mucro | A short, abrupt point, as at the end of a leaf. |
| Multi- | Multi- | A combining form meaning "much," "many," "multiple," "composed of many like parts." |
| Muricado | Muricate | Covered with short, sharp points. |
| Nativo | Native | Of indigenous origin or growth. |
| Nudoso | Nodose | Having short knob-like thickenings. |
| Especie abundante poco | Nonabundant species | A species with a presence of 1-1.99 individuals per hectare with dch \geq 20 cm |
| Nuculanio | Nuculanium | Fruit whose fleshy pericarp forms several distinct nuts. |
| Núcula | Nutlet | A small nut, or a small nutlike fruit or seed. |
| Obdiplostémono | Obdiplostemonous | Having twice as many stamens as petals, those of the outer set being opposite the petals; said of flowers. |
| Oblanceolado | Oblanceolate | Inversely lanceolate, as a leaf; lanceolate with the broadest part toward the apex. |

| Spanish | English | English Definition |
|-------------------|--------------------|--|
| Oblato | Oblate | Wider than long. |
| Oblongo | Oblong | Rectangular with rounded corners or ends; longer than wide. |
| Obovado | Obovate | Egg-shaped, with the apex broader than the base. |
| Obtuso | Obtuse | Broadly pointed, more than 90°; used by some authors to mean blunt or rounded. |
| Especie ocasional | Occasional species | A species with a presence of less than 0.25 individuals per hectare with dch >= 20 cm |
| Ocrea | Ochrea | Flared apex of the vaginula, forming a collar around the base of the seta, as in Macrocoma. |
| -oide | -oid | A suffix meaning "resembling" or "like." |
| Opaco | Opaque | Not transparent or translucent. |
| Opuesto | Opposite | As occurs when on a single node two elements are produced, one facing the other. |
| Orbicular | Orbicular | Like an orb; circular; ringlike; spherical; rounded. |
| Ovario | Ovary | The enlarged, rounded, ovule-producing base of the female portion (the pistil) of a flower that eventually develops into a fruit after being fertilized. |
| Ovado | Ovate | Having a shape like the longitudinal section of an egg; having such a shape with the broader end at the base, as a leaf. |
| Palea | Palea | A chaff-like scale or bract. |
| Palma | Palm | Any plant of the family Palmae having an unbranched trunk crowned by large pinnate or palmate leaves. |
| Palmeada | Palmate | Shaped like an open palm or like a hand with the fingers extended, as a leaf. |
| Panduriforme | Panduriform | Shaped like the body of a violin; obovate with a median, rounded sinus on either side. |
| Panícula | Panicle | Compound raceme or branched cluster of flowers. |
| Papiliforme | Papiliform | Shaped like or resembling a papilla. |
| Papilonado | Papilionaceous | Having an irregular corolla shaped somewhat like a butterfly, as the pea and other leguminous plants. |
| Vilano | Pappus | Bristly, feathery, or fluffy perianth whorl crowning the ovary or fruit in the Compositae, adapted for dispersal of the fruit by the wind or other means. |
| Papiráceo | Papyraceous | Resembling papyrus or paper; having the consistency of paper; papery. |
| Parásito | Parasite | An organism that grows in or on another plant or animal, obtaining all or part of its nutrients from it, and usually showing a degree of adaptive structural modification. |
| Pateliforme | Patelliform | Having the form of a patella; saucer-shaped. |
| Patente | Patent | Expanded or spreading; said of leaves spreading from the stem at an angle of 45° or more. |
| Pauci- | Pauci- | Combining form meaning "few" or "scarce"; opposed to "multi-." |
| Pedato | Pedate | Palmately parted or divided, with the lateral lobes or divisions cleft or divided; said of a leaf. |

| Spanish | English | English Definition |
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| Pedúnculo | Peduncle | Botanical term used to describe the stalk of a single flower, as in the tulip, or of a cluster of flowers, as in the geranium. |
| Pelúcido | Pellucid | Allowing the maximum passage of light; transparent. |
| Peltado | Peltate | Having the stalk or support attached to the lower surface at a distance from the margin, as a leaf; shield-shaped. |
| Pendular | Pendulous | Hanging down loosely. |
| Penninervio | Penninervate | Having nerves or veins diverging on each side of a midrib; feather-veined; pinnately veined; penninerved. |
| Apergaminado | Pergamentaceous | Said of a substance that bends and sounds like parchment; parchment-like. |
| Perianto | Perianth | The envelope of a flower, whether calyx or corolla or both. |
| Perigino | Perigynous | Situated around the pistil on the edge of a cup-like receptacle, as stamens or petals. |
| Persistente | Persistent | Remaining attached beyond the usual time; not falling or nondeciduous, long-lasting. |
| Perula | Perule | The covering of a seed. |
| Pétalo | Petal | One portion of the often bright and colored part of the corolla; one of the floral leaves which combine to form the perianth of a flower. |
| Pecioló | Petiole | A slender stalk by which a leaf is attached to the stem. |
| Peciolulo | Petiolule | The stalk of a leaflet of a compound leaf. |
| Pétreo | Petrous | Rock-like, stony. |
| Filoclado | Phylloclade | A flattened stem or branch that assumes the functions of foliage, as the broad, succulent stems of the Cactaceae (cactus family). |
| Filodio | Phyllode | An expanded leaf stalk, which functions as and resembles a leaf blade, e.g. asparagus. |
| Filopodio | Phyllopodium | An outgrowth of the rhizome to which the frond is joined in some ferns. |
| Filotaxia | Phyllotaxy | The distribution or arrangement of leaves on a stem; also, the genetically determined laws that govern such distribution. |
| Fitopatología | Phytopathology | The science of diseases to which plants are liable. |
| Pie de monte | Piedmont | An area lying along or near the foot of a mountain range. |
| Pinna | Pinna | One of the primary divisions of a pinnate leaf. |
| Pinnado | Pinnate | Having numerous, spreading branches on opposite sides of the axis and thus resembling a feather. |
| Pinnati- | Pinnati- | A combining form representing "pinnate" in compound words. |
| Pínula | Pinnule | A secondary pinna, one of the pinnately disposed divisions of a bipinnate leaf. |
| Anatomía vegetal | Plant anatomy | The science dealing with the structure of plants; the structure of a plant or any of its parts. |
| Plántula | Plantule | A plant embryo which has begun its development in the act of germination. |

| Spanish | English | English Definition |
|-----------------|----------------|---|
| Plicado | Plicate | Folded like a fan. |
| Plúmula | Plumule | The first bud, or gemmule, of a young plant; the bud, or growing point, of the embryo, above the cotyledons. |
| Pluri- | Pluri- | Combining form meaning "more," "several." |
| Poculiforme | Poculiform | Cup-shaped. |
| Vaina | Pod | The outer covering of the fruit of a plant, e.g., corn husk. |
| Polen | Pollen | The fertilizing element of flowering plants, consisting of fine, powdery, yellowish dust-like grains or spores, sometimes in masses. |
| Polinario | Pollinary | Same as pollinium. |
| Polinización | Pollination | The transfer of pollen from the male organ, where it is formed, to the receptive region of a female organ, e.g., from anther to stigma. |
| Polinio | Pollinium | A mass of pollen grains. |
| Polígamo | Polygamous | Bearing both unisexual or bisexual flowers on the same plant, or on plants of the same species. |
| Prefoliación | Praefoliation | The arrangement of unexpanded leaves in a bud. |
| Premorso | Premorse | Appearing to be broken off at the end, as a root or stem. |
| Aguijoneado | Prickly | Full of or armed with prickles. |
| Bosque primario | Primary forest | Primary vegetation on terra firma. |
| Procumbente | Procumbent | Lying along the ground, but not putting forth roots. |
| Prolato | Prolate | Longer than wide; opposed to oblate. |
| Proterógino | Proterogynous | Having the pistil or female organ mature before the stamens or male organs. |
| Proximal | Proximal | Near the base or point of attachment; the internal face of a spore. |
| Pruinoso | Pruinose | Having a bloom on the surface. |
| Poda | Pruning | Trimming branches or (1) parts of trees and shrubs, in order to strengthen those that remain or to bring the tree or plant into a desired shape, or (2) roots in order to control size, promote fruitfulness, or secure a growth of fibrous roots near the stem prior to transplanting. |
| Pubérulo | Puberulent | Minutely pubescent. |
| Pubescente | Pubescent | Fuzzy; covered with down or hairs, as the leaves of the African violet. |
| Pulverolento | Pulverulent | Covered with dust or powder. |
| Pulvínulo | Pulvinus | A cushion-like swelling at the base of a leaf. |
| Postulado | Pustular | Having bumps, as though blistered. |

| Spanish | English | English Definition |
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| Piriforme | Pyriform | Having the form of a pear; pear-shaped. |
| Pixidio | Pyxidium | A seed vessel that opens transversely, the top part acting as a lid. |
| Cuadrangular | Quadrangular | Having four angles and four sides; having the shape of a quadrangle. |
| Racimo | Raceme | An unbranched inflorescence of stalked flowers. |
| Raquisillo | Rachilla | A branch of inflorescence, the zigzag center upon which the florets are arranged in the spikelets of grasses. |
| Raquis | Rachis | That portion of an inflorescence, above the peduncle, bearing flowers. |
| Rameal | Rameal | Pertaining to branches or boughs. |
| Ramificación | Ramification | A structure formed of branches. |
| Ramular | Ramous | Ramose; of or referring to branches. |
| Rafe | Raphe | The part of the supporting stalk of an ovule that is fused to its outer covering, usually shaped like a ridge. |
| Receptáculo | Receptacle | The modified or expanded portion of the stem or axis that bears the organs of a single flower or the florets of a flower head; thalamus. |
| Recurvado | Recurved | Curved downward (abaxially) and inward; in leaves, referring to margins, apices, or marginal teeth; in peristome teeth, curved outward and more or less downward; opposed to incurved. |
| Reduplicado | Reduplicate | Valvate with the margins curved outwardly. |
| Bejuco | Reed | A name given to many tall and coarse grasses or grasslike plants, and their slender, often jointed, stems, such as the various kinds of bamboo. |
| Bejucoso | Reedy | Having a reed-like appearance. |
| Reflexo | Reflexed | Bent down (abaxially) and inward, generally referring to leaf margins or leaves on a stem (opposed to inflexed). |
| Regeneración | Regeneration | The development of a plant from a dedifferentiated adult cell. |
| Remanente | Remanent | Similar to persistent. |
| Resina | Resin | A class of solid or semisolid viscous substances obtained as exudations from certain plants. |
| Resupinado | Resupinate | Inverted; appearing as if upside down. |
| Retináculo | Retinaculum | A small gland or process to which bodies are attached; as, the glandular retinacula to which the pollinia of orchids are attached, or the hooks which support the seeds in many acanthaceous plants. |
| Retrorso | Retrorse | Directed backward or downward. |
| Retuso | Retuse | Having an obtuse or rounded apex with a shallow notch, as leaves. |
| Revoluto | Revolvute | Rolled downward (abaxially) and backward, referring to a leaf margin. |
| Ritidoma | Rhytidome | The bark external to the last formed periderm. |

| Spanish | English | English Definition |
|-----------------------------|------------------|--|
| Rimoso | Rimose | Full of crevices, chinks or cracks. |
| Sistema radicular | Root system | Form in which roots are distributed in the soil. |
| Roseta | Rosette | A compact cluster of leaves encircling the stem; a growth habit with thalli radiating from a central point. |
| Rostelo | Rostellum | Part of the median stigma lobe of Orchid flowers. |
| Rostrado | Rostrate | Beaked, narrowed into a slender tip or point. |
| Rufescente | Rufescent | Reddish; tinged with red. |
| Rugulado | Rugulose | Having many small wrinkles. |
| Ruminado | Ruminated | Presenting a chewed appearance; permeated by striae; striated; marbled. |
| Rupícola | Rupicolous | Rupestine; inhabiting rocks. |
| Sacciforme | Saccate | Having a sac, or sac-like; abruptly and deeply concave; e.g., forming a sac. |
| Samara | Samara | An indehiscent, usually one-seeded fruit provided with a wing, as in the ash, elm, or birch; also called key and key fruit. |
| Saprófita | Saprophyte | Plant living on dead organic matter. |
| Sarmentoso | Sarmentose | Having long sarmenta or runners; having the form or character of a runner. |
| Escabroso | Scabrose | Rough. |
| Escalariforme | Scalariform | Ladder-shaped, step-like. |
| Cicatriz | Scar | A mark left upon a stem or branch by the fall of a leaf, leaflet, or frond, or upon a seed by the separation of its support. |
| Especie escasa | Scarce species | A species with a presence of 0.5-0.99 individuals per hectare with dch \geq 20 cm |
| Nombre científico o técnico | Scientific name | Universal term created by botanists to designate plants by a single name; consists of two (genus and species) or more (subspecies, variety or form) words. |
| Esclerofilia | Sclerophylly | The normal development of much sclerenchyma in the leaves of certain plants, as some desert plants, resulting in thickened, hardened foliage that resist loss of moisture. |
| Escuteliforme | Scutelliform | Shield-shape; scutiform. |
| Bosque secundario | Secondary forest | Degraded vegetation. |
| Secundo | Secund | Arranged on one side only; turned to one side; e.g., leaves on a stem. |
| Semilla | Seed | The fertilized mature ovule of a flowering plant, containing an embryo or rudimentary plant. |
| Seríceo | Seraceous | Covered with silky down, as a leaf. |
| Aserrado | Serrate | Saw-toothed; with marginal teeth pointing forward (towards apex). |
| Sentado | Sessile | Attached by the base, or without any distinct projecting support, as a leaf issuing directly from the leaf. |

| Spanish | English | English Definition |
|-----------------|-------------------|--|
| Seta | Seta | A stiff hair; bristle or bristle-like part. |
| Restinga | Shoal | Vegetation inundated sporadically by water at high tide. |
| Aletón | Shoot | A young branch which sprouts from the main stock. |
| Corto | Short | Having little length, or lacking in length. |
| Silicuo | Silique | The long, pod-like fruit that is characteristic of plants of the family Cruciferae (mustard family). |
| Simple | Simple | Used to describe a leaf that consists of a single blade, unlike a compound leaf, which has two or more. |
| Estaca | Slip | Same as cutting. |
| Arbolito | Small tree | Smallest size classification for trees. |
| Olor | Smell | Any property detected by the olfactory system. |
| Lisa | Smooth | Having an even surface, or a surface so even that no roughness or points can be perceived by the touch. |
| Apariencia lisa | Smooth appearance | Said of bark that does not feel wrinkled to the touch. |
| Sorosis | Sorosis | A fleshy fruit formed by the consolidation of many flowers with their receptacles, ovaries, etc., as the breadfruit, mulberry and pineapple. |
| Soro | Sorus | One of the clusters of sporangia on the back of the fronds of ferns. |
| Espádice | Spadix | An inflorescence consisting of a spike with a fleshy or thickened axis, usually enclosed in a spathe. |
| Espata | Spathe | One, or sometimes two, large bracts, which grow near the base or surround a flower cluster or individual bud. |
| Espatulado | Spathulate | Tapering proximally from a broad, rounded apex. |
| Especimen | Specimen | An example regarded as typical of its class. |
| Redondeado | Spheroidal | Globular. |
| Espolonado | Spicate | Having or relating to spikes; e.g., spicate inflorescence. |
| Espicular | Spiculate | Having the form of a spicule; covered with or having spicules; consisting of spicules. |
| Espícula | Spicule | A small, sharp-pointed body or part. |
| Espiga | Spike | A flower stalk; indefinite inflorescence with sessile flowers along an elongated axis. |
| Bofo | Spongy | Resembling a sponge in having soft porous texture and compressibility. |
| Esporangio | Sporangium | A receptacle containing spores; a spore case or capsule. |
| Esporocarpio | Sporocarp | A multicellular structure in which spores form; a fruiting body. |
| Esporofilo | Sporophyll | The leaf or leaf-like organ that bears the spores. |

| Spanish | English | English Definition |
|---------------|---------------------|---|
| Escuamiforme | Squamiform | Shaped like a scale. |
| Escamoso | Squamous | Cover with or formed of squamae or scales; scalelike. |
| Color estable | Stable color | Where the color does not vary for the approximately 3-5 minutes required for the evaluation. |
| Cayado | Staff-shaped | Cane-shaped. |
| Estambre | Stamen | The male floral organ, bearing the anther, which produces pollen. |
| Estela | Stele | The central cylinder or cylinders of vascular and related tissue in the stem, root, petiole, leaf, etc., of the higher plants. |
| Tallo | Stem | The main ascending axis of a plant. |
| Estigma | Stigma | The part of the pistil of a flower, normally on the tip of the style or ovary, which receives pollen. |
| Estipite | Stipe | The unbranched basal part of an erect stem in a dendroid or frondose moss and some anacrogynous liverworts. |
| Punteado | Stippled | Having minute dots or depressions. |
| Estipula | Stipule | Underleaves in leafy liverworts; in a few mosses, smaller leaves on the upper or lower stem surface, variously differentiated from the lateral leaves. |
| Recto | Straight | Said of any branch, vein, trunk, stipule, etc., exhibiting tis characteristic. |
| Estrato | Stratum | A layer of tissue; lamella. |
| Rayas | Striae | Small grooves, channels or ridges. |
| Estriado | Striate | Marked with fine ridges or lines (striae). |
| Estrigoso | Strigose | Set with stiff bristles or hairs; hispid. |
| Estrobilo | Strobile | A reproductive structure characterized by overlapping scalelike parts, as a pine cone or the fruit of the hop; a conelike structure composed of sporophylls; strobile. |
| Sub- | Sub- | Prefix meaning "under," "below," "beneath." |
| Subespecie | Subspecies | A taxonomic subdivision of a species, often with a distinct geographic distribution. |
| Subulado | Subulate | Slender, somewhat cylindrical and tapering to a point; acuminate. |
| Suculento | Succulent | Describing a plant with thick fleshy leaves and/or stems that are adapted to store water. |
| Sufrútice | Suffrutescent | Partially or slightly woody; subshrubby. |
| Surcado | Sulcated | Furrowed lengthwise, as pseudobulbs; having long, narrow lengthwise channels or grooves, as plant stems. |
| Supay chacra | <i>Supay chacra</i> | Small areas populated with myrmecophilous trees. |
| Sicono | Syconium | A multiple fleshy fruit composed of a hollow receptacle containing numerous reduced flowers, as in the fig. |
| Simpódico | Sympodial | Having the character of or resulting in a sympodium, as a sympodial stem or a sympodial growth; referring to a growth habit (of a sympodial Orchid) in which new shoots arise |

| Spanish | English | English Definition |
|---------------------|---------------------|---|
| | | successively from axillary buds of a rhizome. |
| Cola | Tail | A downy or feathery appendage to certain achenes, formed of the permanent elongated style; appendage. |
| Terete | Terete | Slender and smooth, with a circular transverse section. |
| Terminal | Terminal | Located at the apex, tip or distal end. |
| Ternado | Ternate | Consisting of three leaflets, as a compound leaf; having leaves arranged in whorls of three, as a plant. |
| Teselado | Tessellated | Arranged in or having the appearance of a mosaic; checkered. |
| Testa | Testa | The hard outer coating of a seed; episperm |
| Tetraspora | Tetraspore | One of the four asexual spores produced within a sporangium. |
| Consistencia | Texture | Texture of leaves and other plants. |
| Textura | Texture | The visual and especially tactile quality of a surface. |
| Grueso | Thick | Classification parameter for describing the thickness of something. |
| Delgado | Thin | Having relatively little extent from one surface or side to the opposite. |
| Tomentoso | Tomentose | Closely covered with down or matted hair; woolly; densely radiculose. |
| Toruloso | Torulose | Having at intervals small rounded parts, as a stem or pod. |
| Toro | Torus | The receptacle of a flower; a thickening of the wall membrane in the bordered pits occurring in the tracheid cells of the wood of many conifers. |
| Bosque transicional | Transitional forest | Vegetation on clayey soil. |
| Arbol | Tree | A perennial plant that grows from the ground with a single, normally tall, woody, self-supporting trunk or stem and an elevated crown of branches and foliage (or only foliage, as in the palms). |
| Tricoma | Trichome | An outgrowth from the epidermis of plants, as a hair. |
| Tricótomo | Trichotomous | Branching almost equally into three parts. |
| Trifoliolado | Trifoliolate | Having three leaves. |
| Tripinnado | Tripinnate | Bipinnate, as a leaf, with the divisions also pinnate. |
| Truncado | Truncated | Abruptly cut off or squared off at the apex. |
| Abombado | Tumid | Swollen, tumescent. |
| Túnica | Tunic | A loose, outer covering or skin surrounding some corms and bulbs, e.g., the onion, tulip and crocus. |
| Ramillete | Umbel | Inflorescence in which a number of flower stalks or pedicels, nearly equal in length, spread from a common center; cluster. |
| Umbela | Umbel | A flat-topped or rounded flower cluster in which each flower's stalk rises from a central point. In a compound umbel, each primary stalk ends in an umbel. |

| Spanish | English | English Definition |
|---------------------------------|----------------------------|---|
| Aparasolado | Umbellate | Arranged in umbels; bearing umbels, such as umbellate plants, flowers or clusters. |
| Umbonado | Umbonate | Convex, with an abrupt, rounded, central point. |
| Uncinado | Uncinate | Hooked; having the tip bent in the form of a hook. |
| Urceolado | Urceolate | Urn-shaped; applied to capsules constricted below a wide mouth and abruptly narrowed to the seta. |
| Uso | Use | Medicinal, lumbering, etc., utilization made of plants. |
| Vagina | Vagina | The sheath formed by the basal part of certain leaves where they embrace the stem; same as pod or husk. |
| Variegado | Variegated | Varied in appearance or color; marked with patches or spots of different colors. |
| Variedad | Variety | A subdivision of a species officially ranking between subspecies and forma. |
| Velamen | Velamen | The outer envelope or covering of the aerial roots of some arums and orchids. |
| Ventricoso | Ventricose | Bulging, especially on one side or unequally; protuberant. |
| Vermiforme | Vermiform | Resembling a worm; long, thin and cylindrical. |
| Vernación | Vernation | The arrangement of leaves within a bud. |
| Verrucoso | Verrucose | Covered with small wart-like elevations. |
| Versátil | Versatile | Swinging or turning without restraint on a support, such as an anther fixed at the middle on the tip of the filament, and swinging freely. |
| Verticilo | Verticil | A whorl, as leaves or flowers that are disposed in a circle or ring around an axis. |
| Verticilado | Verticillate | Arranged in a ring or circle. |
| Especie muy escasa | Very scarce species | A species with a presence of less than 0.25-0.49 individuals per hectare with dch \geq 20 cm |
| Vestigial | Vestigial | Relatively undeveloped; rudimentary. |
| Velloso | Villous | Covered with, or of the nature of, villi (long, soft, straight hairs covering the fruit, flowers and other parts of certain plants. |
| Viscido | Viscid | Having a glutinous consistency; sticky; adhesive; viscous. |
| Vidrioso | Vitrious | Resembling glass, as in a leaf or bark, either dead or living, that breaks easily. |
| Enroscado | Volute | Spiral in shape. |
| Aleta | Wing | A thin, flat membranous expansion or appendage such as the margin of a spore; the keel of a perianth or folded leaf, or loosely applied to the lamina of a thallus or basal angles of leaves. |
| Aleta medianamente desarrollada | Wing, moderately developed | Wing with a height greater than 1.5 but less than four times the diameter at the point the wing terminates. |
| Aleta pobremente desarrollada | Wing, poorly developed | Wing with a height of 1.5 or less times the diameter at the point the wing terminates. |

| Spanish | English | English Definition |
|-----------------------|----------------------------|---|
| Aleta desarrollada | bien Wing, developed | well- Wing with a height equal to or greater than four times the diameter at the point the wing terminates. |
| Madera | Wood | The substance of trees and the like; the hard fibrous substance which composes the body of a tree and its branches, and which is covered by the bark; timber. |
| Xerofítico | Xerophytic | Referring to a plant adapted for growth under dry conditions. |
| Zigomorfo | Zigomorphic | Capable of division into symmetrical halves by only one longitudinal plane passing through the axis. |
| Zigzagado | Zigzagging | Describing a branch or dead bark having such a shape. |