# SUPPLEMENTARY MATERIAL

**Figure S1** Rarefaction curves. We classified three forest conditions as: High severity and intensity burned forest (HSIBF) in red colors, Moderate severity and intensity burned forest (MSIBF) in green and Unburned forest (UB) in blue. The figure on the left corresponds to the size category of adults, and the figure on the right corresponds to the natural regeneration (saplings). The endpoint of each curve depicts the total number of individuals of all species combined, and the variation between assemblages in where the curve terminates quantifies changes to the number of individuals and species richness.

**Gráfico

Descripción generada automáticamenteDiagrama

Descripción generada automáticamente**

**Table S1** List of species and their associated traits. In total, we registered 182 species of trees and palms belonging to thirty-eight families. The most representative families were Fabaceae, with thirty-eight species, including Chrysobalanaceae (16), Myrtaceae (13), Euphorbiaceae (10), Lecythidaceae (8), and Sapotaceae (7). Where: Evergreen (Ev), deciduous (D), semi-deciduous (S-D), anemochory (Ane), autochory (Au), hydrochory (H), fish dispersal (F), terrestrial zoochory (Zoo (T)) and aerial zoochory (Zoo (A)). Gender information (\*), family information (\*\*), no information (▪), maximum registered value (◦), according to gender information and fruit characteristics (꙳), High severity burned forest (HSBF), Moderate severity burned forest (MSIBF) and Unburned forest (UB).

| **Family** | **Scientific Names** | **Species** | **Wood density (g/cm3)** | **H max (mt)** | **Resprouter** | **Leaf phenology** | **Seed dispersal** | **Adults DBH ≥ 10 cm (Abundance)** | | | **Saplings DBH < 10 cm (Abundance)** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **HSBF** | **MSIBF** | **UB** | **HSBF** | **MSIBF** | **UB** |
| ANACARDIACEAE | *Tapirira guianensis* Aubl*.* | Tagu | 0.46 | 18 | NO | Ev | Zoo (A) | - | - | 2 | - | - | - |
| ANNONACEAE | *Duguetia sp1.* | Dusp | 0.72\* | 11 | NO | Ev | Zoo (T) ꙳ | - | - | 1 | - | - | - |
| *Guatteria* aff. *metensis* R.E.Fr. | Gume | 0.54 | 13 | NO | Ev | H | - | - | 2 | - | - | - |
| *Guatteria* cf. *stenopetala* R.E.Fr. | Gust | 0.54 | 10 | NO | Ev | H | 1 | - | - | - | - | - |
| *Guatteria hirsuta* Ruiz and Pav. | Guhi | 0.56 | 14 | NO | D | Zoo (T) | - | - | 2 | - | - | - |
| *Guatteria maypurensis* Kunth | Guma | 0.54 | 15 | NO | S-D | H | 1 | - | 2 | - | - | - |
| *Pseudoxandra sp.* | Pssp | 0.37\* | 14 | NO\* | Ev\* | H꙳ | - | - | 5 | - | - | - |
| *Xylopia emarginata* Mart*.* | Xyem | 0.59 | 17 | YES | Ev | H | - | - | 11 | 1 | - | 45 |
| APOCYNACEAE | *Himatanthus attenuatus* (Benth.) Woodson | Hiat | 0.51 | 10 | NO | S-D | H | 1 | - | - | 39 | 3 | - |
| *Lacmellea utilis*(Arn.) Markgr. | Laut | 0.49 | 15 | NO▪ | Ev | Zoo (T)\* | - | - | - | - | 29 | - |
| *Malouetia sp1.* | Masp1 | 0.63\* | 16 | YES | D | H꙳ | - | - | 1 | - | - | - |
| *Malouetia tamaquarina* (Aubl.) A.DC. | Mata | 0.53 | 15 | NO | S-D | H | - | - | 2 | - | - | - |
| *Parahancornia oblonga* (Benth. ex Müll.Arg.) Monach. | Paob | 0.5 | 17 | NO | S-D | Au | - | - | 11 | - | - | - |
| AQUIFOLIACEAE | *Ilex* cf*. cardonae* Steyerm. | Ilca | 0.79 | 13 | YES | D | Zoo (T) | - | - | 1 | - | - | - |
| *Ilex sp.1* | Ilsp1 | 0.56\* | 10\* | NO▪ | D\* | Zoo (T) ꙳ | - | - | - | 63 | - | - |
| *Ilex sp.2* | Ilsp2 | 0.56\* | 10\* | NO▪ | D\* | Zoo (T) ꙳ | - | - | - | 43 | - | - |
| ARECACEAE | Astrocaryum jauari Mart. | Asja | 0.5 | 12 | NO | Ev | F | 5 | 6 | 26 | 464 | 30 | 226 |
| *Euterpe precatoria* Mart*.* | Eupr | 0.39 | 17 | NO | Ev | H | - | - | 2 | - | - | - |
| *Leopoldinia pulchra* Mart*.* | Lepu | 0.48 | 9 | NO | Ev | H | 5 | - | 6 | 174 | - | 311 |
| *Mauritia flexuosa* L.f. | Mafl | 0.56 | 17 | NO | Ev | Au | - | - | 4 | - | - | 20 |
| *Oenocarpus bataua* Mart*.* | Oeba | 0.68 | 14 | YES | Ev | Zoo (T) | - | - | 17 | - | - | 77 |
| BIGNONIACEAE | *Handroanthus barbatus* (E.Mey.) Mattos | Haba | 0.7 | 14 | YES | D | Ane | 16 | 2 | 8 | 60 | 2 | 5 |
| *Handroanthus chrysanthus* (Jacq.) S.O.Grose | Hach | 0.7 | 6.5 | YES | D | Ane | - | 1 | - | - | - | - |
| *Tabebuia* cf. *insignis* (Miq.) Sandwith | Tain | 0.526 | 6 | YES | D | Ane | - | 1 | - | - | - | - |
| BURSERACEAE | *Protium llanorum* Cuatrec*.* | Prll | 0.671 | 15 | YES | S-DD | Zoo (A) | - | - | 20 | - | - | - |
| *Protium guianense* (Aubl.) Marchand | Prqui | 0.711 | 20\* | NO▪ | Ev\* | Zoo (T)\* | - | - | - | - | - | 20 |
| *Tetragastris panamensis* (Engl.) Kuntze | Tepa | 0.717 | 9 | NO | Ev | Zoo (T) | - | - | 2 | - | - | 14 |
| CALOPHYLLACEAE | *Calophyllum brasiliense* Cambess*.* | Cabr | 0.659 | 18 | NO | D | Zoo (A) | - | - | 2 | - | - | - |
| *Caraipa llanorum* Cuatrec*.* | Call | 0.606 | 17 | YES | D | Au | 103 | 7 | 35 | 78 | - | 15 |
| *Caraipa heterocarpa* Ducke | Cahe | 0.648 | 16 | NO | Ev | Zoo (T) | - | - | 2 | - | - | - |
| CARYOCARACEAE | *Caryocar* cf. *microcarpum* Ducke | Cami | 0.66 | 18 | YES | S-DD | F | - | - | 14 | - | - | - |
| CELASTRACEAE | *Maytenus sp.* | Maysp | 0.69\* | 4 | NO\* | Ev\* | Zoo (T) ꙳ | 1 | - | - | - | - | - |
| *Maytenus guyanensis* Klotzsch ex Reissek. | Maguy | 0.63 | 16 | NO | Ev | Zoo (A) | - | - | 1 | - | - | - |
| CHRYSOBALANACEAE | *Chrysobalanaceae sp.1* | Chsp | 0.781\* | 13 | YES | Ev\* | Zoo (T) ꙳ | - | 3 | - | - | - | - |
| *Couepia paraensis* (Mart. and Zucc.) Benth. ex Hook. f. | Copa | 0.85 | 12 | YES | S-DD | Zoo (T) | 8 | 7 | - | 7 | 3 | - |
| *Couepia sp1.* | Cosp | 0.79\* | 11 | NO | Ev\* | Zoo (T) ꙳ | - | - | 1 | - | - | - |
| *Couepia subcordata* Benth*.* | Cosu | 0.79\* | 20 | NO▪ | Ev | Zoo (T) | - | - | - | 4 | 6 | - |
| *Hirtella triandra* Sw*.* | Hitr | 0.619 | 15 | YES | Ev | Zoo (T) | - | - | 4 | - | - | - |
| *Licania apetala var. aperta* (Benth.) Prance | Liap | 0.76 | 13 | NO | D | F | - | 2 | - | - | - | - |
| *Licania* cf*. octandra* (Hoffmanns. ex Schult.) Kuntze | Lioc | 0.81 | 12 | NO | Ev | F | - | - | 1 | - | - | - |
| *Licania heteromorpha* Benth*.* | Lihe | 0.59 | 15 | YES | Ev | F | 44 | 2 | - | 35 | - | - |
| *Licania heteromorpha var. glabra* (Mart. ex Hook.f.) Prance | Liheg | 0.59 | 17 | YES | Ev | F | 2 | 7 | 7 | - | - | - |
| *Licania hypoleuca* Benth*.* | Lihy | 0.86 | 15 | YES | Ev | F | - | - | 20 | - | - | - |
| *Licania licaniiflora* (Sagot) S.F.Blake | Lili | 0.67 | 11 | NO | Ev | F | - | - | 1 | - | - | - |
| *Licania longistyla* (Hook.f.) Fritsch | Lilo | 0.62 | 16 | YES | Ev | F | - | - | 15 | - | - | - |
| *Licania mollis* Benth*.* | Limo | 0.636 | 16 | YES | Ev | F | 10 | - | 12 | - | - | - |
| *Licania sp8.* | Lisp | 0.63\* | 13 | YES | Ev꙳ | F | - | - | 1 | - | - | - |
| *Licania sprucei* (Hook.f.) Fritsch. | Lispr | 0.63\* | 14 | NO | Ev | F | - | - | 2 | - | - | - |
| *Licania undulata* Prance*.* | Liun | 0.63\* | 13 | YES | Ev | F | - | - | 1 | - | - | - |
| CLUSIACEAE | *Tovomita* cf. *spruceana* Planch. and Triana | Tosp | 0.68 | 15 | NO | Ev | Zoo (A) | - | - | 2 | 1 | - | 37 |
| *Tovomita* cf. *umbellata* Benth*.* | Toum | 0.86 | 13 | YES | Ev | Zoo (A) | - | - | 4 | - | - | - |
| COMBRETACEAE | *Buchenavia* cf*. ochroprumna* Eichler | Buoc | 0.69 | 12 | YES | D | F | - | 1 | 1 | - | - | - |
| *Buchenavia viridiflora* Ducke | Buvi | 0.88 | 14 | NO | S-D | Zoo (T) | - | - | 1 | - | - | - |
| CONNARACEAE | *Connarus* cf*. venezuelanus* Baill*.* | Cove | 0.45 | 11 | NO | Ev | Zoo (T) | - | - | 2 | 11 | - | - |
| *Connarus punctatus* Planch*.* | Copu | 0.5 | 15 | YES | Ev | Zoo (T) | - | - | 2 | 2 | 3 | 19 |
| *Deguelia angulata* (Ducke) A.M.G.Azevedo and R.A.Camargo. | Dean | 0.5 | 9 | YES | Ev | H | - | - | 1 | - | - | - |
| EBENACEAE | *Diospyros* cf*. cayennensis* A.DC. | Dica | 0.46 | 10 | NO | Ev | Zoo (T) | - | - | 1 | - | - | - |
| EUPHORBIACEAE | *Alchornea discolor* Poepp*.* | Aldi | 0.42 | 5.5 | YES | Ev | H | 1 | - | - | - | - | - |
| *Croton cuneatus* Klotzsch | Crcu | 0.41 | 9 | NO | Ev | F | - | - | 1 | - | - | - |
| *Discocarpus essequeboensis* Klotzsch | Dies | 0.56 | 4.5 | YES | Ev | Au | 1 | - | - | - | - | - |
| *Hevea sp.1* | Hesp1 | 0.62\* | 9 | NO\* | S-D\* | Au꙳ | - | - | 1 | - | - | - |
| *Hevea sp.2* | Hesp2 | 0.62\* | 14 | NO\* | S-D\* | Au꙳ | - | - | 1 | - | - | - |
| *Hevea rigidifolia* (Spruce ex Benth.) Müll.Arg. | Heri | 0.62 | 14 | NO | Ev | Au꙳ | - | - | 1 | - | - | - |
| *Mabea nitida* Spruce ex Benth. | Mani | 0.65 | 15 | YES | Ev | F | 9 | 5 | 5 | 20 | - | - |
| *Maprounea guianensis* Aubl*.* | Magu | 0.6 | 14 | NO | S-DD | Zoo (T) | - | - | 1 | - | - | - |
| *Nealchornea yapurensis* Huber | Neya | 0.56 | 10 | YES | Ev | Au | - | - | 1 | - | - | - |
| *Piranhea* cf*. trifoliata* Baill*.* | Pitr | 0.84 | 14 | YES | S-DD | H | - | 8 | - | - | - | - |
| FABACEAE | *Acosmium nitens* (Vogel) Yakovlev | Acni | 0.8 | 17 | YES | S-DD | F | 11 | 1 | - | 44 | 1 | - |
| *Acosmium stirtonii* G.A. Aymard and V. González | Acst | 0.76\* | 10 | NO▪ | SemiD | F | - | - | - | 3 | 35 | - |
| *Bowdichia virgilioides* Kunth | Bovi | 0.91 | 9 | NO | D | Ane | - | - | 1 | - | - | - |
| *Campsiandra comosa* Benth*.* | Caco | 0.81 | 13 | YES | Ev | F | 1 | 10 | 21 | - | 37 | 19 |
| *Campsiandra implexicaulis* Stergios | Caim | 0.55 | 16 | YES | Ev | F | 8 | - | - | 12 | - | - |
| *Clathrotropis* cf*. brachypetala* (Tul.) Kleinhoonte | Clbr | 0.82 | 11 | YES | S-DD | H | - | - | 1 | - | - | - |
| *Clathrotropis* cf*. nitida* (Benth.) Harms | Clni | 0.838 | 13 | NO | S-DD | H | - | - | 1 | - | - | - |
| *Cynometra bauhiniifolia* Benth*.* | Cyba | 0.865 | 14 | YES | Ev | H | - | 5 | - | 9 | 2 | 1 |
| *Cynometra marginata* Benth*.* | Cyma | 0.865 | 12.5 | NO | Ev | H | - | - | 1 | - | - | - |
| *Cynometra sp1.* | Cysp | 0.80\* | 13 | NO | Ev | H꙳ | - | - | 2 | - | - | - |
| *Cynometra martiana* Benth*.* | Cymar | 0.8 | 8 | YES | Ev | H | - | - | 1 | - | - | - |
| *Dimorphandra unijuga* Tul*.* | Diun | 0.55 | 7.5 | YES | Ev | Zoo (T) | 2 | - | - | - | - | - |
| *Diplotropis martiusii* Benth*.* | Dima | 0.79 | 14 | NO | Ev | H | - | - | 3 | - | - | - |
| *Diplotropis purpurea* (Rich.) Amshoff | Dipu | 0.78 | 18 | NO | Ev | H | - | - | 2 | - | - | - |
| *Etaballia dubia* (Kunth) Rudd | Etdu | 0.55 | 14 | NO | Ev | Ane | - | 1 | - | - | - | - |
| *Hymenolobium heterocarpum* Ducke | Hyhe | 0.63 | 15 | YES | Ev | Ane | - | - | 2 | - | - | - |
| *Inga* cf*. alba* (Sw.) Willd. | Inal | 0.68 | 8 | NO | Ev | Zoo (T) | - | 1 | - | - | - | - |
| *Inga semialata* (Vell.) C.Mart. | Inse | 0.58 | 14 | NO | S-DD | Zoo (T) | 1 | - | - | - | - | - |
| *Macrolobium acaciifolium* (Benth.) Benth. | Maac | 0.53 | 14 | YES | S-DD | H | - | - | 1 | - | - | - |
| *Macrolobium angustifolium* (Benth.) Cowan | Maan | 0.68 | 13 | YES | S-DD | Zoo (T) | 3 | - | 14 | - | - | - |
| *Macrolobium discolor* Benth*.* | Madi | 0.8 | 5 | NO | S-DD | Au | - | 1 | - | - | - | - |
| *Macrolobium multijugum* (DC.) Benth. | Mamu | 0.58 | 18 | YES | S-DD | H | 7 | - | 1 | 20 | - | - |
| *Macrolobium sp.* | Macsp | 0.61\* | 11 | NO\* | Ev\* | H꙳ | - | - | 2 | - | - | - |
| *Macrolobium bifolium* (Aubl.) Pers. | Mabi | 0.69 | 11 | YES | D | H | - | - | 4 | - | - | - |
| *Macrosamanea pubiramea* (Steud.) Barneby and J.W.Grimes | Mapu | 0.678\*\* | 13 | NO▪ | Ev\*\* | H\*\* | - | - | 2 | 52 | - | 123 |
| *Ormosia costulata* (Miq.) Kleinhoonte | Orco | 0.55 | 15 | YES | Ev | Au | 2 | - | 1 | - | - | - |
| *Parkia discolor* Benth*.* | Padi | 0.69 | 17 | YES | D | F | 11 | - | - | 14 | - | - |
| *Peltogyne venosa* (M.Vahl) Benth. | Peve | 0.75 | 16 | YES | Ev | Au | 6 | - | 2 | - | - | - |
| *Peltogyne paniculata* Benth*.* | Pepa | 0.81 | 16 | YES | D | Ane | - | - | 4 | - | - | - |
| *Swartzia leptopetala* Benth*.* | Swle | 0.82 | 15 | YES | S-D | Zoo (A) | 1 | 13 | 4 | - | - | - |
| *Swartzia pittieri* Schery | Swpi | 0.8 | 12 | YES | S-D | Zoo (A) | - | 1 | - | - | - | - |
| *Swartzia arborescens* (Aubl.) Pittier. | Swar | 0.84 | 10 | NO▪ | Ev | H\* | - | - | - | - | 8 | 7 |
| *Swartzia cardiosperma* Benth*.* | Swca | 0.84 | 15 | YES | Ev | H | - | - | 2 | - | - | - |
| *Tachigali davidsei* Zarucchi and Herend. | Tada | 0.7 | 11 | YES | S-D | Zoo (T) | - | 3 | - | - | - | - |
| *Tachigali physophora* (Huber) Zarucchi and Herend. | Taph | 0.55 | 15 | YES | S-D | Zoo (T) | 20 | - | 4 | - | - | - |
| *Zygia inaequalis* (Humb. and Bonpl. ex Willd.) | Zyin | 0.81\* | 8 | NO▪ | Ev | Zoo (A)\* | - | - | - | 19 | 18 | 5 |
| *Zygia cataractae* (Kunth) L.Rico | Zyca | 0.69 | 8 | YES | Ev | Zoo (A) | - | - | 1 | 29 | - | 5 |
| *Zygia longifolia* (Willd.) Britton and Rose | Zylo | 0.71 | 12 | YES | S-D | Zoo (A) | - | - | 2 | - | 4 | 21 |
| HUMIRIACEAE | *Humiriastrum piraparanense* Cuatrec*.* | Hupi | 0.62 | 14 | NO | Ev | Zoo (A) | - | - | 6 | - | - | - |
| *Sacoglottis guianensis* Benth*.* | Sagu | 0.58 | 16 | YES | Ev | F | 8 | - | 1 | 21 | - | - |
| *Sacoglottis mattogrossensis* Malme | Sama | 0.77 | 19 | YES | Ev | F | - | - | 3 | - | - | - |
| HYPERICACEAE | *Vismia* cf*. ferruginea* Kunth | Vife | 0.49 | 3.5 | NO | S-DD | Ane | 1 | - | - | - | - | - |
| LAURACEAE | *Aniba megaphylla* Mez | Anme | 0.45 | 15 | NO | Ev | Zoo (A) | - | - | 1 | - | - | - |
| *Endlicheria anomala* (Nees) Mez | Enan | 0.49 | 8.6 | YES | Ev | Zoo (T) | - | - | 3 | - | - | - |
| *Lauraceae sp.1* | Lasp1 | 0.639\* | 13 | YES | Ev\* | Zoo (A) ꙳ | - | - | 1 | - | - | - |
| *Nectandra membranacea* (Sw.) Griseb. | Neme | 0.58\* | 15 | NO▪ | Ev | Zoo (A) | - | - | - | 23 | - | - |
| *Nectandra sp1.* | Nesp | 0.58\* | 15 | YES | Ev | Zoo (A) ꙳ | - | - | 5 | - | - | - |
| *Ocotea esmeraldana* Moldenke | Oces | 0.52\* | 30\* | NO▪ | Ev\* | Zoo (A)\* | - | - | - | 147 | 16 | 1 |
| LECYTHIDACEAE | *Cariniana* cf*. penduliflora* Prance | Cape | 0.57 | 10 | NO | D | Ane | - | - | 1 | - | - | - |
| *Eschweilera* cf*. pedicellata* (Rich.) S.A.Mori | Esped | 0.91 | 12 | NO▪ | Ev\* | H\* | - | - | - | 4 | 9 | 16 |
| *Eschweilera parviflora* Mart. ex DC. | Espa | 0.63 | 15 | YES | Ev | H | 25 | 14 | 15 | 59 | 1 | 7 |
| *Eschweilera sagotiana* Miers | Essa | 0.8 | 17 | YES | Ev | H | - | - | 4 | - | - | - |
| *Eschweilera sessilis* A.C.Sm. | Esse | 0.71 | 12 | YES | Ev | H | - | 3 | - | - | - | - |
| *Eschweilera tenuifolia* (O.Berg) Miers | Este | 0.59 | 10 | YES | Ev | H | 2 | - | - | 41 | - | - |
| *Gustavia augusta* L. | Guau | 0.66 | 15 | YES | Ev | H | - | 13 | 3 | - | - | - |
| *Gustavia pulchra* Miers | Gupu | 0.64 | 18 | NO▪ | Ev | Zoo (T)\* | - | - | - | 1 | 14 | 6 |
| MALPIGHIACEAE | *Burdachia prismatocarpa*A. Juss. | Bupr | 0.73 | 13 | YES | S-D | H | 1 | 4 | 1 | 6 | 4 | - |
| *Byrsonima* cf. *japurensis* A.Juss. | Byja | 0.62 | 12 | NO | S-D | F | - | 1 | - | - | - | - |
| MELASTOMATACEAE | *Henriettea stellaris* O. Berg ex Triana | Hest | 0.58 | 10 | YES | D | Zoo (A) | - | - | 1 | - | - | - |
| MELIACEAE | *Guarea glabra* Vahl*.* | Gugl | 0.48 | 15 | NO | Ev | Zoo (A) | - | - | 1 | - | - | - |
| *Trichilia* aff. *rubra* C.DC. | Trru | 0.59 | 13 | YES | S-DD | Zoo (A) | - | 5 | - | - | - | - |
| MORACEAE | *Maquira coriacea* (H.Karst.) C.C.Berg | Maco | 0.62 | 17 | YES | Ev | F | - | - | 4 | - | - | - |
| MYRISTICACEAE | *Virola carinata* (Spruce ex Benth.) Warb. | Vica | 0.72 | 17 | YES | Ev | Zoo (T) | - | - | 13 | - | - | - |
| *Virola surinamensis* Rol. ex Rottb.) Warb. | Visu | 0.42 | 14 | NO | Ev | Zoo (A) | - | - | 5 | - | - | - |
| MYRTACEAE | *Calyptranthes sp. 1* | Casp | 0.78\* | 12 | YES | Ev\* | Zoo (A) ꙳ | - | 1 | 2 | 11 | 27 | 16 |
| *Calyptranthes* aff*. ruiziana* O.Berg | Caru | 0.752 | 13 | YES | Ev | Zoo (A) | - | 2 | 3 | - | - | - |
| *Calyptranthes* cf*. paniculata* (Lam.) Raeusch. | Capa | 0.79 | 5.5 | NO | Ev | Zoo (A) | 1 | - | - | - | - | - |
| cf. *Calyptranthes sp.2* | Casp2 | 0.75\* | 7 | YES | Ev\* | Zoo (A) ꙳ | - | 1 | - | - | - | - |
| cf. *Myrcia sp.1* | Mycf | 0.65\* | 13 | YES | Ev\* | Zoo (A) ꙳ | - | - | 1 | - | - | - |
| *Eugenia* cf*. lambertiana* DC*.* | Eula | 0.8 | 12 | YES | D | Zoo (A) | - | - | 6 | - | - | - |
| *Eugenia chrysophyllum* Poir*.* | Euch | 0.64 | 9.8 | NO | D | Zoo (A) | - | - | 2 | 17 | - | 8 |
| *Myrcia* aff. *calycampa* Amshoff | Myca | 0.65 | 13 | YES | Ev | H | - | 4 | - | - | 111 | 4 |
| *Myrcia subsessilis* O.Berg | Mysu | 0.81\* | 10◦ | NO▪ | Ev\* | H\* | - | - | - | 18 | 2 | 18 |
| *Myrtaceae sp. 6* | Mysp1 | 0.79\* | 11 | YES | Ev\* | H꙳ | 1 | 1 | - | - | - | - |
| *Myrtaceae sp.1* | Mysp | 0.63\* | 12 | YES | Ev\* | H꙳ | - | 5 | - | - | - | - |
| *Plinia involucrata* (O.Berg) McVaugh. | Plin | 0.95\* | 20\*\* | NO▪ | Ev\* | Zoo (A) | - | - | - | 36 | - | - |
| *Psidium* cf*. densicomum* Mart. ex DC. | Psde | 0.81 | 8 | NO | Ev | H | - | 1 | - | 8 | 42 | 2 |
| OCHNACEAE | *Blastemanthus sp.* | Blsp | 0.78\* | 8 | NO\* | Ev\* | Zoo (A) ꙳ | - | - | 1 | - | - | - |
| *Elvasia quinqueloba* Spruce ex Engl. | Elqu | 0.75 | 7 | YES | S-DD | Zoo (A) | - | - | 3 | - | - | - |
| *Ochnaceae sp1.* | Ocsp | 0.78\* | 9 | NO | Ev | Zoo (A) ꙳ | - | - | 1 | - | - | - |
| *Ouratea polyantha* (Triana and Planch.) Engl. | Oupo | 0.61 | 15 | NO | Ev | Zoo (A) | 1 | - | - | - | - | - |
| *Quiina florida* Tul. | Qufl | 0.73 | 23\* | NO▪ | Ev | Zoo (T)\* | - | - | - | 13 | - | - |
| *Quiina longifolia* Spruce ex Planch. and Triana | Qulo | 0.86 | 13 | NO | Ev\* | Zoo (T)\* | - | - | 2 | - | - | 55 |
| *Quiina macrophylla*Tul*.* | Quma | 0.862\* | 10 | NO▪ | Ev\* | Zoo (T)\* | - | - | - | 1 | - | 13 |
| *Quiina rhytidopus* | Qurhy | 0.862\* | 10 | NO▪ | Ev\* | F | - | - | - | - | - | 16 |
| OLACACEAE | *Chaunochiton angustifolium* Sleumer | Chan | 0.65 | 12 | NO | Ev | Ane | - | - | 1 | - | - | - |
| *Chaunochiton loranthoides* Benth*.* | Chlo | 0.65 | 9 | NO | Ev | Ane | 1 | - | - | - | - | - |
| *Heisteria* cf*. acuminata* (Humb. and Bonpl.) Engl. | Heac | 0.69 | 11 | YES | Ev | Zoo (A) | - | 5 | - | - | - | - |
| PHYLLANTHACEAE | *Amanoa glaucophylla* Müll.Arg. | Amgl | 0.8 | 11 | NO | Ev | H | - | - | 1 | - | - | - |
| *Amanoa oblongifolia* Müll.Arg. | Amob | 0.83 | 17 | YES | Ev | H | - | - | 12 | - | - | - |
| *Discocarpus gentryi* S.M.Hayden | Dige | 0.61 | 9 | YES | Ev | Au | 5 | - | - | - | - | - |
| *Richeria grandis* Vahl | Rigr | 0.57 | 14 | YES | Ev | Zoo (A) | 7 | - | 25 | - | - | - |
| POLYGONACEAE | *Coccoloba mollis* Casar*.* | Como | 0.67 | 16 | YES | D | F | 8 | - | 5 | 28 | 1 | 4 |
| *Ruprechtia tenuiflora* Benth*.* | Rute | 0.66 | 12 | YES | D | Zoo (A) | - | 3 | - | - | - | - |
| *Symmeria paniculata* Benth*.* | Sypa | 0.67 | 13 | YES | D | H | - | 3 | - | - | - | - |
| PROTEACEAE | *Panopsis rubescens* (Pohl) Pittier | Paru | 0.52 | 13 | YES | Ev | F | 5 | 1 | - | 10 | - | - |
| RUBIACEAE | *Alibertia bertierifolia* K.Schum. | Albe | 0.73\* | 7.5\* | NO▪ | Ev | Zoo (A)\* | - | - | - | 9 | - | 3 |
| *Alibertia edulis* (Rich.) A.Rich. ex DC. | Aled | 0.76 | 7.5 | NO▪ | Ev | Zoo (A) | - | - | - | - | 8 | 9 |
| *Duroia micrantha* Zarucchi and J.H.Kirkbr. | Dumi | 0.8 | 13.5 | YES | Ev | F | 2 | 20 | 22 | 18 | 9 | 13 |
| *Pagamea guianensis* Aubl*.* | Pagu | 0.61 | 9 | YES | Ev | Zoo (A) | 3 | - | 3 | - | - | - |
| SALICACEAE | *Casearia sylvestris*Sw*.* | Casy | 0.63\* | 6 | YES | Ev | Zoo (T) | - | - | - | 3 | 13 | 3 |
| *Homalium guianense* (Aubl.) Oken | Hogu | 0.62 | 12 | NO | Ev | Au | 2 | - | - | - | - | - |
| *Homalium racemosum* Jacq*.* | Hora | 0.62 | 12 | NO | Ev | Au | - | - | 1 | - | - | - |
| *Laetia sp.* | Lasp | 0.64\* | 13 | NO\* | Ev\* | F꙳ | - | - | 1 | - | - | - |
| *Laetia suaveolens* (Poepp.) Benth. | Lasu | 0.8 | 16 | NO | D | F | 4 | - | 3 | - | - | - |
| SAPINDACEAE | *Matayba* aff. *purgans* (Poepp.) Radlk. | Mapu | 0.78 | 13 | NO | Ev | Zoo (T) | - | - | 2 | 52 | - | 123 |
| *Matayba* cf*. macrostylis* Radlk*.* | Mama | 0.78 | 13 | YES | Ev | Zoo (T) | - | - | 1 | - | - | - |
| SAPOTACEAE | cf. *Pouteria sp.2* | Pocf | 0.66\* | 13 | NO\* | Ev\* | Zoo (T) ꙳ | - | - | 1 | - | - | - |
| *Elaeoluma glabrescens* (Mart. and Eichler ex Miq.) Aubrév. | Elgl | 0.75 | 17 | YES | Ev | Zoo (A) | - | - | 11 | - | - | - |
| *Micropholis gardneriana* (A.DC.) Pierre | Miga | 0.97 | 5 | NO | S-DD | Zoo (T) | - | 1 | - | - | - | - |
| *Pouteria* cf*. venosa subsp. amazonica* T.D.Penn. | Pove | 0.92\* | 12 | YES | Ev | F\* | - | 1 | - | - | - | - |
| *Pouteria elegans* (A. DC.) Baehni | Poel | 0.72 | 16 | YES | Ev | Zoo (T) | 6 | - | 8 | 8 | - | 10 |
| *Pouteria gomphiifolia* (Mart. ex Miq.) Radlk. | Pogo | 0.78 | 16 | YES | Ev | F | 1 | - | 2 | - | - | - |
| *Pouteria orinocoensis* (Aubrév.) T.D.Penn. | Poor | 0.66 | 12 | YES | Ev | F | - | 4 | - | - | - | - |
| SIMAROUBACEAE | *Simaba orinocensis* Kunth | Sior | 0.42 | 13 | YES | Ev | H | 6 | - | - | 22 | - | - |
| VOCHYSIACEAE | *Vochysia obscura* Warm*.* | Voob | 0.48 | 9 | YES | S-DD | Ane | 5 | - | - | - | - | - |
| *Vochysia venezuelana* Stafleu | Vove | 0.428 | 14 | YES | S-DD | Ane | 13 | 7 | 1 | - | - | - |

**Table S2** Height values of the species with individuals with a DBH > 10 cm. The measures were registered during the field campaign with a TruPulse 200L laser rangefinder.

| **Especie** | **n** | **Mean (mt)** | **S.D** | **Mín (mt)** | **Máx (mt)** | **P(95)** | **H max (mt)** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Acni | 12 | 11.96 | 3.43 | 6.5 | 17 | 17 | 17 |
| Aldi | 1 | 5.5 | 0 | 5.5 | 5.5 | sd | 5.5 |
| Amgl | 1 | 11 | 0 | 11 | 11 | sd | 11 |
| Amob | 12 | 11.92 | 2.15 | 9 | 17 | 17 | 17 |
| Anme | 1 | 15 | 0 | 15 | 15 | sd | 15 |
| Asja | 37 | 8.59 | 1.65 | 4.5 | 12 | 12 | 12 |
| Blsp | 1 | 8 | 0 | 8 | 8 | sd | 8 |
| Bovi | 1 | 9 | 0 | 9 | 9 | sd | 9 |
| Buoc | 2 | 10.5 | 2.12 | 9 | 12 | 12 | 12 |
| Bupr | 6 | 10.17 | 3.08 | 4.5 | 13 | 13 | 13 |
| Buvi | 1 | 14 | 0 | 14 | 14 | sd | 14 |
| Byja | 1 | 12 | 0 | 12 | 12 | sd | 12 |
| Cabr | 2 | 17.5 | 0.71 | 17 | 18 | 18 | 18 |
| Caco | 32 | 10.37 | 2.4 | 7 | 20 | 13 | 13 |
| Cahe | 2 | 14 | 2.83 | 12 | 16 | 16 | 16 |
| Caim | 8 | 12.75 | 1.67 | 11 | 16 | 16 | 16 |
| Call | 145 | 10.33 | 3.71 | 3 | 18 | 17 | 17 |
| Cami | 14 | 14.21 | 2.69 | 8 | 18 | 18 | 18 |
| Capa | 1 | 5.5 | 0 | 5.5 | 5.5 | sd | 5.5 |
| Cape | 1 | 10 | 0 | 10 | 10 | sd | 10 |
| Caru | 5 | 10.4 | 1.82 | 8 | 13 | 13 | 13 |
| Casp | 3 | 10.67 | 2.31 | 8 | 12 | 12 | 12 |
| Casp2 | 1 | 7 | 0 | 7 | 7 | sd | 7 |
| Chan | 1 | 12 | 0 | 12 | 12 | sd | 12 |
| Chlo | 1 | 9 | 0 | 9 | 9 | sd | 9 |
| Chsp | 3 | 11.67 | 1.53 | 10 | 13 | 13 | 13 |
| Clbr | 1 | 11 | 0 | 11 | 11 | sd | 11 |
| Clni | 1 | 13 | 0 | 13 | 13 | sd | 13 |
| Como | 13 | 8.12 | 3.81 | 4 | 16 | 16 | 16 |
| Copa | 15 | 7.73 | 2.74 | 4 | 12 | 12 | 12 |
| Copu | 2 | 12.5 | 3.54 | 10 | 15 | 15 | 15 |
| Cosp | 1 | 11 | 0 | 11 | 11 | sd | 11 |
| Cove | 2 | 10 | 1.41 | 9 | 11 | 11 | 11 |
| Crcu | 1 | 9 | 0 | 9 | 9 | sd | 9 |
| Cyba | 5 | 11.8 | 1.48 | 10 | 14 | 14 | 14 |
| Cyma | 1 | 12.5 | 0 | 12.5 | 12.5 | sd | 12.5 |
| Cymar | 1 | 8 | 0 | 8 | 8 | sd | 8 |
| Cysp | 2 | 11.5 | 2.12 | 10 | 13 | 13 | 13 |
| Dean | 1 | 9 | 0 | 9 | 9 | sd | 9 |
| Dica | 1 | 10 | 0 | 10 | 10 | sd | 10 |
| Dies | 1 | 4.5 | 0 | 4.5 | 4.5 | sd | 4.5 |
| Dige | 5 | 7.2 | 1.68 | 5 | 9 | 9 | 9 |
| Dima | 3 | 13 | 1.73 | 11 | 14 | 14 | 14 |
| Dipu | 2 | 16 | 2.83 | 14 | 18 | 18 | 18 |
| Diun | 2 | 7.25 | 0.35 | 7 | 7.5 | 7.5 | 7.5 |
| Dumi | 44 | 10.34 | 2.14 | 4.5 | 14 | 13.5 | 13.5 |
| Dusp | 1 | 11 | 0 | 11 | 11 | sd | 11 |
| Elgl | 11 | 12.23 | 2.07 | 10 | 17 | 17 | 17 |
| Elqu | 3 | 6.33 | 0.58 | 6 | 7 | 7 | 7 |
| Enan | 3 | 8.03 | 0.55 | 7.5 | 8.6 | 8.6 | 8.6 |
| Espa | 54 | 9.87 | 2.92 | 4 | 17 | 15 | 15 |
| Essa | 4 | 14.5 | 2.08 | 12 | 17 | 17 | 17 |
| Esse | 3 | 11 | 1.73 | 9 | 12 | 12 | 12 |
| Este | 2 | 8.5 | 2.12 | 7 | 10 | 10 | 10 |
| Etdu | 1 | 14 | 0 | 14 | 14 | sd | 14 |
| Euch | 2 | 9.15 | 0.92 | 8.5 | 9.8 | 9.8 | 9.8 |
| Eula | 6 | 10.5 | 1 | 9 | 12 | 12 | 12 |
| Eupr | 2 | 13 | 5.66 | 9 | 17 | 17 | 17 |
| Guau | 16 | 10.63 | 2.42 | 5 | 15 | 15 | 15 |
| Gugl | 1 | 15 | 0 | 15 | 15 | sd | 15 |
| Guhi | 2 | 13.5 | 0.71 | 13 | 14 | 14 | 14 |
| Guma | 3 | 11.33 | 4.04 | 7 | 15 | 15 | 15 |
| Gume | 2 | 12.5 | 0.71 | 12 | 13 | 13 | 13 |
| Gust | 1 | 10 | 0 | 10 | 10 | sd | 10 |
| Haba | 26 | 9.35 | 2.39 | 5 | 14 | 14 | 14 |
| Hach | 1 | 6.5 | 0 | 6.5 | 6.5 | sd | 6.5 |
| Heac | 5 | 8.8 | 1.64 | 7 | 11 | 11 | 11 |
| Heri | 1 | 14 | 0 | 14 | 14 | sd | 14 |
| Hesp1 | 1 | 9 | 0 | 9 | 9 | sd | 9 |
| Hesp2 | 1 | 14 | 0 | 14 | 14 | sd | 14 |
| Hest | 1 | 10 | 0 | 10 | 10 | sd | 10 |
| Hiat | 1 | 10 | 0 | 10 | 10 | sd | 10 |
| Hitr | 4 | 10 | 3.74 | 6 | 15 | 15 | 15 |
| Hogu | 2 | 9 | 4.24 | 6 | 12 | 12 | 12 |
| Hora | 1 | 12 | 0 | 12 | 12 | sd | 12 |
| Hupi | 6 | 12 | 2.1 | 9 | 14 | 14 | 14 |
| Hyhe | 2 | 13.5 | 2.12 | 12 | 15 | 15 | 15 |
| Ilca | 1 | 13 | 0 | 13 | 13 | sd | 13 |
| Inal | 1 | 8 | 0 | 8 | 8 | sd | 8 |
| Inse | 1 | 14 | 0 | 14 | 14 | sd | 14 |
| Lasp | 1 | 13 | 0 | 13 | 13 | sd | 13 |
| Lasp1 | 1 | 13 | 0 | 13 | 13 | sd | 13 |
| Lasu | 7 | 13.86 | 1.95 | 11 | 16 | 16 | 16 |
| Lepu | 11 | 5.55 | 2.01 | 2 | 9 | 9 | 9 |
| Liap | 2 | 12.5 | 0.71 | 12 | 13 | 13 | 13 |
| Lihe | 46 | 10.32 | 3.69 | 1.5 | 17 | 15 | 15 |
| Liheg | 16 | 10.96 | 2.79 | 4.3 | 17 | 17 | 17 |
| Lihy | 10 | 12.3 | 1.89 | 10 | 15 | 15 | 15 |
| Lili | 1 | 11 | 0 | 11 | 11 | sd | 11 |
| Lilo | 15 | 11.33 | 2.23 | 7 | 16 | 16 | 16 |
| Limo | 22 | 12.41 | 2.24 | 9 | 19 | 16 | 16 |
| Lioc | 1 | 12 | 0 | 12 | 12 | sd | 12 |
| Lisp | 1 | 13 | 0 | 13 | 13 | sd | 13 |
| Lispr | 2 | 12 | 2.83 | 10 | 14 | 14 | 14 |
| Liun | 1 | 13 | 0 | 13 | 13 | sd | 13 |
| Maac | 1 | 14 | 0 | 14 | 14 | sd | 14 |
| Maan | 17 | 10.71 | 1.99 | 5 | 13 | 13 | 13 |
| Mabi | 4 | 8.75 | 1.71 | 7 | 11 | 11 | 11 |
| Maco | 4 | 12.5 | 3.32 | 9 | 17 | 17 | 17 |
| Macsp | 2 | 10 | 1.41 | 9 | 11 | 11 | 11 |
| Madi | 1 | 5 | 0 | 5 | 5 | sd | 5 |
| Mafl | 4 | 14.38 | 3.77 | 9 | 17 | 17 | 17 |
| Magu | 1 | 14 | 0 | 14 | 14 | sd | 14 |
| Maguy | 1 | 16 | 0 | 16 | 16 | sd | 16 |
| Mama | 1 | 13 | 0 | 13 | 13 | sd | 13 |
| Mamu | 8 | 11.13 | 4.97 | 2 | 18 | 18 | 18 |
| Mani | 19 | 11.29 | 3 | 5.5 | 15 | 15 | 15 |
| Mapu | 2 | 12.5 | 0.71 | 12 | 13 | 13 | 13 |
| Masp1 | 1 | 16 | 0 | 16 | 16 | sd | 16 |
| Mata | 2 | 13.5 | 2.12 | 12 | 15 | 15 | 15 |
| Maysp | 1 | 4 | 0 | 4 | 4 | sd | 4 |
| Miga | 1 | 5 | 0 | 5 | 5 | sd | 5 |
| Myca | 4 | 11 | 1.83 | 9 | 13 | 13 | 13 |
| Mycf | 1 | 13 | 0 | 13 | 13 | sd | 13 |
| Mysp | 5 | 9.8 | 1.92 | 7 | 12 | 12 | 12 |
| Mysp1 | 2 | 10 | 1.41 | 9 | 11 | 11 | 11 |
| Nesp | 5 | 12.6 | 1.95 | 10 | 15 | 15 | 15 |
| Neya | 1 | 10 | 0 | 10 | 10 | sd | 10 |
| Ocsp | 1 | 9 | 0 | 9 | 9 | sd | 9 |
| Oeba | 17 | 11.88 | 1.58 | 8 | 14 | 14 | 14 |
| Orco | 3 | 11.33 | 3.21 | 9 | 15 | 15 | 15 |
| Oupo | 1 | 15 | 0 | 15 | 15 | sd | 15 |
| Padi | 11 | 13.82 | 2.36 | 9 | 17 | 17 | 17 |
| Pagu | 6 | 8.33 | 0.82 | 7 | 9 | 9 | 9 |
| Paob | 11 | 13.55 | 2.16 | 9 | 17 | 17 | 17 |
| Paru | 6 | 9.17 | 2.93 | 6 | 13 | 13 | 13 |
| Pepa | 4 | 14.75 | 0.96 | 14 | 16 | 16 | 16 |
| Peve | 8 | 8.5 | 3.37 | 4.5 | 16 | 16 | 16 |
| Pitr | 8 | 12.38 | 1.69 | 10 | 14 | 14 | 14 |
| Pocf | 1 | 13 | 0 | 13 | 13 | sd | 13 |
| Poel | 14 | 11.93 | 3.23 | 4 | 16 | 16 | 16 |
| Pogo | 3 | 11.17 | 4.75 | 6.5 | 16 | 16 | 16 |
| Poor | 4 | 10.75 | 1.89 | 8 | 12 | 12 | 12 |
| Pove | 1 | 12 | 0 | 12 | 12 | sd | 12 |
| Prll | 20 | 12.4 | 2.04 | 8 | 17 | 15 | 15 |
| Psde | 1 | 8 | 0 | 8 | 8 | sd | 8 |
| Pssp | 5 | 12 | 1.22 | 11 | 14 | 14 | 14 |
| Qulo | 2 | 11.5 | 2.12 | 10 | 13 | 13 | 13 |
| Rigr | 32 | 9.8 | 2.36 | 4.5 | 14 | 14 | 14 |
| Rute | 3 | 10.33 | 1.53 | 9 | 12 | 12 | 12 |
| Sagu | 9 | 14.22 | 2.05 | 11 | 16 | 16 | 16 |
| Sama | 3 | 15.17 | 3.75 | 11.5 | 19 | 19 | 19 |
| Sior | 6 | 7.92 | 3.01 | 5 | 13 | 13 | 13 |
| Swca | 2 | 13 | 2.83 | 11 | 15 | 15 | 15 |
| Swle | 18 | 11.5 | 2.57 | 5 | 15 | 15 | 15 |
| Swpi | 1 | 12 | 0 | 12 | 12 | sd | 12 |
| Sypa | 3 | 12.33 | 0.58 | 12 | 13 | 13 | 13 |
| Tada | 3 | 10.33 | 0.58 | 10 | 11 | 11 | 11 |
| Tagu | 2 | 14.5 | 4.95 | 11 | 18 | 18 | 18 |
| Tain | 1 | 6 | 0 | 6 | 6 | sd | 6 |
| Taph | 24 | 10.06 | 3.24 | 5 | 15 | 15 | 15 |
| Tepa | 2 | 8.5 | 0.71 | 8 | 9 | 9 | 9 |
| Tosp | 2 | 13.5 | 2.12 | 12 | 15 | 15 | 15 |
| Toum | 4 | 11.5 | 1.29 | 10 | 13 | 13 | 13 |
| Trru | 5 | 10.8 | 2.39 | 7 | 13 | 13 | 13 |
| Vica | 13 | 13 | 1.87 | 11 | 17 | 17 | 17 |
| Vife | 1 | 3.5 | 0 | 3.5 | 3.5 | sd | 3.5 |
| Visu | 5 | 13 | 0.71 | 12 | 14 | 14 | 14 |
| Voob | 5 | 5.9 | 1.82 | 4.5 | 9 | 9 | 9 |
| Vove | 21 | 10.95 | 2.73 | 6 | 17 | 14 | 14 |
| Xyem | 11 | 13 | 2.68 | 9 | 17 | 17 | 17 |
| Zyca | 1 | 8 | 0 | 8 | 8 | sd | 8 |
| Zylo | 2 | 11.5 | 0.71 | 11 | 12 | 12 | 12 |

**Table S3** Outcomes of the linear mixed effect models for species-based and taxonomic and functional diversity indices. Forest type and Stratum are included as fixed factors and the plot nested in the transect as a random factor. P values indicating significant effects of forest type are highlighted in bold. Marginal (R2m ) and conditional (R2c ) R2 values were calculated with r.squaredGLMM (delta method) from R package MuMIn (Barton, 2019).

| **Variable** | **Term** | **Estimate** | **Std. Error** | **z value** | **p** | **R2m** | **R2c** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Richness** | (Intercept) | 2.001 | 0.117 | 17.043 | **<0,0001** | 0.455 | 0.757 |
| Forest type (MSIBF) | 0.310 | 0.220 | 1.409 | **<0,0001** |  |  |
| Forest type (UB) | 1.194 | 0.172 | 6.925 | **<0,0001** |  |  |
| Stratum (Saplings) | 0.021 | 0.117 | 0.178 | **<0,0001** |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -0.516 | 0.233 | -2.212 | **<0,0001** |  |  |
| Forest type (UB): Stratum (Saplings) | -1.024 | 0.184 | -5.563 | **<0,0001** |  |  |
|  |  |  |  |  |  |  |  |
| **Shaw** | (Intercept) | 1.57 | 0.14 | 1.12 | **<0,0001** | 0.037 | 0.750 |
| Forest type (MSIBF) | 0.25 | 0.28 | 0.88 | 0.3827 |  |  |
| Forest type (UB) | 1.25 | 0.24 | 5.20 | **<0,0001** |  |  |
| Stratum (Saplings) | -0.04 | 0.16 | -0.26 | 0.7936 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -0.34 | 0.32 | -1.06 | 0.2976 |  |  |
| Forest type (UB): Stratum (Saplings) | -1.06 | 0.29 | -3.62 | **0.0012** |  |  |
|  |  |  |  |  |  |  |  |
| **Pielou** | (Intercept) | -0.225 | 0.353 | -0.635 | 0.525 | 0.001 | 0.571 |
| Forest type (MSIBF) | 0.062 | 0.698 | 0.089 | 0.929 |  |  |
| Forest type (UB) | 0.107 | 0.592 | 0.181 | 0.857 |  |  |
| Stratum (Saplings) | -0.028 | 0.374 | -0.075 | 0.940 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -0.058 | 0.741 | -0.078 | 0.938 |  |  |
| Forest type (UB): Stratum (Saplings) | -0.097 | 0.674 | -0.144 | 0.886 |  |  |
|  |  |  |  |  |  |  |  |
| **Alpha Fisher** | (Intercept) | 1.538 | 0.261 | 5.904 | **<0,0001** | 0.199 | 0.918 |
| Forest type (MSIBF) | 0.161 | 0.515 | 0.313 | **<0,0001** |  |  |
| Forest type (UB) | 1.216 | 0.431 | 2.819 | **<0,0001** |  |  |
| Stratum (Saplings) | -0.505 | 0.165 | -3.061 | **<0,0001** |  |  |
| Forest type (MSIBF): Stratum (Saplings) | 0.356 | 0.292 | 1.218 | **<0,0001** |  |  |
| Forest type (UB): Stratum (Saplings) | -0.604 | 0.234 | -2.589 | **<0,0001** |  |  |
|  |  |  |  |  |  |  |  |
| **Fdis** | (Intercept) | 0.187 | 0.025 | 7.381 | **<0,0001** | 0.262 | 0.262 |
| Forest type (MSIBF) | 0.076 | 0.051 | 1.488 | 0.1463 |  |  |
| Forest type (UB) | 0.176 | 0.044 | 3.994 | **0.0003** |  |  |
| Stratum (Saplings) | -0.001 | 0.036 | -0.017 | 0.9865 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -0.085 | 0.072 | -1.189 | 0.2449 |  |  |
| Forest type (UB): Stratum (Saplings) | -0.087 | 0.062 | -1.400 | 0.173 |  |  |
|  |  |  |  |  |  |  |  |
| **Feve** | (Intercept) | 0.230 | 0.050 | 4.66 | 0.000 | 0.294 | 0.294 |
| Forest type (MSIBF) | 0.140 | 0.120 | 1.38 | 0.177 |  |  |
| Forest type (UB) | 0.380 | 0.070 | 4.38 | **0.000** |  |  |
| Stratum (Saplings) | 0.030 | 0.070 | 0.5 | 0.622 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -0.250 | 0.170 | -1.79 | 0.083 |  |  |
| Forest type (UB): Stratum (Saplings) | -0.240 | 0.100 | -1.91 | 0.066 |  |  |
|  |  |  |  |  |  |  |  |
| **Fric** | (Intercept) | 0.020 | 0.010 | 3.38 | **0.002** | 0.238 | 0.329 |
| Forest type (MSIBF) | 0.020 | 0.010 | 1.3 | 0.2042 |  |  |
| Forest type (UB) | 0.040 | 0.010 | 3.7 | **0.0008** |  |  |
| Stratum (Saplings) | 0.002 | 0.010 | 0.25 | 0.8044 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -0.030 | 0.020 | -1.88 | 0.0715 |  |  |
| Forest type (UB): Stratum (Saplings) | -0.040 | 0.010 | -2.78 | **0.0098** |  |  |
|  |  |  |  |  |  |  |  |
| **Fdiv** | (Intercept) | 0.230 | 0.050 | 4.58 | **0.000** | 0.368 | 0.382 |
| Forest type (MSIBF) | 0.100 | 0.110 | 0.98 | 0.3363 |  |  |
| Forest type (UB) | 0.410 | 0.060 | 6.45 | **<0,0001** |  |  |
| Stratum (Saplings) | 0.020 | 0.070 | 0.24 | 0.8152 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -0.210 | 0.150 | -1.45 | 0.1577 |  |  |
| Forest type (UB): Stratum (Saplings) | -0.250 | 0.090 | -2.83 | **0.0087** |  |  |
|  |  |  |  |  |  |  |  |
| **Redundancy** | (Intercept) | 0.3 | 0.25 | 1.19 | 0.2418 | 0.450 | 0.450 |
| Forest type (MSIBF) | -0.53 | 0.5 | -1.06 | 0.2955 |  |  |
| Forest type (UB) | -1.83 | 0.43 | -4.26 | **0.0002** |  |  |
| Stratum (Saplings) | 0.29 | 0.26 | 1.13 | 0.2701 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | 0.63 | 0.52 | 1.21 | 0.2359 |  |  |
| Forest type (UB): Stratum (Saplings) | 1.66 | 0.45 | 3.66 | **0.0011** |  |  |

**Table S4** Moran's test was used to assess spatial autocorrelation in the residuals of taxonomic and functional diversity models. The null hypothesis posits that the attribute under analysis is randomly distributed among the entities in the study area, meaning that the spatial processes that promote the observed pattern of values are a random occurrence. If the p-value is not statistically significant (p > 0.05), the null hypothesis cannot be rejected because the spatial distribution of entity values may be the result of random spatial processes. If the p-value is statistically significant (p < 0.05) and the standard deviate (SD) is positive, it indicates that the high and low values of the variable are more spatially clustered than expected. Conversely, if the p-value is statistically significant (p < 0.05) and the standard deviate (SD) is negative, it suggests that the spatial distribution is more dispersed than expected. A Moran I value close to -1 indicates negative spatial dispersion, a value close to 0 indicates a random spatial distribution of variable values, and a value near 1 indicates positive spatial clustering. The Moran I statistic values were calculated in R (Bivand and Wong, 2018**).**

| **).Variable** | **SD** | **p -value** | **Moran I statistic** | **Expectation** | **Variance** |
| --- | --- | --- | --- | --- | --- |
| **Richness** | 0.338 | 0.368 | 0.009 | -0.015 | 0.0051 |
|  |  |  |  |  |  |
| **Shaw** | -0.561 | 0.713 | -0.055 | -0.015 | 0.0051 |
|  |  |  |  |  |  |
| **Pielou** | -0.253 | 0.600 | -0.028 | -0.015 | 0.0026 |
|  |  |  |  |  |  |
| **Alpha Fisher** | 0.472 | 0.319 | 0.018 | -0.015 | 0.0049 |
|  |  |  |  |  |  |
| **Fdis** | 0.402 | 0.344 | 0.013 | -0.015 | 0.0051 |
|  |  |  |  |  |  |
| **Feve** | -0.135 | 0.554 | -0.025 | -0.015 | 0.0051 |
|  |  |  |  |  |  |
| **Fric** | 0.539 | 0.295 | 0.023 | -0.015 | 0.0050 |
|  |  |  |  |  |  |
| **Fdiv** | 0.228 | 0.410 | 0.001 | -0.015 | 0.0051 |
|  |  |  |  |  |  |
| **Redundancy** | 0.656 | 0.256 | 0.030 | -0.015 | 0.0049 |

**Table S5** Community-weighted trait means (CWM) for each functional trait in the different forest types and stratum. CWM values were calculated with FD package (Laliberté et al. 2022) in R software.

| **Fores Type** | **Transect** | **Stratum** | **Deciduous** | **Evergreen** | **Semideciduous** | **Anemochory** | **Autochory** | **Hidrochory** | **Ictochory** | **Zoochory \_aerial** | **Zoochory \_terrestral** | **Non-resprouters** | **Resprouters** | **Wood density (g/cm3)** | **H max (mt)** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| UB | B\_B7 | Adults | 0.024 | 0.747 | 0.229 | 0.000 | 0.012 | 0.205 | 0.265 | 0.157 | 0.361 | 0.181 | 0.819 | 0.676 | 22.494 |
| UB | B\_B8 | Adults | 0.057 | 0.679 | 0.264 | 0.019 | 0.000 | 0.151 | 0.509 | 0.038 | 0.283 | 0.208 | 0.792 | 0.684 | 20.094 |
| UB | B\_B9 | Adults | 0.041 | 0.735 | 0.224 | 0.000 | 0.000 | 0.143 | 0.490 | 0.163 | 0.204 | 0.184 | 0.816 | 0.708 | 21.000 |
| UB | B\_R1 | Adults | 0.111 | 0.704 | 0.185 | 0.037 | 0.111 | 0.222 | 0.352 | 0.148 | 0.130 | 0.556 | 0.444 | 0.639 | 19.019 |
| UB | B\_R2 | Adults | 0.058 | 0.827 | 0.115 | 0.077 | 0.154 | 0.038 | 0.385 | 0.038 | 0.308 | 0.462 | 0.538 | 0.645 | 19.865 |
| UB | B\_R3 | Adults | 0.075 | 0.821 | 0.104 | 0.015 | 0.060 | 0.179 | 0.403 | 0.090 | 0.254 | 0.433 | 0.567 | 0.684 | 20.836 |
| UB | B\_UB1 | Adults | 0.018 | 0.927 | 0.055 | 0.018 | 0.018 | 0.127 | 0.455 | 0.091 | 0.291 | 0.073 | 0.927 | 0.753 | 23.473 |
| UB | B\_UB2 | Adults | 0.127 | 0.778 | 0.095 | 0.000 | 0.254 | 0.079 | 0.238 | 0.190 | 0.238 | 0.381 | 0.619 | 0.660 | 22.302 |
| UB | B\_UB3 | Adults | 0.082 | 0.694 | 0.224 | 0.184 | 0.061 | 0.102 | 0.245 | 0.102 | 0.306 | 0.612 | 0.388 | 0.616 | 19.000 |
| UB | B\_UB1 | Saplings | 0.368 | 0.579 | 0.053 | 0.000 | 0.000 | 0.140 | 0.596 | 0.123 | 0.140 | 0.754 | 0.246 | 0.786 | 19.430 |
| UB | B\_UB2 | Saplings | 0.000 | 1.000 | 0.000 | 0.000 | 0.044 | 0.118 | 0.500 | 0.074 | 0.265 | 0.691 | 0.309 | 0.684 | 15.471 |
| UB | B\_UB3 | Saplings | 0.031 | 0.938 | 0.031 | 0.000 | 0.000 | 0.063 | 0.438 | 0.375 | 0.125 | 0.875 | 0.125 | 0.701 | 12.875 |
| UB | B\_B7 | Saplings | 0.377 | 0.585 | 0.038 | 0.000 | 0.000 | 0.170 | 0.698 | 0.075 | 0.057 | 0.717 | 0.283 | 0.730 | 22.453 |
| UB | B\_B8 | Saplings | 0.706 | 0.294 | 0.000 | 0.000 | 0.000 | 0.000 | 0.941 | 0.059 | 0.000 | 1.000 | 0.000 | 0.735 | 18.529 |
| UB | B\_B9 | Saplings | 0.100 | 0.650 | 0.250 | 0.000 | 0.000 | 0.163 | 0.288 | 0.225 | 0.325 | 0.613 | 0.388 | 0.697 | 20.563 |
| UB | B\_R1 | Saplings | 0.000 | 0.542 | 0.458 | 0.000 | 0.000 | 0.042 | 0.917 | 0.000 | 0.042 | 0.250 | 0.750 | 0.639 | 23.042 |
| UB | B\_R2 | Saplings | 0.387 | 0.355 | 0.258 | 0.000 | 0.000 | 0.097 | 0.710 | 0.032 | 0.161 | 0.516 | 0.484 | 0.718 | 22.742 |
| UB | B\_R3 | Saplings | 0.611 | 0.319 | 0.069 | 0.000 | 0.028 | 0.056 | 0.681 | 0.097 | 0.139 | 0.806 | 0.194 | 0.759 | 19.028 |
| MSIBF | B\_B10 | Adults | 0.067 | 0.667 | 0.267 | 0.000 | 0.067 | 0.200 | 0.067 | 0.267 | 0.400 | 0.267 | 0.733 | 0.757 | 21.133 |
| MSIBF | B\_B11 | Adults | 0.482 | 0.286 | 0.232 | 0.250 | 0.000 | 0.161 | 0.036 | 0.089 | 0.464 | 0.393 | 0.607 | 0.686 | 22.875 |
| MSIBF | B\_B12 | Adults | 0.283 | 0.358 | 0.358 | 0.189 | 0.132 | 0.057 | 0.302 | 0.075 | 0.245 | 0.453 | 0.547 | 0.648 | 23.849 |
| MSIBF | B\_B16 | Adults | 0.056 | 0.611 | 0.333 | 0.139 | 0.333 | 0.278 | 0.111 | 0.056 | 0.083 | 0.306 | 0.694 | 0.624 | 21.028 |
| MSIBF | B\_B17 | Adults | 0.000 | 0.250 | 0.750 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0.000 | 1.000 | 0.761 | 11.250 |
| MSIBF | B\_B18 | Adults | 0.000 | 0.667 | 0.333 | 0.000 | 0.167 | 0.167 | 0.583 | 0.083 | 0.000 | 0.333 | 0.667 | 0.756 | 17.667 |
| MSIBF | B\_B10 | Saplings | 0.125 | 0.750 | 0.125 | 0.000 | 0.375 | 0.000 | 0.125 | 0.125 | 0.375 | 0.250 | 0.750 | 0.665 | 21.875 |
| MSIBF | B\_B11 | Saplings | 0.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.143 | 0.143 | 0.286 | 0.429 | 1.000 | 0.000 | 0.701 | 11.714 |
| MSIBF | B\_B12 | Saplings | 0.000 | 0.900 | 0.100 | 0.000 | 0.050 | 0.150 | 0.050 | 0.000 | 0.750 | 0.900 | 0.100 | 0.659 | 14.500 |
| MSIBF | B\_B16 | Saplings | 0.000 | 0.875 | 0.125 | 0.000 | 0.000 | 0.188 | 0.250 | 0.438 | 0.125 | 0.938 | 0.063 | 0.651 | 15.563 |
| MSIBF | B\_B17 | Saplings | 0.000 | 0.333 | 0.667 | 0.000 | 0.000 | 0.000 | 0.611 | 0.111 | 0.278 | 0.278 | 0.722 | 0.727 | 16.944 |
| MSIBF | B\_B18 | Saplings | 0.040 | 0.800 | 0.160 | 0.000 | 0.040 | 0.080 | 0.080 | 0.680 | 0.120 | 0.880 | 0.120 | 0.558 | 16.200 |
| HSIBF | B\_B13 | Adults | 0.000 | 0.429 | 0.571 | 0.000 | 0.000 | 0.571 | 0.429 | 0.000 | 0.000 | 0.571 | 0.429 | 0.826 | 15.000 |
| HSIBF | B\_B14 | Adults | 0.000 | 0.833 | 0.167 | 0.000 | 0.000 | 0.000 | 1.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0.808 | 14.167 |
| HSIBF | B\_B15 | Adults | 0.000 | 0.429 | 0.571 | 0.571 | 0.000 | 0.048 | 0.381 | 0.000 | 0.000 | 0.000 | 1.000 | 0.585 | 17.714 |
| HSIBF | B\_B4 | Adults | 0.111 | 0.889 | 0.000 | 0.000 | 0.000 | 0.111 | 0.889 | 0.000 | 0.000 | 0.556 | 0.444 | 0.607 | 19.444 |
| HSIBF | B\_B5 | Adults | 0.143 | 0.143 | 0.714 | 0.143 | 0.000 | 0.571 | 0.286 | 0.000 | 0.000 | 0.714 | 0.286 | 0.763 | 19.286 |
| HSIBF | B\_B6 | Adults | 0.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0.810 | 15.000 |
| HSIBF | D\_B1 | Adults | 0.000 | 0.556 | 0.444 | 0.333 | 0.000 | 0.111 | 0.444 | 0.000 | 0.111 | 0.111 | 0.889 | 0.625 | 15.444 |
| HSIBF | D\_B2 | Adults | 0.000 | 0.625 | 0.375 | 0.000 | 0.000 | 0.250 | 0.500 | 0.125 | 0.125 | 0.250 | 0.750 | 0.733 | 18.438 |
| HSIBF | D\_B3 | Adults | 0.000 | 0.750 | 0.250 | 0.000 | 0.000 | 0.125 | 0.750 | 0.000 | 0.125 | 0.125 | 0.875 | 0.770 | 14.375 |
| HSIBF | D\_B4 | Adults | 0.000 | 0.581 | 0.419 | 0.000 | 0.047 | 0.349 | 0.326 | 0.047 | 0.233 | 0.279 | 0.721 | 0.702 | 18.581 |
| HSIBF | D\_B5 | Adults | 0.000 | 0.815 | 0.185 | 0.074 | 0.037 | 0.296 | 0.185 | 0.111 | 0.296 | 0.333 | 0.667 | 0.607 | 20.407 |
| HSIBF | D\_B6 | Adults | 0.071 | 0.714 | 0.214 | 0.000 | 0.250 | 0.250 | 0.179 | 0.179 | 0.143 | 0.393 | 0.607 | 0.649 | 25.036 |
| HSIBF | R\_B1 | Adults | 0.028 | 0.611 | 0.361 | 0.000 | 0.028 | 0.222 | 0.278 | 0.139 | 0.333 | 0.583 | 0.417 | 0.647 | 16.500 |
| HSIBF | R\_B2 | Adults | 0.000 | 0.677 | 0.323 | 0.000 | 0.065 | 0.194 | 0.581 | 0.032 | 0.129 | 0.387 | 0.613 | 0.672 | 17.226 |
| HSIBF | R\_B3 | Adults | 0.056 | 0.889 | 0.056 | 0.000 | 0.037 | 0.019 | 0.667 | 0.037 | 0.241 | 0.167 | 0.833 | 0.736 | 20.093 |
| HSIBF | R\_B4 | Adults | 0.000 | 0.703 | 0.297 | 0.000 | 0.027 | 0.459 | 0.189 | 0.027 | 0.297 | 0.757 | 0.243 | 0.588 | 14.730 |
| HSIBF | R\_B5 | Adults | 0.095 | 0.667 | 0.238 | 0.000 | 0.000 | 0.429 | 0.238 | 0.000 | 0.333 | 0.810 | 0.190 | 0.607 | 14.571 |
| HSIBF | R\_B6 | Adults | 0.000 | 0.706 | 0.294 | 0.000 | 0.000 | 0.647 | 0.118 | 0.059 | 0.176 | 0.882 | 0.118 | 0.585 | 15.294 |
| HSIBF | B\_B13 | Saplings | 0.000 | 0.975 | 0.025 | 0.000 | 0.000 | 0.025 | 0.300 | 0.000 | 0.675 | 1.000 | 0.000 | 0.519 | 25.125 |
| HSIBF | B\_B14 | Saplings | 0.000 | 0.919 | 0.081 | 0.000 | 0.016 | 0.097 | 0.339 | 0.016 | 0.532 | 0.968 | 0.032 | 0.532 | 23.355 |
| HSIBF | B\_B15 | Saplings | 0.036 | 0.927 | 0.036 | 0.000 | 0.000 | 0.091 | 0.818 | 0.000 | 0.091 | 0.964 | 0.036 | 0.570 | 14.091 |
| HSIBF | B\_B4 | Saplings | 0.000 | 0.967 | 0.033 | 0.000 | 0.000 | 0.267 | 0.567 | 0.033 | 0.133 | 0.833 | 0.167 | 0.556 | 14.733 |
| HSIBF | B\_B5 | Saplings | 0.000 | 1.000 | 0.000 | 0.000 | 0.071 | 0.000 | 0.429 | 0.286 | 0.214 | 0.643 | 0.357 | 0.513 | 18.929 |
| HSIBF | B\_B6 | Saplings | 0.000 | 0.979 | 0.021 | 0.000 | 0.000 | 0.021 | 0.596 | 0.000 | 0.383 | 1.000 | 0.000 | 0.527 | 19.809 |
| HSIBF | D\_B1 | Saplings | 0.000 | 0.444 | 0.556 | 0.000 | 0.333 | 0.444 | 0.222 | 0.000 | 0.000 | 0.778 | 0.222 | 0.688 | 17.222 |
| HSIBF | D\_B2 | Saplings | 0.000 | 0.941 | 0.059 | 0.000 | 0.000 | 0.059 | 0.412 | 0.000 | 0.529 | 0.529 | 0.471 | 0.659 | 24.118 |
| HSIBF | D\_B3 | Saplings | 0.000 | 0.676 | 0.324 | 0.000 | 0.162 | 0.250 | 0.471 | 0.000 | 0.118 | 0.397 | 0.603 | 0.671 | 26.544 |
| HSIBF | D\_B4 | Saplings | 0.000 | 0.435 | 0.565 | 0.000 | 0.087 | 0.304 | 0.522 | 0.000 | 0.087 | 0.478 | 0.522 | 0.648 | 19.783 |
| HSIBF | D\_B5 | Saplings | 0.000 | 0.882 | 0.118 | 0.000 | 0.000 | 0.176 | 0.471 | 0.059 | 0.294 | 0.882 | 0.118 | 0.557 | 20.294 |
| HSIBF | D\_B6 | Saplings | 0.000 | 0.733 | 0.267 | 0.000 | 0.067 | 0.267 | 0.467 | 0.133 | 0.067 | 0.800 | 0.200 | 0.636 | 21.000 |
| HSIBF | R\_B1 | Saplings | 0.200 | 0.400 | 0.400 | 0.000 | 0.038 | 0.075 | 0.500 | 0.075 | 0.313 | 0.688 | 0.313 | 0.695 | 16.438 |
| HSIBF | R\_B2 | Saplings | 0.494 | 0.356 | 0.149 | 0.000 | 0.011 | 0.011 | 0.805 | 0.011 | 0.161 | 0.828 | 0.172 | 0.703 | 17.299 |
| HSIBF | R\_B3 | Saplings | 0.460 | 0.400 | 0.140 | 0.000 | 0.000 | 0.000 | 0.760 | 0.040 | 0.200 | 0.560 | 0.440 | 0.765 | 17.200 |
| HSIBF | R\_B4 | Saplings | 0.162 | 0.568 | 0.270 | 0.000 | 0.072 | 0.207 | 0.414 | 0.036 | 0.252 | 0.856 | 0.144 | 0.604 | 19.919 |
| HSIBF | R\_B5 | Saplings | 0.098 | 0.537 | 0.366 | 0.000 | 0.098 | 0.195 | 0.488 | 0.122 | 0.098 | 0.829 | 0.171 | 0.615 | 17.927 |
| HSIBF | R\_B6 | Saplings | 0.021 | 0.793 | 0.186 | 0.000 | 0.055 | 0.219 | 0.418 | 0.122 | 0.186 | 0.764 | 0.236 | 0.592 | 17.342 |

**Table S6** Results of the linear mixed effect models for species richness in each functional traits. Forest type and Stratum area included as fixed factors and the transect as a random factor. P values indicating significant effects of forest type are highlighted in bold. Marginal (R2m ) and conditional (R2c ) R2 values were calculated with r.squaredGLMM (delta method) from R package MuMIn (Barton, 2019).

| **Variable** | **Term** | **Estimate** | **Std. Error** | **t value** | **p** | **R2m** | **R2c** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Deciduous** | (Intercept) | 1.889 | 0.280 | 6.755 | **<0.0001** | 0.290 | 0.445 |
| Forest type (MSIBF) | -0.056 | 0.559 | -0.099 | 0.922 |  |  |
| Forest type (UB) | 1.333 | 0.484 | 2.753 | **0.010** |  |  |
| Stratum (Saplings) | 0.056 | 0.350 | 0.159 | 0.875 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -1.556 | 0.699 | -2.225 | **0.034** |  |  |
| Forest type (UB): Stratum (Saplings) | -2.278 | 0.606 | -3.762 | **0.001** |  |  |
|  |  |  |  |  |  |  |  |
| **Evergreen** | (Intercept) | 4.222 | 0.857 | 4.925 | **<0.0001** | 0.546 | 0.616 |
| Forest type (MSIBF) | 1.444 | 1.715 | 0.842 | 0.406 |  |  |
| Forest type (UB) | 12.000 | 1.485 | 8.081 | **<0.0001** |  |  |
| Stratum (Saplings) | 0.833 | 1.115 | 0.747 | 0.461 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -1.667 | 2.230 | -0.747 | 0.461 |  |  |
| Forest type (UB): Stratum (Saplings) | -8.389 | 1.932 | -4.343 | **0.000** |  |  |
|  |  |  |  |  |  |  |  |
| **Semideciduous** | (Intercept) | 1.833 | 0.331 | 5.541 | **<0.0001** | 0.453 | 0.454 |
| Forest type (MSIBF) | 1.333 | 0.662 | 2.015 | **0.053** |  |  |
| Forest type (UB) | 2.611 | 0.573 | 4.556 | **0.000** |  |  |
| Stratum (Saplings) | -0.722 | 0.467 | -1.545 | 0.133 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -1.111 | 0.935 | -1.188 | 0.244 |  |  |
| Forest type (UB): Stratum (Saplings) | -3.500 | 0.810 | -4.323 | **0.000** |  |  |
|  |  |  |  |  |  |  |  |
| **Anemochory** | (Intercept) | -0.318 | 0.294 | -1.079 | 0.280 | 0.320 | 0.385 |
| Forest type (MSIBF) | 0.397 | 0.499 | 0.795 | 0.427 |  |  |
| Forest type (UB) | 0.602 | 0.419 | 1.435 | 0.151 |  |  |
| Stratum (Saplings) | -0.154 | 0.393 | -0.392 | 0.695 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -1.792 | 1.139 | -1.573 | 0.116 |  |  |
| Forest type (UB): Stratum (Saplings) | -2.411 | 1.110 | -2.172 | **0.030** |  |  |
|  |  |  |  |  |  |  |  |
| **Autochory** | (Intercept) | 0.368 | 0.196 | 1.875 | **0.061** | 0.987 | 0.987 |
| Forest type (MSIBF) | -1.466 | 0.734 | -1.998 | **0.046** |  |  |
| Forest type (UB) | 0.571 | 0.286 | 1.993 | **0.046** |  |  |
| Stratum (Saplings) | -1.312 | 0.426 | -3.082 | **0.002** |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -28.321 | 1923822.000 | 0.000 | 1.000 |  |  |
| Forest type (UB): Stratum (Saplings) | -0.214 | 0.652 | -0.328 | 0.743 |  |  |
|  |  | | |  |  |  |  |
| **Hidrochory** | (Intercept) | 1.720 | 0.460 | 3.710 | **0.001** | 0.286 | 0.417 |
| Forest type (MSIBF) | 0.940 | 0.930 | 1.020 | 0.318 |  |  |
| Forest type (UB) | 3.720 | 0.800 | 4.620 | **0.000** |  |  |
| Stratum (Saplings) | 0.440 | 0.590 | 0.750 | 0.460 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -1.440 | 1.190 | -1.220 | 0.233 |  |  |
| Forest type (UB): Stratum (Saplings) | -2.440 | 1.030 | -2.380 | **0.024** |  |  |
|  |  |  |  |  |  |  |  |
| **Ictochory** | (Intercept) | 3.111 | 0.549 | 5.665 | **<0.0001** | 0.334 | 0.535 |
| Forest type (MSIBF) | 0.389 | 1.098 | 0.354 | 0.726 |  |  |
| Forest type (UB) | 4.000 | 0.951 | 4.205 | **0.000** |  |  |
| Stratum (Saplings) | -0.722 | 0.649 | -1.113 | 0.275 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -1.111 | 1.298 | -0.856 | 0.399 |  |  |
| Forest type (UB): Stratum (Saplings) | -4.389 | 1.124 | -3.905 | **0.001** |  |  |
|  |  |  |  |  |  |  |  |
| **Zoochory-aerial** | (Intercept) | -0.944 | 0.378 | -2.499 | **0.012** | 0.565 | 0.565 |
| Forest type (MSIBF) | 1.551 | 0.483 | 3.207 | **0.001** |  |  |
| Forest type (UB) | 2.659 | 0.404 | 6.590 | **0.000** |  |  |
| Stratum (Saplings) | 1.273 | 0.428 | 2.977 | **0.003** |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -1.591 | 0.631 | -2.520 | **0.012** |  |  |
| Forest type (UB): Stratum (Saplings) | -2.352 | 0.512 | -4.597 | **0.000** |  |  |
|  |  |  |  |  |  |  |  |
| **Zoochory-terrestral** | (Intercept) | 0.201 | 0.213 | 0.941 | 0.347 | 0.255 | 0.255 |
| Forest type (MSIBF) | -0.047 | 0.434 | -0.107 | 0.915 |  |  |
| Forest type (UB) | 1.240 | 0.268 | 4.627 | **0.000** |  |  |
| Stratum (Saplings) | -0.095 | 0.309 | -0.308 | 0.758 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | 0.452 | 0.582 | 0.777 | 0.437 |  |  |
| Forest type (UB): Stratum (Saplings) | -0.709 | 0.425 | -1.669 | 0.095 |  |  |
|  |  |  |  |  |  |  |  |
| **Non-resprouters** | (Intercept) | 0.889 | 0.513 | 1.734 | 0.093 | 0.596 | 0.596 |
| Forest type (MSIBF) | 0.778 | 1.025 | 0.759 | 0.454 |  |  |
| Forest type (UB) | 8.000 | 0.888 | 9.010 | **<0.0001** |  |  |
| Stratum (Saplings) | 2.389 | 0.725 | 3.295 | **0.003** |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -2.722 | 1.450 | -1.877 | 0.070 |  |  |
| Forest type (UB): Stratum (Saplings) | -6.167 | 1.256 | -4.911 | **<0.0001** |  |  |
|  |  |  |  |  |  |  |  |
| **Resprouters** | (Intercept) | 7.056 | 0.874 | 8.069 | **<0.0001** | 0.455 | 0.576 |
|  | Forest type (MSIBF) | 1.944 | 1.749 | 1.112 | 0.275 |  |  |
|  | Forest type (UB) | 7.944 | 1.515 | 5.245 | **<0.0001** |  |  |
|  | Stratum (Saplings) | -2.222 | 1.090 | -2.039 | 0.050 |  |  |
|  | Forest type (MSIBF): Stratum (Saplings) | -1.611 | 2.180 | -0.739 | 0.466 |  |  |
|  | Forest type (UB): Stratum (Saplings) | -8.000 | 1.888 | -4.238 | **0.000** |  |  |

**Table S7** Moran's test for spatial autocorrelation in the residuals of species richness in each functional trait models. Moran I statics values were calculated in R (Bivand and Wong, 2018).

| **Variable** | **SD** | **p -value** | **Moran I statistic** | **Expectation** | **Variance** |
| --- | --- | --- | --- | --- | --- |
| **Deciduous** | -0.530 | 0.702 | -0.053 | -0.015 | 0.00506 |
|  |  |  |  |  |  |
| **Evergreen** | 3.423 | 0.000 | 0.228 | -0.015 | 0.005 |
|  |  |  |  |  |  |
| **Semideciduous** | 2.541 | 0.006 | 0.164 | -0.015 | 0.00501 |
|  |  |  |  |  |  |
| **Anemochory** | 0.366 | 0.357 | 0.011 | -0.015 | 0.00507 |
|  |  |  |  |  |  |
| **Autochory** | 1.510 | 0.065 | 0.091 | -0.015 | 0.00500 |
|  |  |  |  |  |  |
| **Hidrochory** | 2.614 | 0.004 | 0.166 | -0.015 | 0.00482 |
|  |  |  |  |  |  |
| **Ictochory** | 0.447 | 0.327 | 0.016 | -0.015 | 0.00490 |
|  |  |  |  |  |  |
| **Zoochory\_aerial** | 0.008 | 0.497 | -0.015 | -0.015 | 0.00503 |
|  |  |  |  |  |  |
| **Zoochory\_terrestral** | 2.155 | 0.016 | 0.138 | -0.015 | 0.00509 |
|  |  |  |  |  |  |
| **Non- resprouters** | 4.015 | 0.002 | 0.266 | -0.015 | 0.00491 |
|  |  |  |  |  |  |
| **Resprouters** | 1.367 | 0.086 | 0.081 | -0.015 | 0.00497 |
|  |  |  |  |  |  |
| **Wood density** | 1.367 | 0.086 | 0.081 | -0.015 | 0.00497 |
|  |  |  |  |  |  |
| **H max** | 0.485 | 0.314 | 0.019 | -0.015 | 0.00510 |

**Table S8** Results of the linear mixed effect models for Community Weighted Mean (CWM) for each functional traits. Forest type and Stratum area included as fixed factors and the transect as a random factor. P values indicating significant effects of forest type are highlighted in bold. Marginal (R2m ) and conditional (R2c ) R2 values were calculated with r.squaredGLMM (delta method) from R package MuMIn (Barton, 2019).

| **Variable** | **Term** | **Estimate** | **Std. Error** | **t value** | **p** | **R2m** | **R2c** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Deciduous** | (Intercept) | -3.586 | 1.429 | -2.510 | **0.012** | 0.078 | 0.200 |
| Forest type (MSIBF) | 1.665 | 1.827 | 0.911 | 0.362 |  |  |
| Forest type (UB) | 0.849 | 1.961 | 0.433 | 0.665 |  |  |
| Stratum (Saplings) | 1.071 | 1.632 | 0.656 | 0.512 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -2.754 | 3.139 | -0.877 | 0.380 |  |  |
| Forest type (UB): Stratum (Saplings) | 0.401 | 2.177 | 0.184 | 0.854 |  |  |
|  |  |  |  |  |  |  |  |
| **Evergreen** | (Intercept) | 0.668 | 0.050 | 13.356 | **<0.0001** | 0.144 | 0.144 |
| Forest type (MSIBF) | -0.194 | 0.100 | -1.945 | 0.061 |  |  |
| Forest type (UB) | 0.100 | 0.087 | 1.160 | 0.255 |  |  |
| Stratum (Saplings) | 0.051 | 0.071 | 0.721 | 0.477 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | 0.252 | 0.141 | 1.785 | 0.084 |  |  |
| Forest type (UB): Stratum (Saplings) | -0.234 | 0.122 | -1.914 | 0.065 |  |  |
|  |  |  |  |  |  |  |  |
| **Semideciduous** | (Intercept) | -3.586 | 1.429 | -2.510 | **0.012** | 0.078 | 0.200 |
| Forest type (MSIBF) | 1.665 | 1.827 | 0.911 | 0.362 |  |  |
| Forest type (UB) | 0.849 | 1.961 | 0.433 | 0.665 |  |  |
| Stratum (Saplings) | 1.071 | 1.632 | 0.656 | 0.512 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -2.754 | 3.139 | -0.877 | 0.380 |  |  |
| Forest type (UB): Stratum (Saplings) | 0.401 | 2.177 | 0.184 | 0.854 |  |  |
|  |  |  |  |  |  |  |  |
| **Anemochory** | (Intercept) | -2.786 | 0.974 | -2.861 | **0.004** | 0.807 | 0.816 |
| Forest type (MSIBF) | 0.441 | 1.688 | 0.261 | 0.794 |  |  |
| Forest type (UB) | -0.463 | 1.980 | -0.234 | 0.815 |  |  |
| Stratum (Saplings) | -18.502 | 9835.034 | -0.002 | 0.998 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -0.453 | 19806.640 | 0.000 | 1.000 |  |  |
| Forest type (UB): Stratum (Saplings) | 0.452 | 17154.140 | 0.000 | 1.000 |  |  |
|  |  |  |  |  |  |  |  |
| **Autochory** | (Intercept) | -3.608 | 1.448 | -2.491 | **0.013** | 0.047 | 0.121 |
| Forest type (MSIBF) | 1.449 | 1.923 | 0.753 | 0.451 |  |  |
| Forest type (UB) | 1.007 | 1.924 | 0.523 | 0.601 |  |  |
| Stratum (Saplings) | 0.723 | 1.741 | 0.415 | 0.678 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -1.130 | 2.572 | -0.440 | 0.660 |  |  |
| Forest type (UB): Stratum (Saplings) | -2.955 | 4.293 | -0.688 | 0.491 |  |  |
|  |  |  |  |  |  |  |  |
| **Hidrochory** | (Intercept) | 0.258 | 0.033 | 7.951 | **<0.0001** | 0.166 | 0.198 |
| Forest type (MSIBF) | -0.115 | 0.065 | -1.766 | 0.088 |  |  |
| Forest type (UB) | -0.120 | 0.056 | -2.129 | **0.042** |  |  |
| Stratum (Saplings) | -0.108 | 0.045 | -2.393 | 0.023 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | 0.058 | 0.090 | 0.640 | 0.527 |  |  |
| Forest type (UB): Stratum (Saplings) | 0.063 | 0.078 | 0.812 | 0.423 |  |  |
|  |  |  |  |  |  |  |  |
| **Ictochory** | (Intercept) | 0.469 | 0.051 | 9.279 | **<0.0001** | 0.286 | 0.308 |
| Forest type (MSIBF) | -0.286 | 0.101 | -2.827 | **0.008** |  |  |
| Forest type (UB) | -0.098 | 0.088 | -1.114 | 0.274 |  |  |
| Stratum (Saplings) | 0.031 | 0.070 | 0.441 | 0.663 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -0.004 | 0.141 | -0.031 | 0.976 |  |  |
| Forest type (UB): Stratum (Saplings) | 0.239 | 0.122 | 1.958 | 0.060 |  |  |
|  |  |  |  |  |  |  |  |
| **Zoochory-aerial** | (Intercept) | -3.175 | 1.175 | -2.703 | **0.007** | 0.042 | 0.165 |
| Forest type (MSIBF) | 0.807 | 1.818 | 0.444 | 0.657 |  |  |
| Forest type (UB) | 0.990 | 1.573 | 0.629 | 0.529 |  |  |
| Stratum (Saplings) | 0.213 | 1.547 | 0.137 | 0.891 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | 0.843 | 2.181 | 0.387 | 0.699 |  |  |
| Forest type (UB): Stratum (Saplings) | -0.171 | 2.079 | -0.082 | 0.934 |  |  |
|  |  |  |  |  |  |  |  |
| **Zoochory-terrestral** | (Intercept) | 0.141 | 0.042 | 3.385 | **0.002** | 0.170 | 0.170 |
| Forest type (MSIBF) | 0.224 | 0.083 | 2.686 | **0.012** |  |  |
| Forest type (UB) | 0.123 | 0.072 | 1.696 | 0.100 |  |  |
| Stratum (Saplings) | 0.099 | 0.059 | 1.684 | 0.103 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -0.119 | 0.118 | -1.007 | 0.322 |  |  |
| Forest type (UB): Stratum (Saplings) | -0.224 | 0.102 | -2.191 | **0.036** |  |  |
|  |  |  |  |  |  |  |  |
| **Non- resprouters** | (Intercept) | 0.384 | 0.056 | 6.857 | **<0.0001** | 0.400 | 0.439 |
| Forest type (MSIBF) | -0.092 | 0.112 | -0.825 | 0.416 |  |  |
| Forest type (UB) | -0.041 | 0.097 | -0.425 | 0.674 |  |  |
| Stratum (Saplings) | 0.382 | 0.077 | 4.986 | **<0.0001** |  |  |
| Forest type (MSIBF): Stratum (Saplings) | 0.034 | 0.153 | 0.219 | 0.828 |  |  |
| Forest type (UB): Stratum (Saplings) | -0.034 | 0.133 | -0.255 | 0.800 |  |  |
|  |  |  |  |  |  |  |  |
| **Resprouters** | (Intercept) | 0.616 | 0.056 | 10.983 | **<0.0001** | 0.400 | 0.439 |
| Forest type (MSIBF) | 0.092 | 0.112 | 0.825 | 0.416 |  |  |
| Forest type (UB) | 0.041 | 0.097 | 0.425 | 0.674 |  |  |
| Stratum (Saplings) | -0.382 | 0.077 | -4.986 | <0.0001 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -0.034 | 0.153 | -0.219 | 0.828 |  |  |
| Forest type (UB): Stratum (Saplings) | 0.034 | 0.133 | 0.255 | 0.800 |  |  |
|  |  |  |  |  |  |  |  |
| **Wood density** | (Intercept) | 0.684 | 0.016 | 42.565 | <0.0001 | 0.225 | 0.225 |
| Forest type (MSIBF) | 0.021 | 0.032 | 0.648 | 0.522 |  |  |
| Forest type (UB) | -0.010 | 0.028 | -0.374 | 0.711 |  |  |
| Stratum (Saplings) | -0.071 | 0.023 | -3.105 | 0.004 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | 0.025 | 0.045 | 0.559 | 0.580 |  |  |
| Forest type (UB): Stratum (Saplings) | 0.113 | 0.039 | 2.870 | 0.007 |  |  |
|  |  |  |  |  |  |  |  |
| **H max** | (Intercept) | 17.295 | 0.759 | 22.796 | <0.0001 | 0.171 | 0.171 |
| Forest type (MSIBF) | 2.339 | 1.517 | 1.541 | 0.134 |  |  |
| Forest type (UB) | 3.603 | 1.314 | 2.742 | 0.010 |  |  |
| Stratum (Saplings) | 2.212 | 1.073 | 2.062 | 0.048 |  |  |
| Forest type (MSIBF): Stratum (Saplings) | -5.713 | 2.146 | -2.662 | 0.012 |  |  |
| Forest type (UB): Stratum (Saplings) | -3.762 | 1.858 | -2.024 | 0.052 |  |  |

**Table S9** Moran's test for spatial autocorrelation in the residuals of models for Community Weighted Mean (CWM) for each functional trait. Moran I statics values were calculated in R (Bivand and Wong, 2018).

| **Variable** | **SD** | **p -value** | **Moran I statistic** | **Expectation** | **Variance** |
| --- | --- | --- | --- | --- | --- |
| **Deciduous** | 3.676 | 0.000 | 0.242 | -0.015 | 0.00491 |
|  |  |  |  |  |  |
| **Evergreen** | -0.858 | 0.805 | -0.076 | -0.015 | 0.00499 |
|  |  |  |  |  |  |
| **Semideciduous** | 0.405 | 0.343 | 0.013 | -0.015 | 0.00507 |
|  |  |  |  |  |  |
| **Anemochory** | 1.014 | 0.155 | 0.054 | -0.015 | 0.00470 |
|  |  |  |  |  |  |
| **Autochory** | 0.542 | 0.294 | 0.023 | -0.015 | 0.00494 |
|  |  |  |  |  |  |
| **Hidrochory** | 0.867 | 0.193 | 0.046 | -0.015 | 0.00509 |
|  |  |  |  |  |  |
| **Ictochory** | -0.669 | 0.748 | -0.063 | -0.015 | 0.00503 |
|  |  |  |  |  |  |
| **Zoochory\_aerial** | 0.927 | 0.177 | 0.050 | -0.015 | 0.00505 |
|  |  |  |  |  |  |
| **Zoochory\_terrestral** | -0.946 | 0.828 | -0.083 | -0.015 | 0.00508 |
|  |  |  |  |  |  |
| **Non- resprouters** | 0.354 | 0.362 | 0.010 | -0.015 | 0.00500 |
|  |  |  |  |  |  |
| **Resprouters** | 0.423 | 0.336 | 0.015 | -0.015 | 0.00507 |
|  |  |  |  |  |  |
| **Wood density** | 1.367 | 0.086 | 0.081 | -0.015 | 0.00497 |
|  |  |  |  |  |  |
| **H max** | 0.485 | 0.314 | 0.019 | -0.015 | 0.00510 |

**Table S11** βRC metric expresses dissimilarity between two communities relative to the null expectation. A value of 0 represents no difference in the observed (dis)similarity from the null expectation. A value of 1 indicates that the observed dissimilarity is higher than expected in any of the simulations, indicating that the communities are completely more different from each other than expected by chance. Conversely, a value of -1 indicates that the communities are completely less different (more similar) than expected by chance. βRC metric was calculated in R using the code provided byChase *et al.,* (2016).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ADULTS** | | |  | **SAPLINGS** | | |
|  | **HSBF** | **MSIBF** |  |  | **HSBF** | **MSIBF** |
| **MSIBF** | 0.334 |  |  | **MSIBF** | 0.792 |  |
| **UB** | 1 | 1 |  | **UB** | 1 | 0.4 |

**Table S12** Results of the core calculations of functional dissimilarities metrics. Functional richness and matrices were calculated with functional.betapart.core function of Betapart package (Baselga et al., 2011).

1. Functional richness.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Functional traits** | **Stratum** | **FRi** | **FRt** | **a** |
| Presence/absence traits | Adults | 4.27E-10 | 3.96E-10 | 3.05E-11 |
| Saplings | 2.65E-10 | 2.31E-10 | 3.48E-11 |
| Quantitative traits | Adults | 38.17 | 15.48 | 22.69 |
| Saplings | 25.80 | 10.87 | 14.93 |

Where: FRi is the sum of the functional richness values of all sites; FRt in the total functional richness in the dataset and “a” is the multiple-site analog of the shared functional richness term. Presence/absence traits (leaf phenology, resprouting capacity, animal dispersal, or physical dispersal), and quantitative traits (maximum height and wood density).

1. Matrix containing the functional richness shared between pairs of sites.

| **ADULTS** | | | | | | | | |  | **SAPLINGS** | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Presence/absence traits** | | | |  | **Quantitative traits** | | | |  | **Presence/absence traits** | | | |  | **Quantitative traits** | | | |
|  | **HSBF** | **MSIBF** | **UB** |  |  | **HSBF** | **MSIBF** | **UB** |  |  | **HSBF** | **MSIBF** | **UB** |  |  | **HSBF** | **MSIBF** | **UB** |
| **HSBF** | 0E+00 | 0E+00 | 0 |  | **HSBF** | 0 | 0 | 0 |  | **HSBF** | 0E+00 | 0E+00 | 0 |  | **HSBF** | 0 | 0 | 0 |
| **MSIBF** | 2E-11 | 0E+00 | 0 |  | **MSIBF** | 10.09 | 0 | 0 |  | **MSIBF** | 2E-11 | 0E+00 | 0 |  | **MSIBF** | 7.75 | 0 | 0 |
| **UB** | 2E-11 | 2E-11 | 0 |  | **UB** | 12.36 | 10.30 | 0 |  | **UB** | 2E-11 | 2E-11 | 0 |  | **UB** | 7.18 | 6.38 | 0 |

Where: Presence/absence traits (leaf phenology, resprouting capacity, animal dispersal, or physical dispersal), and quantitative traits (maximum height and wood density).

1. Matrix containing the functional richness not shared between pairs of sites

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ADULTS** | | | | | | | | |  | **SAPLINGS** | | | | | | | | |
| **Presence/absence traits** | | | |  | **Quantitative traits** | | | |  | **Presence/absence traits** | | | |  | **Quantitative traits** | | | |
|  | **HSBF** | **MSIBF** | **UB** |  |  | **HSBF** | **MSIBF** | **UB** |  |  | **HSBF** | **MSIBF** | **UB** |  |  | **HSBF** | **MSIBF** | **UB** |
| **HSBF** | 0E+00 | 1E-10 | 1E-10 |  | **HSBF** | 0 | 3.65 | 1.38 |  | **HSBF** | 0E+00 | 1E-10 | 1E-10 |  | **HSBF** | 0 | 2.27 | 2.83 |
| **MSIBF** | 1E-10 | 0E+00 | 1E-10 |  | **MSIBF** | 0.33 | 0 | 0.12 |  | **MSIBF** | 4E-11 | 0E+00 | 4E-11 |  | **MSIBF** | 0 | 0 | 1.37 |
| **UB** | 2E-10 | 2E-10 | 0E+00 |  | **UB** | 1.64 | 3.70 | 0 |  | **UB** | 6E-11 | 7E-11 | 0E+00 |  | **UB** | 0.86 | 1.66 | 0 |

Where: Presence/absence traits (leaf phenology, resprouting capacity, animal dispersal, or physical dispersal), and quantitative traits (maximum height and wood density).

1. Matrix containing the total functional richness not shared between pairs of sites

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ADULTS** | | | | | | | | |  | **SAPLINGS** | | | | | | | | |
| **Presence/absence traits** | | | |  | **Quantitative traits** | | | |  | **Presence/absence traits** | | | |  | **Quantitative traits** | | | |
|  | **HSBF** | **MSIBF** | **UB** |  |  | **HSBF** | **MSIBF** | **UB** |  |  | **HSBF** | **MSIBF** | **UB** |  |  | **HSBF** | **MSIBF** | **UB** |
| **HSBF** | 0E+00 | 2E-10 | 3E-10 |  | **HSBF** | 0 | 3.99 | 3.02 |  | **HSBF** | 0E+00 | 1E-10 | 2E-10 |  | **HSBF** | 0 | 2.27 | 3.69 |
| **MSIBF** | 2E-10 | 0E+00 | 3E-10 |  | **MSIBF** | 3.99 | 0 | 3.82 |  | **MSIBF** | 1E-10 | 0E+00 | 1E-10 |  | **MSIBF** | 2.27 | 0 | 3.03 |
| **UB** | 3E-10 | 3E-10 | 0E+00 |  | **UB** | 3.02 | 3.82 | 0 |  | **UB** | 2E-10 | 1E-10 | 0E+00 |  | **UB** | 3.69 | 3.03 | 0 |

Where: Presence/absence traits (leaf phenology, resprouting capacity, animal dispersal, or physical dispersal), and quantitative traits (maximum height and wood density).

1. The matrix containing the total maximum functional richness not shared between pairs of sites

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ADULTS** | | | | | | | | |  | **SAPLINGS** | | | | | | | | |
| **Presence/absence traits** | | | |  | **Quantitative traits** | | | |  | **Presence/absence traits** | | | |  | **Quantitative traits** | | | |
|  | **HSBF** | **MSIBF** | **UB** |  |  | **HSBF** | **MSIBF** | **UB** |  |  | **HSBF** | **MSIBF** | **UB** |  |  | **HSBF** | **MSIBF** | **UB** |
| **HSBF** | 0E+00 | 1E-10 | 2E-10 |  | **HSBF** | 0 | 3.65 | 1.64 |  | **HSBF** | 0E+00 | 1E-10 | 1E-10 |  | **HSBF** | 0 | 2.27 | 2.83 |
| **MSIBF** | 1E-10 | 0E+00 | 2E-10 |  | **MSIBF** | 3.65 | 0 | 3.70 |  | **MSIBF** | 1E-10 | 0E+00 | 7E-11 |  | **MSIBF** | 2.27 | 0 | 1.66 |
| **UB** | 2E-10 | 2E-10 | 0E+00 |  | **UB** | 1.64 | 3.70 | 0 |  | **UB** | 1E-10 | 7E-11 | 0E+00 |  | **UB** | 2.83 | 1.66 | 0 |

Where: Presence/absence traits (leaf phenology, resprouting capacity, animal dispersal, or physical dispersal), and quantitative traits (maximum height and wood density).

1. The matrix containing the total minimum functional richness not shared between pairs of sites

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ADULTS** | | | | | | | | |  | **SAPLINGS** | | | | | | | | |
| **Presence/absence traits** | | | |  | **Quantitative traits** | | | |  | **Presence/absence traits** | | | |  | **Quantitative traits** | | | |
|  | **HSBF** | **MSIBF** | **UB** |  |  | **HSBF** | **MSIBF** | **UB** |  |  | **HSBF** | **MSIBF** | **UB** |  |  | **HSBF** | **MSIBF** | **UB** |
| **HSBF** | 0E+00 | 1E-10 | 1E-10 |  | **HSBF** | 0 | 0.33 | 1.38 |  | **HSBF** | 0E+00 | 4E-11 | 6E-11 |  | **HSBF** | 0 | 0 | 0.86 |
| **MSIBF** | 1E-10 | 0E+00 | 1E-10 |  | **MSIBF** | 0.33 | 0 | 0.12 |  | **MSIBF** | 4E-11 | 0E+00 | 4E-11 |  | **MSIBF** | 0 | 0 | 1.37 |
| **UB** | 1E-10 | 1E-10 | 0E+00 |  | **UB** | 1.38 | 0.12 | 0 |  | **UB** | 6E-11 | 4E-11 | 0E+00 |  | **UB** | 0.86 | 1.37 | 0 |

Where: Presence/absence traits (leaf phenology, resprouting capacity, animal dispersal, or physical dispersal), and quantitative traits (maximum height and wood density).