

Supplementary material

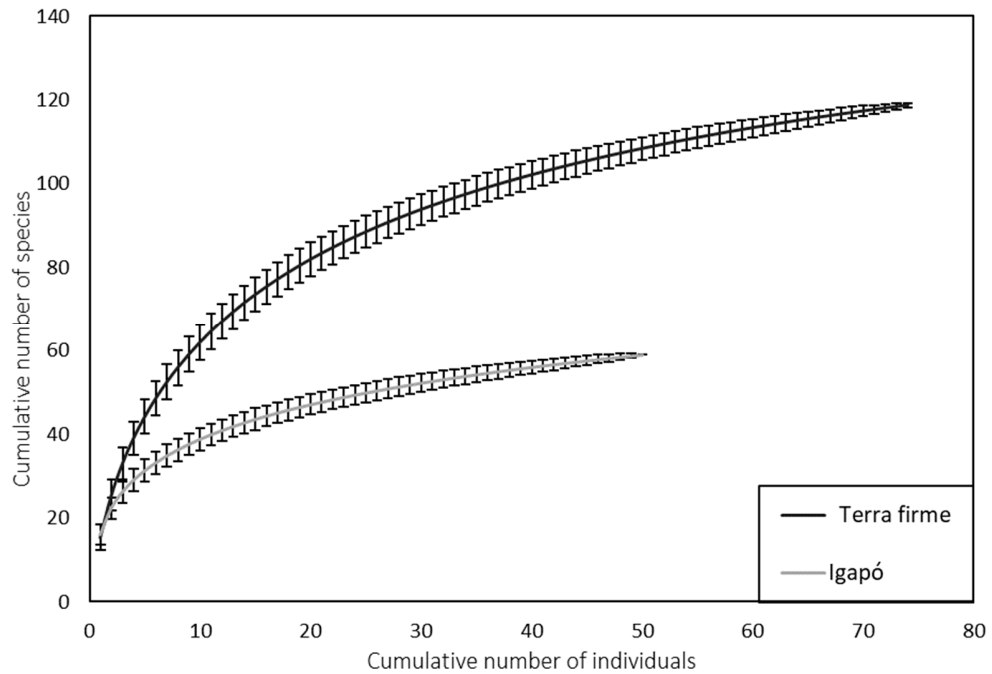
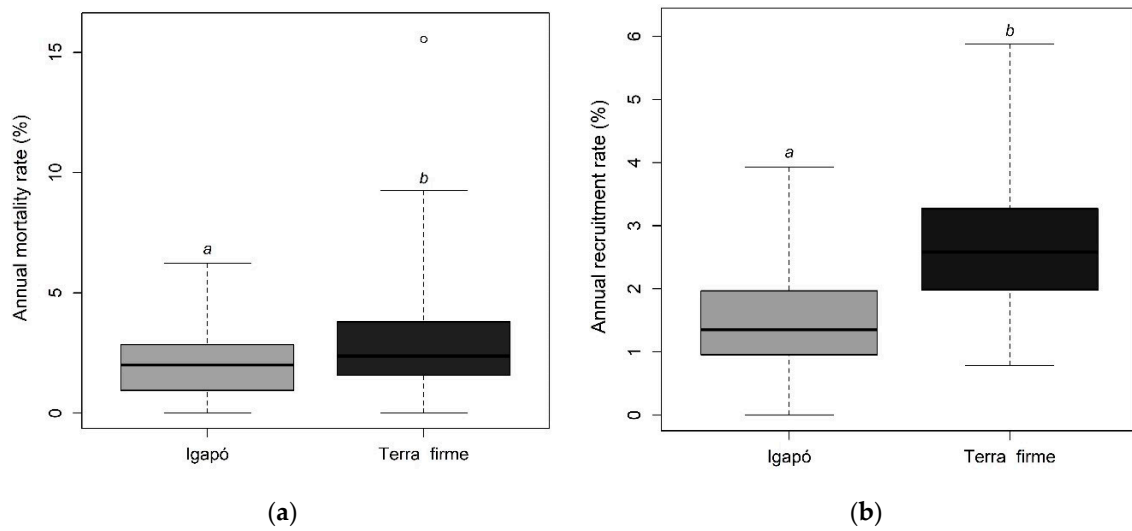


Figure S1. Rarefaction curve comparing the species richness of the flooded and the terra firme forests in the Tomogrande Reserve, Vichada (Colombia)



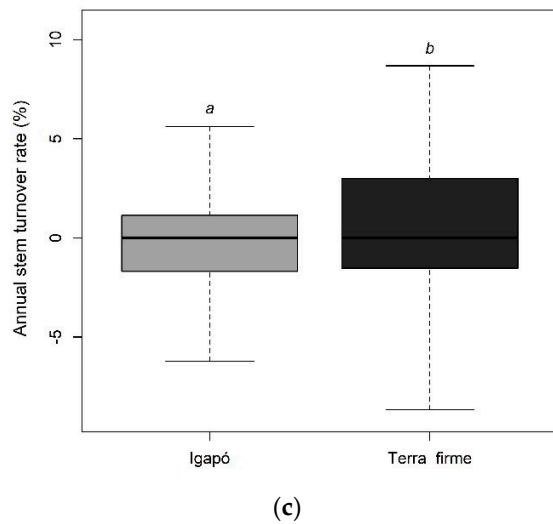


Figure S2. Tree dynamics in terms of (a) annual mortality rate ($W = 1477$, $p = 0,045$); (b) annual recruitment rate ($W = 1006$, $p \leq 0.001$) and (c) annual stem turnover rate ($t = -2.14$, $p = 0.034$) for each forest type in Tomogrande Reserve (Vichada, Colombia), taking a 20 m x 20 m subplot as the sample unit (50 subplots for igapó and 75 for terra firme). The thick line represents the average for each group, and the dotted lines represent the variance. The letters above indicate statistically significant differences among forest types ($p < 0.05$).

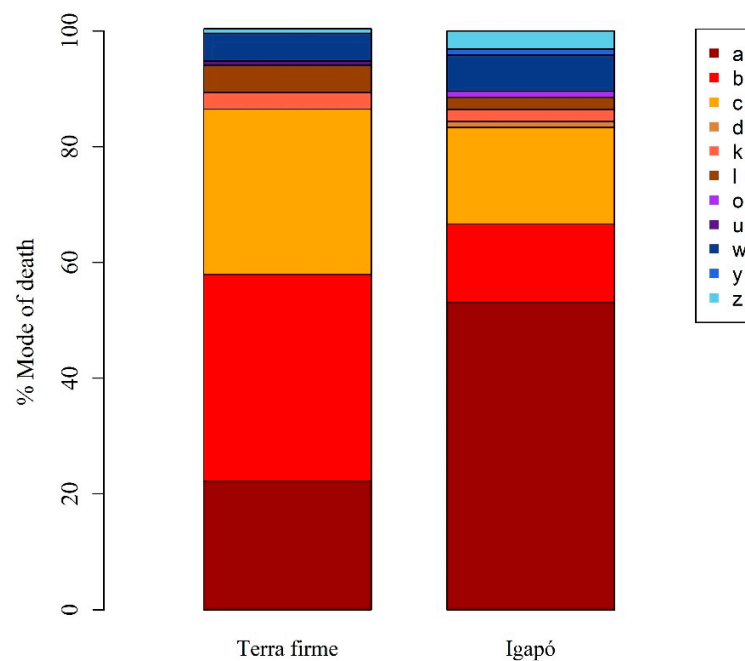


Figure S3. Individual's death mode percentage for each type of forest, according to the mode of death proposed by RAINFOR (2009) [Error! Reference source not found.]. Where, a: Dead standing, b: Snapped trunk, c: Uprooted, d:

Standing or broken, dead standing, k: Vanished, l: Presumed dead, o: Lightning, u: Killed, no more information, w: Killed by another tree that uprooted, y: Killed by branches fallen from living tree, z: Killed by strangler.

Table S1. List of the 10 most important species in the flooded and terra firme forests in the Tomogrande Reserve, where: D = Relative dominance (Basal area/Total basal area), q = Relative density (total number of individuals per species/total number of individuals), F = Relative frequency (presence of species per subplots/total number of subplots per plot), IVI = Importance value index

	Species	D	q	F	IVI
Igapó Forest	<i>Mabea trianae</i>	16,44	11,31	8	35,75
	<i>Tachigali tinctoria</i>	10,14	15,8	6,5	32,44
	<i>Tachigali vaupesiana</i>	6,58	11,19	6	23,77
	<i>Licania heteromorpha</i>	6,51	7,49	5,33	19,33
	<i>Eschweilera parvifolia</i>	6,23	4,84	6,67	17,74
	<i>Guatteria brevicuspis</i>	4,25	7,28	4,67	16,19
	<i>Caraipa llanorum</i>	3,01	7,68	4	14,7
	<i>Laetia suaveolens</i>	5,21	3,07	5	13,28
	<i>Duroia micrantha</i>	4,79	5,46	3	13,26
	<i>Licania apetala</i>	3,9	3,12	4,5	11,52
Terra firme forest	<i>Attalea maripa</i>	8,12	11,79	5,39	25,3
	<i>Jacaranda copaia</i>	5,71	15,04	3,21	23,96
	<i>Bocageopsis multiflora</i>	6,58	2,77	5,08	14,43
	<i>Tetragastris panamensis</i>	3,88	5,81	3,11	12,8
	<i>Oenocarpus bataua</i>	5,41	4,58	2,8	12,79
	<i>Pseudolmedia laevis</i>	5,71	1,92	4,15	11,77
	<i>Couepia glabra</i>	3,22	3,88	3,21	10,31
	<i>Guatteria foliosa</i>	3	3,03	2,38	8,41
	<i>Pourouma aurea</i>	3,44	2,47	2,07	7,98
	<i>Xylopia polyantha</i>	2,93	1,56	3,11	7,6

Table S2. Moran spatial autocorrelation index (Moran's I) values, for each demographic rate for each forest type in the Tomogrande Reserve (Vichada, Colombia), taking 20 m x 20 m subplots as sample units (16 subplots for igapó and 24 for terra firme). Values greater than zero are indicative of positive spatial autocorrelation, while values less than 0 are indicative of negative spatial autocorrelation. * indicates positive significant autocorrelation among subplots with $p \leq 0,05$.

Demographic Rates	Forest	
	Igapó	Terra firme
Mortality rate	-0,042	-0,017
Recruitment rate	-0,193	-0,031
Stem turnover rate	-0,063	-0,063
AGB mortality rate	-0,099	-0,018
AGB recruitment rate	0,017	0,269*

Table S3. Average values of all variables sampled in the soil of terra firme and flooded forests, taking 20 m x 20 m subplots as sample units (50 subplots for igapó and 75 for terra firme). Organic Carbon (CO), Nitrogen (N), Phosphorus (P), pH, Exchange Acidity (Al), Cation Exchange Capacity (CEC), Effective Cation Exchange Capacity (ECEC), Calcium (Ca), Magnesium (Mg), Potassium (K), Sodium (Na).

Variable	Forest	
	Igapó	Terra firme
% Clay	15.00 ± 8,18	54.59 ± 15,64
% Silt	49.90 ± 8,55	21.93 ± 10,22
% Sand	34.70 ± 10,57	23.20 ± 6,48
% CO	3.80 ± 1,88	3.12 ± 1,78
% N	0.27 ± 0,15	0.18 ± 0,09
P(mg/Kg)	8.37 ± 7,98	1.90 ± 1,50
pH	4.56 ± 0,20	3.68 ± 0,25
Al (cmol _c /Kg)	4.11 ± 1,07	2.79 ± 1,39
CEC	15.82 ± 5,44	10.36 ± 3,35
ECEC	5.18 ± 1,31	3.83 ± 1,56
Ca (cmol _c /Kg)	0.18 ± 0,02	0.26 ± 0,67
Mg (cmol _c /Kg)	0.16 ± 0,05	0.15 ± 0,07
K (cmol _c /Kg)	0.23 ± 0,10	0.10 ± 0,05
Na (cmol _c /Kg)	0.50 ± 0,47	0.53 ± 0,74