

Fine grouping of French Guiana's rain forest tree species

Table 1: Successional status (SS) of 1022 of French Guiana's lowland tree species, Version 1. No spp.: Number of species per SS. Abundance of trees with diameter >10cm in research plots in Nouragues, Piste de Saint-Elie and Paracou (20276 trees).

Successional status	SS	No spp.	Abundance [%]
Savanna spp.	0	47	0.0
Early successional spp.	1	189	6.8
Mid successional spp.	2	294	44.5
Late successional spp.	3	492	48.7

Table 2: Aggregation of 1022 of French Guiana's lowland tree species into five height groups (HG). Height at maturity. No spp.: Number of species per HG. Abundance of trees with diameter >10cm in research plots in Nouragues, Piste de Saint-Elie and Paracou (20276 trees).

Name	Height [m]	HG	No spp.	Abundance [%]
Shrubs	0-5	1	136	3.2
Understorey	5-15	2	333	10.4
Lower canopy	15-25	3	261	32.3
Upper canopy	25-36	4	210	44.8
Emergent	>36	5	82	9.4

Table 3: Autoecological characteristics of plant functional types (PFT) in lowland rain forest of French Guiana. Height at maturity. SS: related successional status (Table 1). HG: related height group (Table 2). No spp.: Number of species per PFT. Abundance of trees with diameter >10cm in research plots in Nouragues, Piste de Saint-Elie and Paracou (20276 trees).

Species group name	Height [m]	PFT	SS	HG	No spp.	Abundance [%]
Shrub savanna spp.	0-5	1	0	1	7	0.0
Shrub early successional spp.	0-5	2	1	1	17	0.1
Shrub mid successional spp.	0-5	3	2	1	29	1.0
Shrub late successional spp.	0-5	4	3	1	83	2.0
Understorey savanna spp.	5-15	5	0	2	31	0.0
Understorey early successional spp.	5-15	6	1	2	74	1.4
Understorey mid successional spp.	5-15	7	2	2	76	3.5
Understorey late successional spp.	5-15	8	3	2	152	5.4
Lower canopy savanna spp.	15-25	9	0	3	7	0.0
Lower canopy early successional spp.	15-25	10	1	3	48	2.8
Lower canopy mid successional spp.	15-25	11	2	3	84	11.4
Lower canopy late successional spp.	15-25	12	3	3	122	18.1
Upper canopy savanna spp.	25-36	13	0	4	2	0.0
Upper canopy early successional spp.	25-36	14	1	4	38	1.6
Upper canopy mid successional spp.	25-36	15	2	4	67	22.2
Upper canopy late successional spp.	25-36	16	3	4	103	21.0
Emergent early successional spp.	>36	17	1	5	12	0.9
Emergent mid successional spp.	>36	18	2	5	38	6.4
Emergent late successional spp.	>36	19	3	5	32	2.2

Coarse grouping of French Guiana’s rain forest tree species

Table 4: Successional status (SS2) of 1022 of French Guiana’s lowland tree species, Version 2. No spp.: Number of species per SS2. Abundance in research plots in Nouragues, Piste de Saint-Elie and Paracou (20276 trees).

Successional status	SS2	No spp.	Abundance [%]
Savanna spp.	0	47	0.0
Early successional spp.	1	189	6.8
Late successional spp.	2	786	93.2

Table 5: Aggregation of 1022 of French Guiana’s lowland tree species into two height groups (SG2). Height at maturity. No spp.: Number of species per HG2. Abundance in research plots in Nouragues, Piste de Saint-Elie and Paracou (20276 trees).

Name	Height [m]	HG2	No spp.	Abundance [%]
Lower canopy	≤ 20	1	523	29.6
Upper canopy	> 20	2	410	70.4

Table 6: Autoecological characteristics of plant functional types (PFT2) in lowland rain forest of French Guiana. Height at maturity. SS2: related successional status (Table 4). HG2: related height group (Table 5). No spp.: Number of species per PFT. Abundance in research plots in Nouragues, Piste de Saint-Elie and Paracou (20276 trees).

Species group name	Height [m]	PFT2	SS2	HG2	No spp.	Abundance [%]
Lower canopy savanna spp.	≤ 20	1	0	1	47	0.0
Lower canopy early successional spp.	≤ 20	2	1	1	117	2.8
Lower canopy late successional spp.	≤ 20	3	2	1	451	26.8
Upper canopy early successional spp.	> 20	4	1	3	72	4.0
Upper canopy late successional spp.	> 20	5	2	3	335	66.4

Legend

Table 7: Legend of tree species lists of Fench Guiana

Column	Description
Family	Family name
Genus	Genus name
Species	Species name
PFT	Plant Functional Type after Table 3
SS	Successional status after Table 1
HG	Height group after Table 2
PFT2	Plant Functional Type - coarse grouping after Table 6
SS2	Successional status - coarse grouping after Table 4
HG2	Height group - coarse grouping after Table 5
Code	Species code for identification
N-NOU	Number of trees with diameter >10cm in Nouragues
N-PSE	Number of trees with diameter >10cm in Piste de Saint-Elie
N-PARA	Number of trees with diameter >10cm in Paracou
N-TOTAL	Total number of trees with diameter >10cm in Nouragues, Piste de Saint-Elie and Paracou
VR Index	Van Roosmalen index of adundance (0: very rare; 1: rare; 2: fairly rare; 3: not common; 4: fairly common; 5: common; 6: very common). The average number of individuals per species should roughly follow $N \exp(-a \cdot VRI)$
Height	Maximum height at maturity [m]
Dispersion	Dispersion strategies (AN: anemochorous; HY: hydrochorous; Z: zoochorous; EZ: endozoochorous (seed eaten, then defecated); SZ: synzoochorous (seed transported)) by different processes (B: birds; M: monkeys; bat: bats; R: rodents; T:tortoises). Generally, the dispersing capacity of each of these modes can be roughly estimated in terms of distance $HY < SZR < SZM \quad EZT < SZbat \quad EZM < EZB < AN$
Density	wood density [$t_{ODM} m^{-3}$]
Architecture	Crown architecture type after Halle, Oldeman and Tomlinson