

River damming affects seedling communities of a floodplain forest in the Central Amazon

doi: 10.1590/0102-33062019abb0263

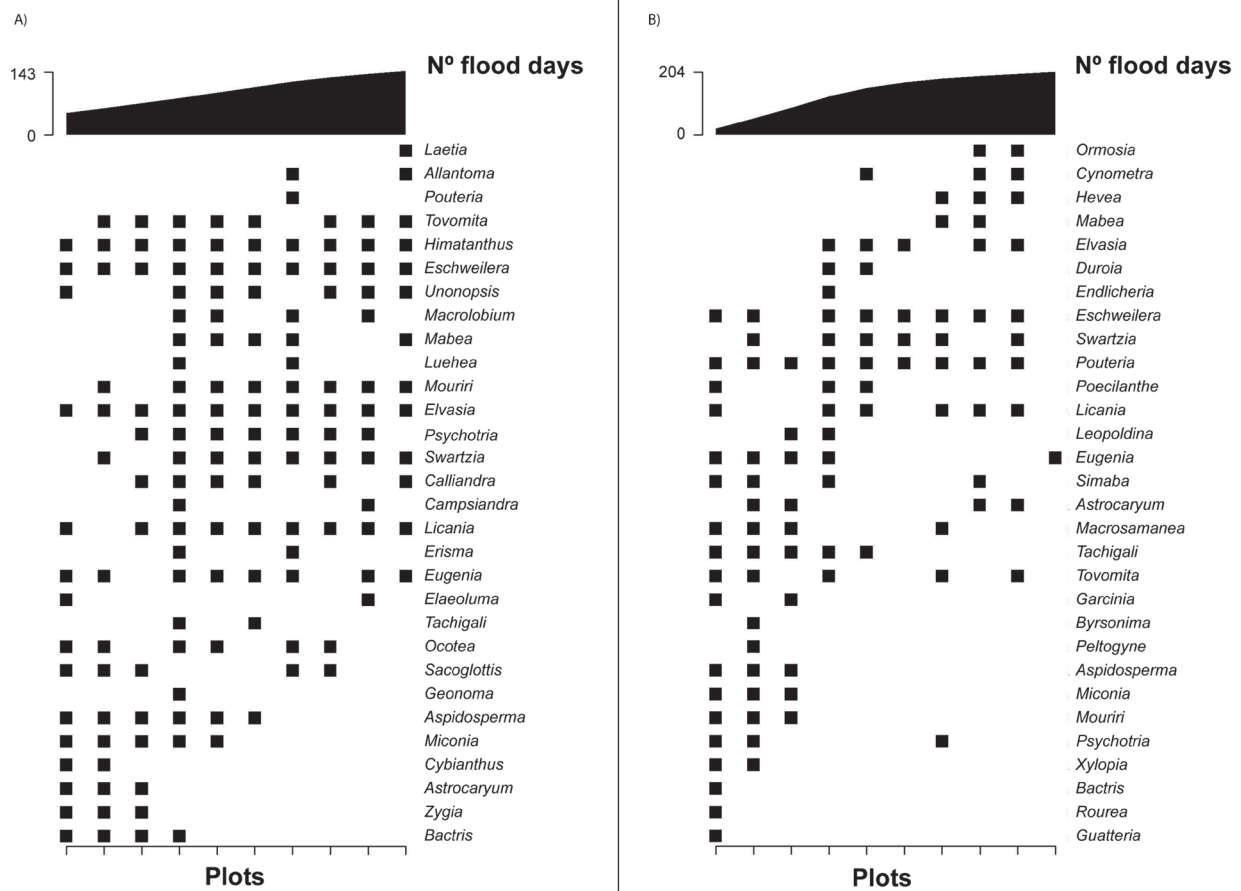


Figure S1. Distribution of the 30 tree dominant genera according to the flood days per year in igapó forest with regular hydrological regime: A) Abacate River and B) Jaú River. The flood days were calculated using the flood height of the Jatapu River (for Abacate River – 2002 to 2016) and Negro River (for Jaú River – 1974 to 2017) provided by the National Water Agency (ANA – Hidroweb System 2018).



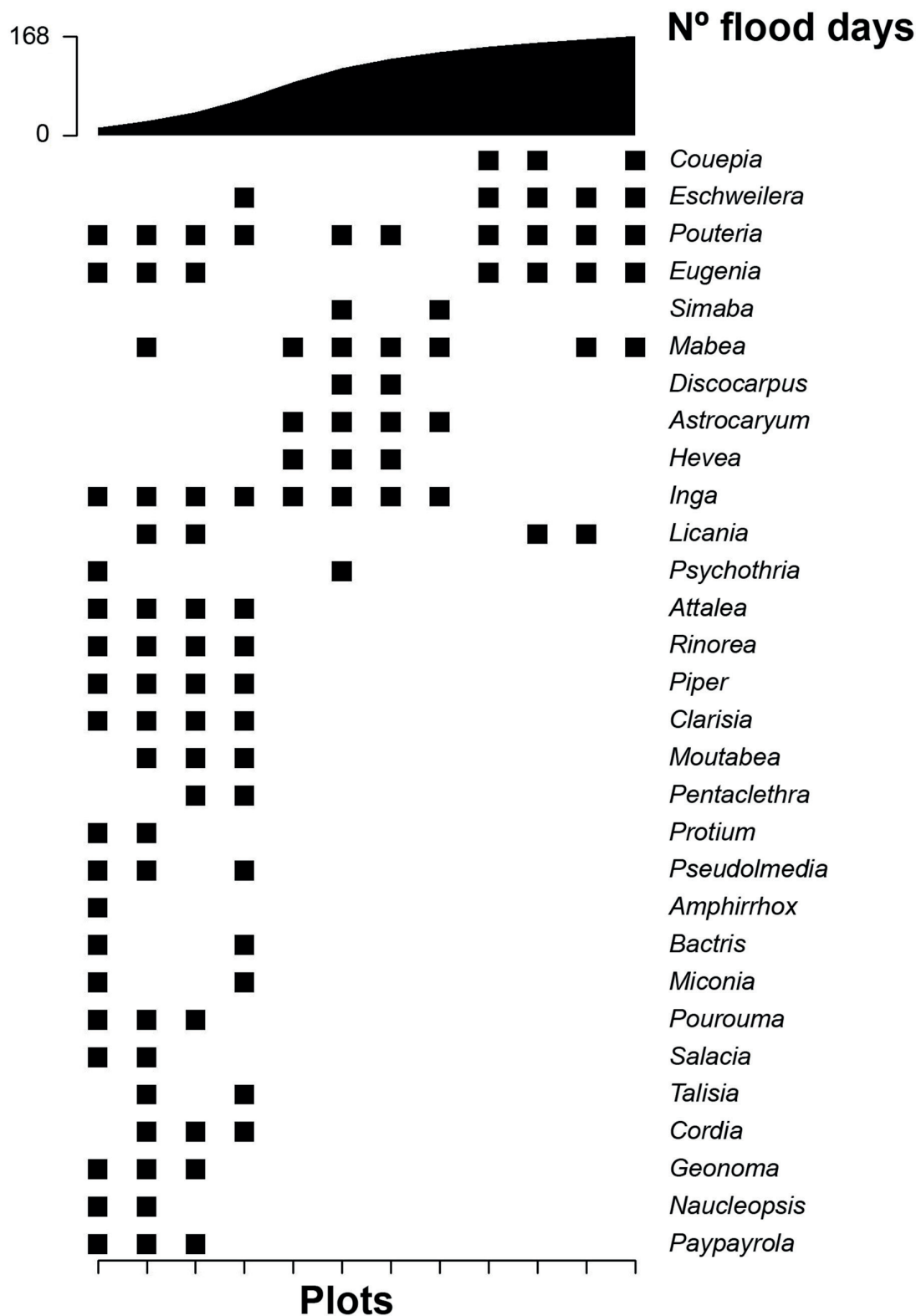


Figure S2. Distribution of the 30 tree dominant genera according to the flood days per year in igapó forest with irregular hydrological regime. The flood days were calculated using the flood height Negro River (for Uatumã River from the previous period to the Balbina Dam, when the Uatumã River presented a regular flood pulse – 1974 to 1986) provided by the National Water Agency (ANA – Hidroweb System 2018).



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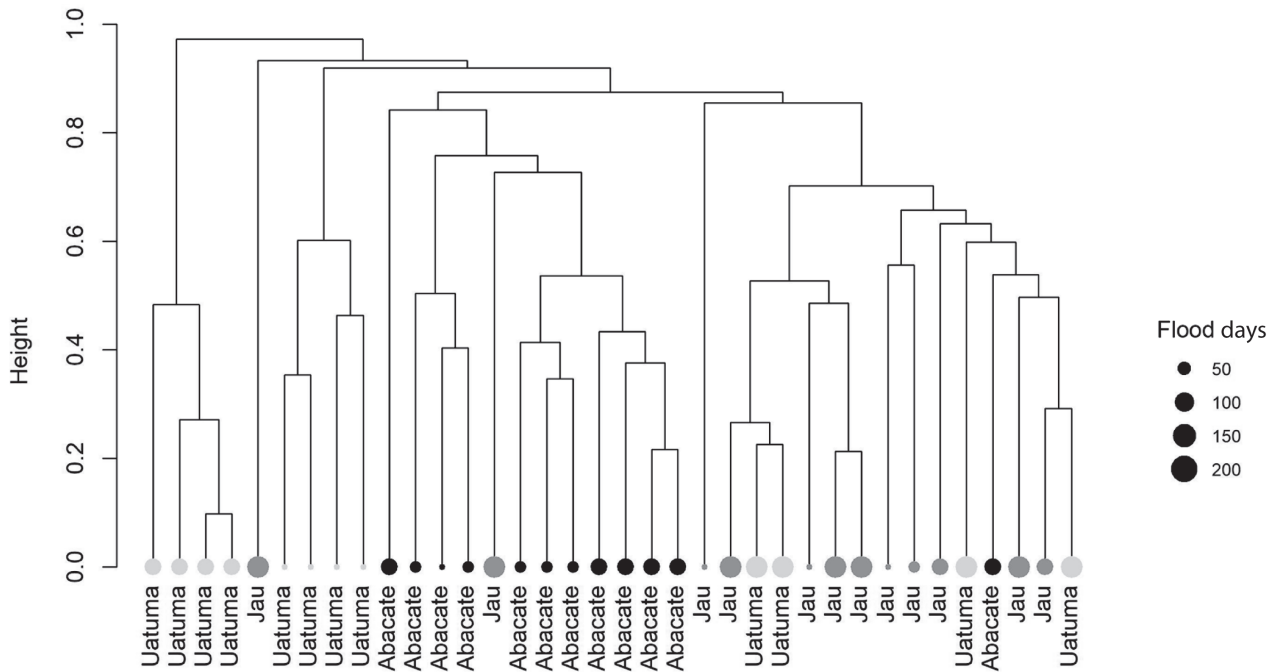


Figure S3. Dendrogram resulting from cluster analysis using total number of individuals, at genus level, in each plot of the sampled areas (Abacate, Jaú and Uatumã igapó forests). The plots are indicated in the dendrogram according to flood days per plot (50 to 200 days). The flood days were calculated using the flood height of the Jatapu River (for Abacate River – 2002 to 2016) Negro River (for Jaú River – 1974 to 2017; for Uatumã River from the previous period to the Balbina Dam, when the Uatumã River presented a regular flood pulse – 1974 to 1986) provided by the National Water Agency (ANA – Hidroweb System 2018).



Table S1. Families, genera and number of species found in the three igapó forests sampled according to flood days (above five individuals) in the areas of Uatumã Abacate and Jaú Rivers. Data from daily flood quotas provided by ANA (National Water Agency) were used: Of the Jatapu River from 2002 to 2016 (Abacate River); Manaus Harbor from 1974 to 1986 (Uatumã River) and Manaus Harbor from 1974 to 2017 (Jaú River).

Family/ Genus	Flood days	Uatumã	Abacate	Jaú	Family/ Genus	Flood days	Uatumã	Abacate	Jaú
Annonaceae Juss.					<i>Poecilanthe</i> Benth.	28 to 164		1	1
<i>Guatteria</i> Ruiz & Pav.	25 to 143	1	1	1	<i>Swartzia</i> Schreb.	25 to 196	1	2	3
<i>Unonopsis</i> R.E. Fr.	50 to 143		1		<i>Tachigali</i> Aubl.	28 to 164	1	1	2
<i>Xylopia</i> L.	28 to 88		1	2	<i>Zygia</i> P. Browne	25 to 83	1	1	
Apocynaceae Juss.					Humiriaceae A. Juss.				
<i>Aspidosperma</i> Mart. & Zucc.	28 to 111		1	1	<i>Sacoglottis</i> Mart.	50 to 130		1	
<i>Himatanthus</i> Willd. ex Schult.	50 to 158	1	1		Lauraceae Juss.				
Arecaceae Bercht. & J. Presl					<i>Ocotea</i> Aubl.	25 to 168	1	2	1
<i>Astrocaryum</i> G. Mey.	46 to 196	1	1	2	Lecythydaceae A. Rich.				
<i>Attalea</i> Kunth	25	1			<i>Allantoma</i> Miers	80 to 143		1	
<i>Bactris</i> Jacq. ex Scop.	25 to 88	1	1	1	<i>Eschweilera</i> Mart. ex DC.	25 to 196	2	1	1
<i>Geonoma</i> Willd.	25 to 88	1	1		Melastomataceae Juss.				
<i>Oenocarpus</i> Mart.	25 to 83	1	2		<i>Miconia</i> Ruiz & Pav.	25 to 89	1	1	2
Burseraceae Kunth					<i>Mouriri</i> Aubl.	25 to 143	1	1	1
<i>Protium</i> Burm. f.	25 to 88	2	1	1	<i>Tococa</i> Aubl.	89			1
Celastraceae R. Br.					Moraceae Gaudich.				
<i>Salacia</i> L.	25 to 102	1	1	1	<i>Clarisia</i> Ruiz & Pav.	25	2		
Chrysobalanaceae R. Br.					<i>Pseudolmedia</i> Trécul	25	1		
<i>Couepia</i> Aubl.	155 to 168	1		2	Myrtaceae Juss.				
<i>Licania</i> Aubl.	25 to 196	1	2	2	<i>Eugenia</i> L.	25 to 204	4	1	1
Clusiaceae Lindl.					Ochnaceae DC.				
<i>Garcinia</i> L.	28 to 129	1		1	<i>Elvasia</i> DC.	50 to 196		1	1
<i>Tovomita</i> Aubl.	28 to 196		1	3	<i>Quiina</i> Aubl.	80 to 196		1	1
Connaraceae R. Br.					Piperaceae Giseke				
<i>Rourea</i> Aubl.	25 to 28	1		1	<i>Piper</i> L.	25	1		
Euphorbiaceae Juss.					Polygalaceae Hoffmanns. & Link				
<i>Hevea</i> Aubl.	80 to 196	1	1	1	<i>Moutabea</i> Aubl.	25	1		
<i>Mabea</i> Aubl.	25 to 193	2	1	2	Rubiaceae Juss.				
Fabaceae Lindl.					<i>Duroia</i> L. f.	25 to 164	1	1	1
<i>Calliandra</i> Benth.	66 to 143		1		<i>Isertia</i> Schreb.	80 to 83		1	
<i>Cynometra</i> L.	80 to 196	1	1	1	Sapotaceae Juss.				
<i>Deguelia</i> Aubl.	80 to 196	1	1		<i>Pouteria</i> Aubl.	25 to 196	3	2	2
<i>Inga</i> Mill.	25 to 132	4			Simaroubaceae DC.				
<i>Macrobium</i> Schreb.	83 to 140	1	1	1	<i>Simaba</i> Aubl.	28 to 193	1		1
<i>Macrosamanea</i> Britton & Rose ex Britton & Killip	28 to 175		2	1	Violaceae Batsch				
<i>Ormosia</i> Jacks.	168 to 196	1		1	<i>Amphirrhox</i> Spreng.	25	1		
<i>Pentaclethra</i> Benth.	25	1			<i>Rinorea</i> Aubl.	25	1		

References

ANA – Agência Nacional de Águas. 2018. Sistema de Informações hidrológicas (Hidroweb). <http://hidroweb.ana.gov.br>

