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Ilyas Siddique, Ima Célia Guimarães Vieira, Susanne Schmidt, David Lamb, Cláudio José Reis Carvalho, Ricardo de Oliveira Figueiredo, Simon Blomberg, Eric A. Davidson. Year. Nitrogen and phosphorus additions negatively affect tree species diversity in tropical forest regrowth trajectories. *Ecology* 91:2121-2131.

Appendix C. Detailed responses of absolute species woody biomass.

TABLE C1. Fitted equation for *Rollinia exsucca* aboveground woody biomass (fixed effects displayed in Fig. 3a), with

$$\text{Woody}_{R.exsucca} = \alpha + \beta_1 \cdot \text{time} + \beta_2 \cdot \text{time}^2 + \beta_3 \cdot \text{density} + \beta_4 \cdot \text{time} \times \text{density} + \beta_5 \cdot \text{time}^2 \times \text{density} + \gamma_j + \gamma_k + \varepsilon$$

where

density = density of individuals of *R.exsucca*

(for further explanations and definitions of notation, see Appendix A)

i	α	β_1	β_2	β_3	β_4	β_5
treatment	intercept	time	time^2	density	time×density	time^2×density
Control	2.33	-1.30E-01	8.45E-04	4.28E-02	1.21E-02	-8.88E-05
N	5.28	1.05E-01	-1.43E-03	-8.21E-02	7.43E-03	-3.45E-05
P	2.37	7.12E-02	-7.26E-04	4.78E-02	2.97E-03	-4.06E-06
NP	1.51	6.51E-02	-4.41E-04	6.09E-02	5.66E-03	-3.59E-05

TABLE C2. Fitted equation for *Zanthoxylum rhoifolium* aboveground woody biomass (fixed effects displayed in Fig. 3b), with

$$\log(\text{Woody}_{Z.rhoifolium}+1) = \alpha + \beta_1 \cdot \text{time} + \beta_2 \cdot \text{time}^2 + \beta_3 \cdot \text{density} + \beta_4 \cdot \text{time} \times \text{density} + \beta_5 \cdot \text{time}^2 \times \text{density} + \gamma_j + \gamma_k + \varepsilon$$

where

density = density of individuals of *Z.rhoifolium*

(for further explanations and definitions of notation, see Appendix A)

i	α	β_1	β_2	β_3	β_4	β_5
treatment	intercept	time	$time^2$	density	time×density	$time^2$×density
–N	1.42E-02	8.53E-03	5.61E-05	-3.60E-03	2.47E-03	-4.88E-05
+N	2.37E-01	2.58E-02	-3.02E-04	4.74E-02	-4.28E-04	7.65E-06

TABLE C3. Fitted equation for *Banara guianensis* aboveground woody biomass (fixed effects displayed in Fig. 3c), with

$$\log(Woody_{B.guianensis}+0.1) = \alpha + \beta_1 \cdot time + \beta_2 \cdot time^2 + \beta_3 \cdot density + \beta_4 \cdot time \times density + \beta_5 \cdot time^2 \times density + \gamma_j + \gamma_k + \varepsilon$$

where

density = density of individuals of *B.guianensis*

(for further explanations and definitions of notation, see Appendix A)

i	α	β_1	β_2	β_3	β_4	β_5
treatment	intercept	time	$time^2$	density	time×density	$time^2$×density
–N	-2.28	2.36E-02	1.78E-04	1.29E-01	1.74E-03	-4.37E-05
+N	-2.12	4.22E-02	-3.16E-04	1.76E-01	0.37E-03	0.18E-05

TABLE C4. Fitted equation for pooled aboveground woody biomass of 55 non-responsive tree species (fixed effects displayed in Fig. 3d), with

$$\log(Woody_{non\text{-}responsive}+1) = \alpha + \beta_1 \cdot time + \beta_2 \cdot time^2 + \beta_3 \cdot density + \beta_4 \cdot time \times density + \beta_5 \cdot time^2 \times density + \gamma_j + \gamma_k + \varepsilon$$

where

density = density of individuals of 55 non-responsive tree species

(for further explanations and definitions of notation, see Appendix A)

i	α	β_1	β_2	β_3	β_4	β_5
treatment	intercept	time	time^2	density	time×density	time^2×density
–N	4.65E-01	2.21E-02	-4.85E-05	2.27E-02	-2.39E-04	1.84E-06
+N	3.06E-01	1.76E-02	2.51E-05	1.40E-02	0.90E-04	-1.23E-06