

1 **Supplementary material**

2 **Vegetation heterogeneity and temporal changes in a seasonally dry tropical forest**
3 **enclave in Northeast Brazil**

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17 Table S1. Summary of overall diversity, structure and dynamics parameters in the two
 18 censuses (2007 and 2014) in a Seasonally Dry Tropical Forest enclave in Januária, northern
 19 Minas Gerais, Brazil.

	2007	2014
<u><i>Diversity</i></u>		
Species richness	110	107
Shannon-Wiener Index (H')	3.447	3.424
Evenness (J')	0.733	0.733
<u><i>Vegetation structure</i></u>		
Total Basal Area (m ² ha ⁻¹)	28.246	28.689
Total Density (ind. ha ⁻¹)	900.833	953.333
<u><i>Vegetation dynamics</i></u>		
Mortality rate (%)	-	2.187
Recruitment rate (%)	-	2.975

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22 Table S2. List of species and authority names measured during two censuses (2007 and 2014) in a Seasonally Dry Tropical Forest
 23 enclave in Januária, northern Minas Gerais, Brazil. The abbreviations R% = relative recruitment and M% = relative mortality (see
 24 Methods section in main text).

FAMILY	Species	Relative abundance (%)		Basal area (%)		M(%)	R(%)
		2007	2014	2007	2014		
FABACEAE	<i>Acosmium lentiscifolium</i> Schott	1.295	1.136	1.325	1.214	0.185	0.093
FABACEAE	<i>Albizia polycephala</i> (Benth.) Killip	0.185	0.175	0.438	0.490	-	-
SAPINDACEAE	<i>Allophylus racemosus</i> Sw.	0.093	0.087	0.013	0.019	-	-
RUBIACEAE	<i>Alseis pickelii</i> Pilger & Schmale	0.185	0.087	0.193	0.092	0.093	-
FABACEAE	<i>Amburana cearensis</i> (Allemão) A.C.Sm.	0.278	0.262	0.311	0.354	-	-
FABACEAE	<i>Anadenanthera colubrina</i> (Vell.) Brenan	0.833	0.699	1.498	1.631	0.093	-
ANNONACEAE	<i>Annona leptopetala</i> (R.E.Fr.) H.Rainer	0.648	0.787	0.075	0.099	0.093	0.278
ARALIACEA	<i>Aralia warmingiana</i> (Marchal) J.Wen	0.278	0.612	0.299	0.404	-	0.370
APOCYNACEAE	<i>Aspidosperma multiflorum</i> A.DC.	0.278	0.262	0.246	0.270	-	-
APOCYNACEAE	<i>Aspidosperma pyriforme</i> Mart.	0.370	0.350	0.271	0.289	-	-
ANACARDIACEAE	<i>Astronium fraxinifolium</i> Schott ex Spreng.	1.850	1.661	1.759	1.397	0.185	0.093

FABACEAE	<i>Blanchetiodendron blanchetii</i> (Benth.) Barneby & J.W.Grimes	0.093	0.087	0.703	0.755	-	-
MORACEAE	<i>Brosimum gaudichaudii</i> Trécul	0.185	0.524	0.014	0.036	-	0.370
FABACEAE	<i>Calliandra foliolosa</i> Benth.	-	0.087	-	0.004	-	0.093
VOCHYSIACEAE	<i>Callisthene fasciculata</i> (Spreng.) Mart.	0.278	0.175	0.070	0.059	0.093	-
MYRTACEAE	<i>Campomanesia velutina</i> (Cambess.) O.Berg	0.463	0.524	0.191	0.234	-	0.093
SALICACEAE	<i>Casearia rupestris</i> Eichler	1.573	0.787	0.286	0.167	0.833	0.093
SALICACEAE	<i>Casearia selloana</i> Eichl.	2.035	1.836	0.789	0.854	0.185	0.093
MALVACEAE	<i>Cavanillesia umbellata</i> Ruiz & Pav.	0.925	1.136	21.987	23.597	-	0.278
MELIACEAE	<i>Cedrela fissilis</i> Vell.	0.278	0.262	0.260	0.361	-	-
CANNABACEAE	<i>Celtis brasiliensis</i> (Gardner) Planch.	0.185	0.087	0.059	0.031	0.093	-
FABACEAE	<i>Centrolobium sclerophyllum</i> H.C.Lima	0.185	-	0.495	-	0.185	-
CACTACEAE	<i>Cereus jamacaru</i> DC.	0.093	0.087	0.079	0.114	-	-
RUBIACEAE	<i>Chomelia brasiliana</i> A.Rich.	0.185	0.175	0.038	0.031	-	-
EUPHORBIACEAE	<i>Cnidoscolus oligandrus</i> (Müll.Arg.) Pax	1.943	2.098	2.879	3.050	0.370	0.648
POLYGONACEAE	<i>Coccoloba alnifolia</i> Casar.	0.093	-	0.060	-	0.093	-
COMBRETACEAE	<i>Combretum duarteanum</i> Cambess.	17.299	15.909	10.497	11.087	1.388	0.925
COMBRETACEAE	<i>Combretum leprosum</i> Mart.	0.185	0.262	0.114	0.151	-	0.093
BURSERACEAE	<i>Commiphora leptophloeus</i> (Mart.) J.B.Gillett	2.405	2.710	3.659	3.875	0.093	0.555

FABACEAE	<i>Copaifera langsdorffii</i> Desf.	0.093	-	0.007	-	0.093	-
BORAGINACEAE	<i>Cordia glabrata</i> (Mart.) A.DC.	0.093	0.087	0.010	0.012	-	-
BORAGINACEAE	<i>Cordia incognita</i> Gottschling & J.J.Mill.	0.093	0.087	0.047	0.051	-	-
BORAGINACEAE	<i>Cordia oncocalyx</i> Allemão	0.093	0.087	0.055	0.054	-	-
BORAGINACEAE	<i>Cordia trichotoma</i> (Vell.) Arrab. ex Steud.	0.093	0.087	0.035	0.037	-	-
DILLENACEAE	<i>Curatella americana</i> L.	0.185	0.087	0.093	0.036	0.093	-
CAPPARACEAE	<i>Cynophalla flexuosa</i> (L.) J.Presl	0.463	0.350	0.168	0.178	0.093	-
ANACARDIACEAE	<i>Cyrtocarpa caatingae</i> J.D.Mitch. & Daly	0.463	0.437	0.340	0.413	-	-
FABACEAE	<i>Dalbergia acuta</i> Benth.	0.278	0.524	0.077	0.128	-	0.278
FABACEAE	<i>Dalbergia cearensis</i> Ducke	0.925	1.049	0.186	0.295	-	0.185
SAPINDACEAE	<i>Dilodendron bipinnatum</i> Radlk.	1.203	1.136	1.947	2.386	-	-
FABACEAE	<i>Diploptropis ferruginea</i> Benth.	0.093	0.175	0.024	0.058	-	0.093
ERYTHROXYLACEAE	<i>Erythroxylum betulaceum</i> Mart.	0.648	0.350	0.100	0.064	0.278	-
ERYTHROXYLACEAE	<i>Erythroxylum nummularia</i> Peyr.	-	0.087	-	0.004	-	0.093
MYRTACEAE	<i>Eugenia dysenterica</i> DC.	0.185	0.087	0.137	0.042	0.093	-
MYRTACEAE	<i>Eugenia florida</i> DC.	0.185	0.087	0.026	0.009	0.093	-
MYRTACEAE	<i>Eugenia ligustrina</i> (Sw.) Willd.	3.423	2.710	0.966	0.589	0.833	0.278
MYRTACEAE	<i>Eugenia sonderiana</i> O.Berg	0.093	0.087	0.010	0.013	-	-
MYRTACEAE	<i>Eugenia uniflora</i> L.	12.396	12.325	3.307	3.130	1.018	1.665

MORACEAE	<i>Ficus nymphaeifolia</i> P.Miller	0.185	0.175	0.173	0.195	-	-
CELASTRACEAE	<i>Fraunhoferia multiflora</i> Mart.	0.093	-	0.095	-	0.093	-
BIGNONIACEAE	<i>Fridericia bahiensis</i> (Schauer ex. DC.) L.G.Lohmann	0.185	0.087	0.028	0.020	0.093	-
FABACEAE	<i>Goniorrhachis marginata</i> Taub.	3.608	3.322	13.343	12.013	0.185	0.093
NYCTAGINACEAE	<i>Guapira opposita</i> (Vell.) Reitz	0.185	-	0.166	-	0.185	-
FABACEAE	<i>Guibourtia hymenaefolia</i> (Moric.) J.Léonard	-	0.087	-	0.009	-	0.093
BIGNONIACEAE	<i>Handroanthus impetiginosus</i> (Mart. ex DC.) Mattos	0.648	0.612	1.890	2.127	-	-
BIGNONIACEAE	<i>Handroanthus ochraceus</i> (Cham.) Mattos	0.278	0.262	0.147	0.154	-	-
MALVACEAE	<i>Helicteres brevispira</i> A.St.-Hil.	0.093	0.087	0.007	0.008	-	-
FABACEAE	<i>Holocalyx balansae</i> Micheli	0.093	0.087	0.088	0.121	-	-
FABACEAE	<i>Hymenaea velutina</i> Ducke	-	0.087	-	0.006	-	0.093
BIGNONIACEAE	<i>Jacaranda brasiliana</i> (Lam.) Pers.	0.185	0.175	0.124	0.144	-	-
CARICACEAE	<i>Jacaratia corumbensis</i> Kuntze	0.093	0.262	0.007	0.021	-	0.185
FABACEAE	<i>Leptolobium dasycarpum</i> Vogel	0.093	0.087	0.138	0.140	-	-
FABACEAE	<i>Leucochloron limae</i> Barneby & J.W.Grimes	0.278	0.262	1.022	1.051	-	-
FABACEAE	<i>Lonchocarpus campestris</i> Mart. ex Benth.	0.093	0.087	0.069	0.072	-	-

FABACEAE	<i>Lonchocarpus montanus</i> A.M.G.Azevedo ex M.J.Silva & A.M.G.Azevedo	0.093	0.087	0.029	0.054	-	-
FABACEAE	<i>Lonchocarpus sericeus</i> (Poir.) DC.	0.093	-	0.070	-	0.093	-
FABACEAE	<i>Machaerium acutifolium</i> Vogel	1.665	1.836	0.590	0.773	0.093	0.370
FABACEAE	<i>Machaerium brasiliense</i> Vogel	0.093	-	0.021	-	0.093	-
FABACEAE	<i>Machaerium hirtum</i> (Vell.) Stellfeld	0.185	0.175	0.068	0.074	-	-
FABACEAE	<i>Machaerium punctatum</i> (Poir.) Pers.	0.093	0.087	0.007	0.011	-	-
FABACEAE	<i>Machaerium scleroxylon</i> Tul.	0.648	0.699	0.981	1.037	-	0.093
FABACEAE	<i>Machaerium villosum</i> Vogel	0.093	0.087	0.323	0.324	-	-
SAPINDACEAE	<i>Magonia pubescens</i> A.St.-Hil.	0.463	0.175	0.751	0.213	0.278	-
CELASTRACEAE	<i>Maytenus quadrangulata</i> (Schrad.) Loes.	1.110	0.787	0.183	0.206	0.278	-
ANACARDIACEAE	<i>Myracrodruon urundeuva</i> Allemão	2.775	2.360	6.627	4.770	0.370	0.093
MYRTACEAE	<i>Myrciaria tenella</i> (DC.) O.Berg	0.278	0.262	0.052	0.062	-	-
FABACEAE	<i>Piptadenia viridiflora</i> (Kunth) Benth.	0.185	0.175	0.448	0.538	-	-
FABACEAE	<i>Plathymenia reticulata</i> Benth.	0.185	0.087	0.679	0.491	0.093	-
FABACEAE	<i>Platymiscium floribundum</i> Vogel	0.093	0.087	0.006	0.019	-	-
FABACEAE	<i>Platymiscium pubescens</i> Micheli	0.093	0.087	0.010	0.019	-	-
FABACEAE	<i>Platypodium elegans</i> Vogel	-	0.087	-	0.009	-	0.093
FABACEAE	<i>Poeppegia procera</i> C.Presl.	0.648	0.699	0.345	0.769	0.093	0.185

FABACEAE	<i>Poincianella pluvirosa</i> (DC.) L.P.Queiroz	7.308	9.003	4.720	5.072	0.740	2.960
SALICACEAE	<i>Prockia crucis</i> P.Browne ex L.	-	0.175	-	0.009	-	0.185
MALVACEAE	<i>Pseudobombax tomentosum</i> (Mart. & Zucc.) A.Robyns	0.278	0.262	0.590	0.579	-	-
FABACEAE	<i>Pterocarpus zehntneri</i> Harms	0.093	-	0.406	-	0.093	-
MALPIGHIACEAE	<i>Ptilochaeta bahiensis</i> Turcz.	0.463	0.699	0.076	0.097	0.093	0.370
MALPIGHIACEAE	<i>Ptilochaeta glabra</i> Nied.	0.185	0.175	0.020	0.025	-	-
VOCHYSIACEAE	<i>Qualea grandiflora</i> Mart.	0.185	0.087	0.055	0.017	0.093	-
RUBIACEAE	<i>Randia armata</i> (Sw.) DC.	1.018	1.836	0.111	0.197	0.185	1.110
RUBIACEAE	<i>Randia calycina</i> Cham.	0.278	0.087	0.050	0.030	0.185	-
RHAMNACEAE	<i>Rhamnidium molle</i> Reissek	0.093	0.087	0.021	0.025	-	-
POLYGONACEAE	<i>Ruprechtia fagifolia</i> Meisn.	0.185	0.175	0.025	0.031	-	-
POLYGONACEAE	<i>Ruprechtia laxiflora</i> Meisn.	0.185	0.175	0.076	0.203	-	-
EUPHORBIACEAE	<i>Sapium argutum</i> (Müll.Arg.) Huber	7.956	8.566	0.899	0.959	3.145	4.255
PHYLLANTHACEAE	<i>Savia dictyocarpa</i> Müll.Arg.	0.185	0.175	0.024	0.016	0.093	0.093
ANACARDIACEAE	<i>Schinopsis brasiliensis</i> Engl.	0.093	0.087	0.008	0.013	-	-
SCHOEPFIACEAE	<i>Schoepfia brasiliensis</i> A.DC.	0.093	0.087	0.068	0.059	-	-
FABACEAE	<i>Senegalia martii</i> (Benth.) Seigler & Ebinger	0.278	0.699	0.060	0.145	0.093	0.555
FABACEAE	<i>Senna spectabilis</i> (DC.) H.S.Irwin & Barneby	0.278	0.350	0.030	0.115	0.093	0.185

SIMAROUBACEAE	<i>Simarouba versicolor</i> A.St.-Hil.	0.093	0.087	0.029	0.036	-	-
ANACARDIACEAE	<i>Spondias mombin</i> L.	0.185	0.175	0.280	0.536	-	-
ANACARDIACEAE	<i>Spondias venulosa</i> Mart. ex Engl.	0.833	0.874	1.600	1.813	-	0.093
MALVACEAE	<i>Sterculia striata</i> A.St.-Hill. & Naudin	0.093	0.175	0.123	0.031	-	0.093
FABACEAE	<i>Swartzia flaemingii</i> Vogel	0.093	0.087	0.009	0.010	-	-
FABACEAE	<i>Sweetia fruticosa</i> Spreng	0.740	0.787	0.921	0.958	-	0.093
ARECACEAE	<i>Syagrus oleracea</i> (Mart.) Becc.	0.093	-	0.073	-	0.093	-
BIGNONIACEAE	<i>Tabebuia aurea</i> (Manso) Benth. & Hook.f. ex S.Moore	0.185	0.175	0.352	0.376	-	-
BIGNONIACEAE	<i>Tabebuia chrysotricha</i> Mart. ex A.DC.	1.295	2.360	2.620	2.824	-	1.203
BIGNONIACEAE	<i>Tabebuia roseoalba</i> (Ridl.) Sandwith	0.555	0.524	0.071	0.086	0.093	0.093
COMBRETACEAE	<i>Terminalia argentea</i> (Cambess.) Mart.	0.093	0.087	0.033	0.034	-	-
MELIACEAE	<i>Trichilia casaretti</i> C.DC.	5.365	5.157	1.202	1.109	0.740	0.833
MELIACEAE	<i>Trichilia hirta</i> L.	0.370	0.350	0.199	0.215	0.093	0.093
FABACEAE	<i>Vatairea macrocarpa</i> (Benth.) Ducke	0.093	0.087	0.011	0.013	-	-
LAMIACEAE	<i>Vitex laciniosa</i> Turcz.	0.093	0.087	0.050	0.051	-	-
OLACACEAE	<i>Ximenia americana</i> L.	0.093	0.087	0.560	0.701	-	-

26 Table S3. Squared correlation coefficients (R^2) and P values of soil factors fitted as vectors
 27 in the species ordination of trees (2007 census) in a Seasonally Dry Tropical Forest enclave
 28 in Januária, northern Minas Gerais, Brazil. See Figure 2 in the main text for the ordination
 29 with significant soil vectors fitted.

	R^2	P
pH	0.1887	0.07
Phosphorus	0.8197	0.001***
Remaining Phosphorus	0.0234	0.721
Potassium	0.2618	0.016*
Calcium	0.2817	0.008**
Magnesium	0.068	0.48
H+ Al	0.0334	0.61
Sum of bases	0.0951	0.262
Base saturation	0.2928	0.007**
Organic matter	0.2025	0.038*
Gravel content	0.0423	0.677
Sand content	0.0075	0.963
Silt content	0.5614	0.001***
Clay content	0.5914	0.001***