Table S1. Historic of the crop systems applied in each area.

Year	PAS	NT1	NT2	EUC	NF
2004	Cerrado	Cerrado	Cerrado	Cerrado	Cerrado
2005	Soybean	Soybean	Cerrado	Cerrado	Cerrado
2006	Soybean	Soybean	Soybean/Mombasa/Cattle	Eucalyptus/ Rice and cowpea	Cerrado
2007	Maize	Maize	Soybean/Mombasa/Cattle	Soybean/ Mombasa	Cerrado
2008	Soybean	Soybean	Soybean/Mombasa/Cattle	Cattle	Cerrado
2009	Millet	Millet	Millet/Cattle	Cattle	Cerrado
2010	Maize	Maize	Soybean/Millet	Fallow*	Cerrado
2011	Maize	Maize	Soybean/Millet	Fallow*	Cerrado
2012	Cotton	Cotton	Cotton	Fallow*	Cerrado
2013	Maize	Maize	Maize	Fallow*	Cerrado
2014	Soybean	Soybean	Soybean	Fallow*	Cerrado
2015	Maize	Maize	Maize	Fallow*	Cerrado
2016	Mombasa	Maize	Mombasa	Fallow*	Cerrado
2017	Mombasa	Soybean/ Maize	Maize	Fallow*	Cerrado

PAS: Pasture species (Mombasa); NT1 and NT2: No-tillage system; EUC: Eucalyptus; NF: Native Cerrado forest. Cattle: Cattle under stocking rate of 2.4 animal unit ha^{-1}. * Fallow from animal and agricultural crop inputs, with the presence of mombasa grass between the Eucaliptus rows.

Table S2. Chemical properties (0-0.10 m depth) of the soils.

Area	pH	P	K	Ca	Mg	Al	H+Al	Sand	Silt	Clay

		(mg dm^{-3})		($cmol_c$ dm^{-3})				(g kg^{-1})		
PAS	5.0	37.8	121.2	5.08	0.8	0.04	5.1	775	37	188
NT1	4.8	27.7	82.1	3.81	0.5	0.07	4.9	594	270	136
NT2	5.0	38.8	78.2	3.33	0.7	0.06	3.3	687	184	129
EUC	4.7	58.2	50.8	2.79	0.9	0.11	5.2	518	326	156
NF	3.8	2.5	35.2	0.65	0.3	1.30	8.3	639	218	143

PAS: Pasture species (Mombasa); NT1 and NT2: No-tillage system; EUC: Eucalyptus; NF: Native Cerrado forest.

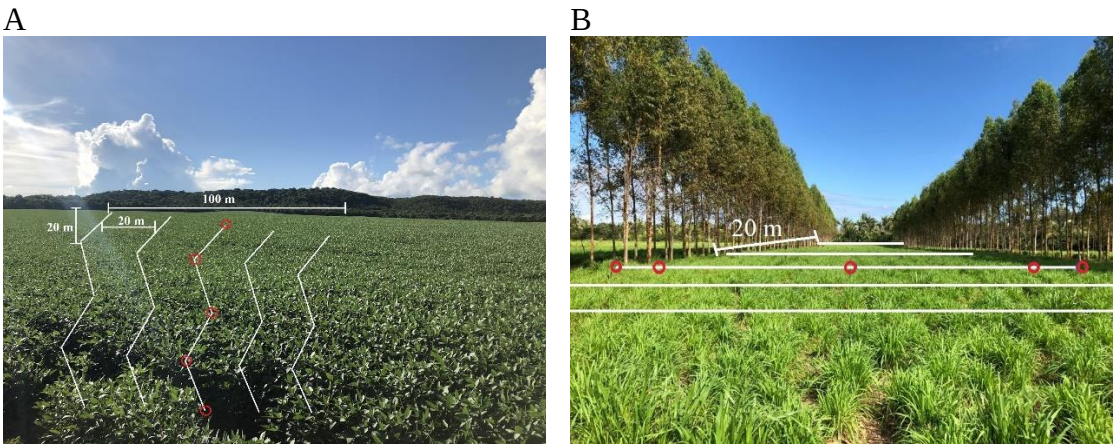

Figure S1. Sampling design. In NT1, NT2, PAS and NF, five 100-m transects distant approximately 20 m between them were sampled (A); In EUC, five 20-m spaced transects considered the transition from eucalyptus rows and spaces between rows (B). Five samples were taken per transect (red circles) and pooled to form a composite sample.