

Supplementary Data

The influence of tropical pasture improvement on animal performance, nitrogen cycling, and greenhouse gas emissions in the Brazilian Atlantic Forest

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Table S1. - Nitrogen (N) balance, N partition in urine, and daily weight in pastures of the *Brachiaria brizantha* cultivar Marandu subjected to different forms of nitrogen fertilization in cool season.

Parameter	Forage consumption and excreta production					
	T1	T2	T3	T4	T5	T6
	kg/ha.season					
Dry matter intake	5244	4864	5670	4794	4649	1569
Fecal production (dry matter)	2095	1841	1934	1804	1832	205
Urinary volume	7331	6853	7847	6637	9183	2518
Live weight gain	120	168	217	133	63	24
	kg N/ha.season					
Dry matter intake	83	79	89	74	65	20
Fecal production (dry matter)	33	26	31	28	25	9
Urinary volume	39	40	45	35	38	10
Incorporated in animal ^a	3	4	5	3	2	1
Retained in animal ^b	7	9	8	8	0	1
	% of N Consumed					
Dry matter intake	100	100	100	100	100	100
In feces (dry mass)	40	32	35	38	39	45
In urine	48	51	50	47	58	47
Incorporated in animal	4	5	6	5	2	3
Retained in animal	12	11	9	2	3	4

T1: Marandu grass with 150 kg N/ha; T2: Marandu grass with 120 kg N/ha; T3: Marandu grass with *Arachis pintoi*; T4: Marandu grass with *Desmodium heterocarpo*; T5: Marandu grass without N fertilization; T6: degraded pasture.

^a N exported in the animal carcass = live weight gain × 0.025 (Scholefield et al., 1991; Boddey et al., 2004). ^b Calculated from consumed N – N excreted in feces + N excreted in urine (Spanghero e Kowalski, 1997)

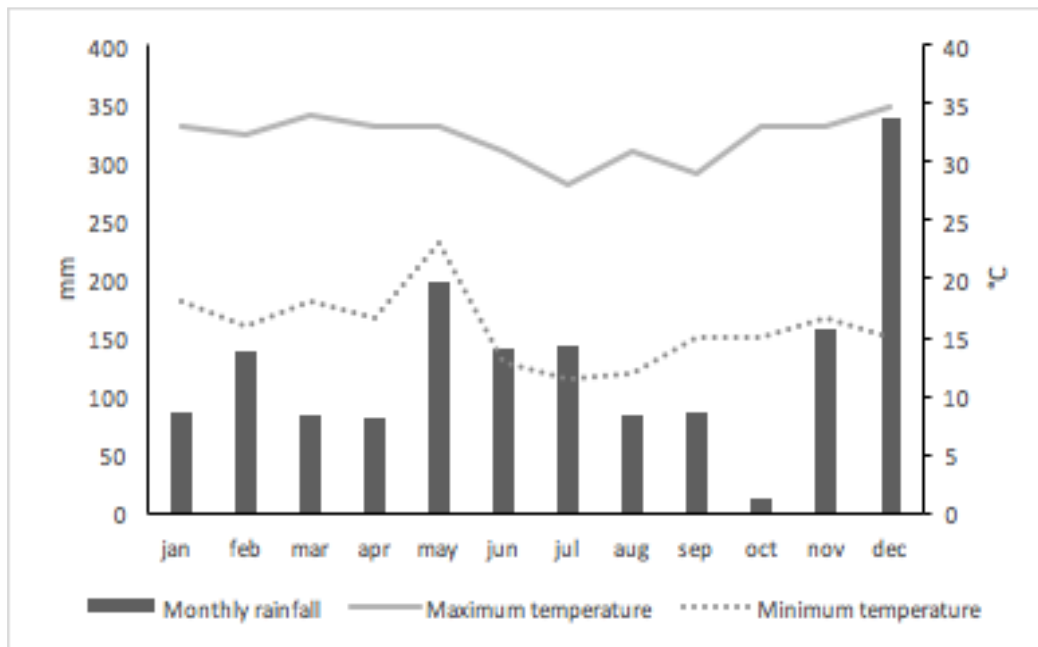


Fig S1. Total monthly rainfall and mean monthly maximum and minimum temperatures during the experimental period in Itabela, southern Bahia, Brazil, 2017.