

**Supplementary Material**

**Tussock and tiller population dynamics on rotationally stocked Piatã palisadegrass (*Urochloa brizantha*) in an integrated crop–livestock–forestry system**

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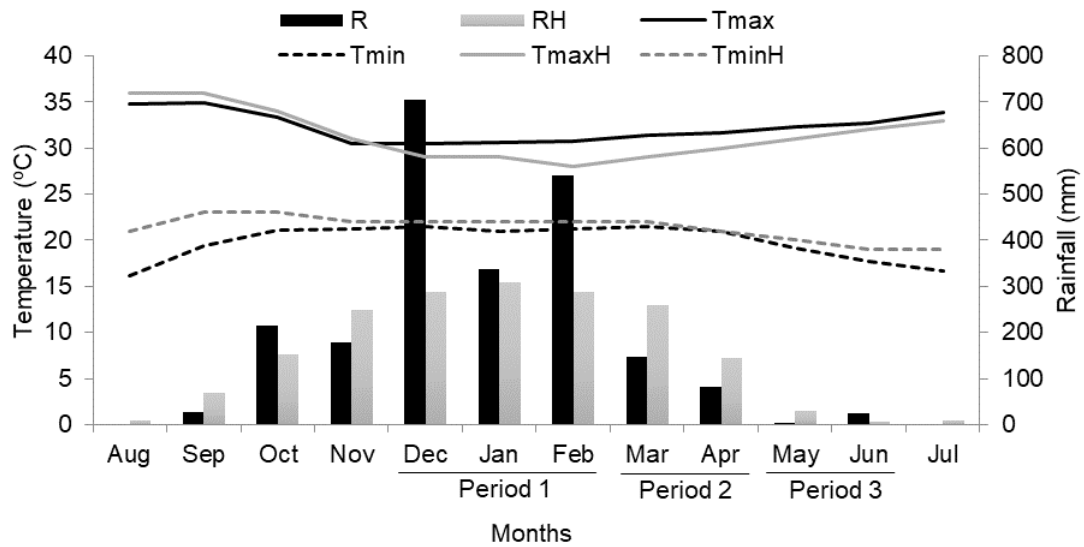
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**Supplementary Table S1. Average daily transmittance of photosynthetically active radiation (relative to NS shading regime) of rotationally stocked Piatã palisadegrass subjected to shading regimes in an integrated crop–livestock–forestry system**

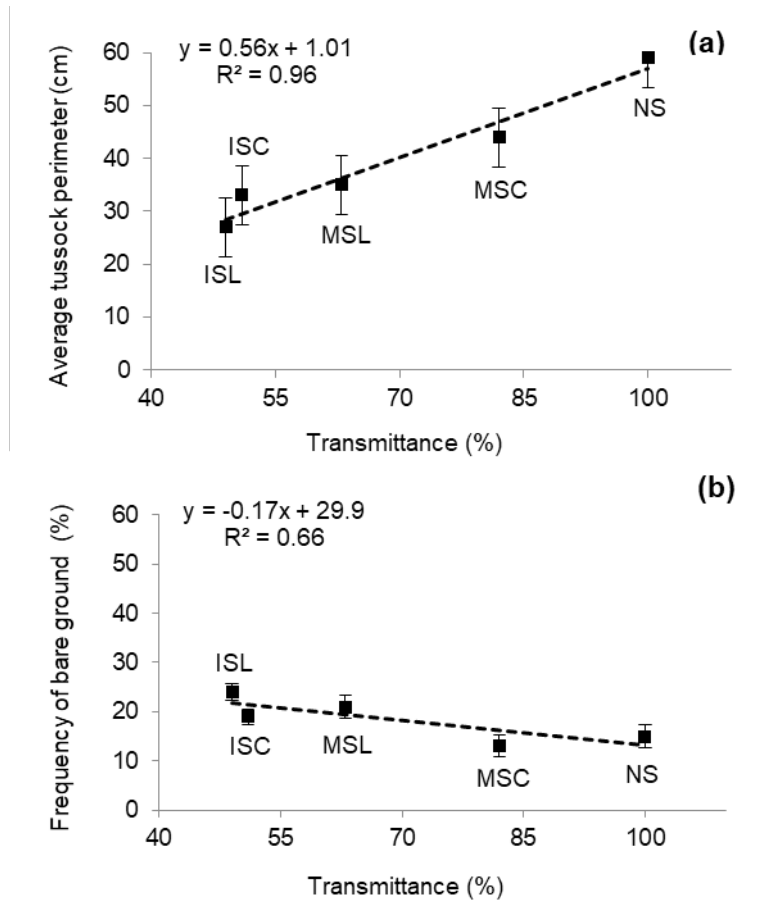
NS: no shading; MS: moderate shading; IS: intense shading

Shading regime/ shading strip	Sampling period			Mean
	P <sub>1</sub>	P <sub>2</sub>	P <sub>3</sub>	
NS	100.0	100.0	100.0	100.0
MS central	83.1	82.8	79.9	81.9
MS lateral	61.2	61.2	66.2	62.9
IS central	65.3	65.0	19.9	50.1
IS lateral	53.9	56.7	33.4	48.0

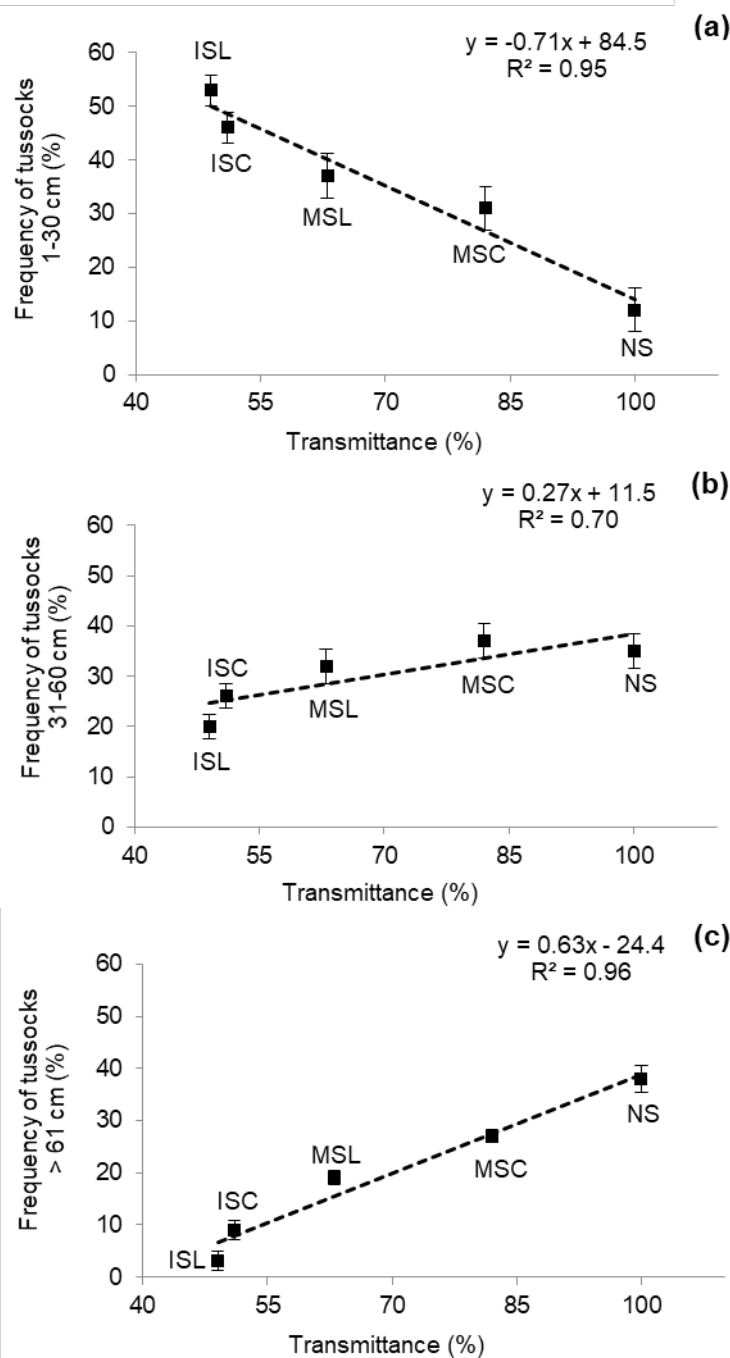
**Supplementary Figure S1.** Monthly rainfall (R), maximum average air temperature (Tmax) and minimum average air temperature (Tmin) from August 2013 to June 2014 and historical records (1985–2015) of rainfall (RH), maximum average air temperature (TmaxH) and minimum average air temperature (TminH) at study site in Sinop, MT, Brazil. Sampling periods are indicated.



**Supplementary Figure S2.** Average tussock perimeter (a) and frequency of bare ground (b) of rotationally stocked Piatã palisadegrass according to levels of photosynthetically active radiation transmittance. NS: no shading; MSC: moderate shading central strip; MSL: moderate shading lateral strip; ISC: intense shading central strip; ISL: intense shading lateral strip.



**Supplementary Figure S3.** Frequency of tussocks with perimeter measuring from 1 to 30 cm (a), from 31 to 60 cm (b), and larger than 61 cm (c) of rotationally stocked Piatã palisadegrass according to levels of photosynthetically active radiation transmittance. NS: no shading; MSC: moderate shading central strip; MSL: moderate shading lateral strip; ISC: intense shading central strip; ISL: intense shading lateral strip.



**Supplementary Figure S4.** Tiller population density of rotationally stocked Piatã palisadegrass according to levels of photosynthetically active radiation transmittance. NS: no shading; MSC: moderate shading central strip; MSL: moderate shading lateral strip; ISC: intense shading central strip; ISL: intense shading lateral strip.

