

## Supplementary material

**Table S1.** Effect of the interaction between the application of the *Trichoderma* spp. Isolates and the biofortification treatment on fiber content, measured through Neutral Detergent Fiber (NDF) Acid Detergent Fiber, Acid Detergent Lignin (ADL) and the content of total ashes. Additionally, the percentage of digestibility of the treated plants is shown.

Trich.	Biof.	NDF (%)	ADF (%)	ADL (%)	Ashes (%)	Digestibility (%)
T05	No Zn	31.9 ± 0.8 de	13.0 ± 1.0 ef	11.5 ± 0.6 a	1.07 ± 0.04 cdef	78.8 ± 0.7 ab
	S	30.6 ± 0.7 de	13.5 ± 0.6 ef	8.0 ± 0.4 cde	1.00 ± 0.07 cdefg	78.4 ± 0.5 ab
	F	38.5 ± 2.9 bcd	25.7 ± 2.4 ab	8.8 ± 0.6 bc	1.25 ± 0.03 bcd	68.9 ± 1.9 ef
	SF	24.5 ± 1.8 e	15.7 ± 1.7 cdef	9.0 ± 0.2 bc	0.67 ± 0.06 efghi	76.6 ± 1.3 abcd
T09	No Zn	34.2 ± 1.0 cde	16.3 ± 1.8 bcdef	8.6 ± 0.1 bcd	0.50 ± 0.02 ghij	76.2 ± 1.4 abcde
	S	32.1 ± 2.3 de	17.9 ± 2.5 bcdef	8.9 ± 0.4 bc	0.79 ± 0.09 defgh	74.9 ± 1.9 abcde
	F	34.0 ± 3.7 cde	24.9 ± 3.7 abc	6.2 ± 0.3 ef	1.20 ± 0.09 cd	69.5 ± 2.9 def
	SF	28.9 ± 3.6 de	24.1 ± 3.2 abcd	7.8 ± 0.5 cde	0.91 ± 0.02 cdefg	70.1 ± 2.5 cdef
T14	No Zn	32.0 ± 4.2 de	8.4 ± 4.0 f	7.7 ± 0.7 cde	1.37 ± 0.05 bc	82.3 ± 3.1 a
	S	42.4 ± 1.1 abc	30.9 ± 1.0 a	8.6 ± 0.5 bcd	1.41 ± 0.04 bc	64.9 ± 0.8 f
	F	35.1 ± 6.4 cd	21.9 ± 6.2 abcde	11.1 ± 0.2 a	1.20 ± 0.01 cd	71.8 ± 4.8 bcdef
	SF	33.1 ± 2.8 cde	19.9 ± 2.9 bcde	6.7 ± 0.3 def	1.13 ± 0.07 cde	73.4 ± 2.3 bcde
T18	No Zn	31.3 ± 8.7 de	20.2 ± 7.8 bcde	7.6 ± 0.9 cde	1.74 ± 0.14 ab	73.2 ± 6.1 bcde
	S	35.3 ± 2.5 cd	18.5 ± 2.8 bcde	8.2 ± 0.6 cd	1.08 ± 0.07 cde	74.5 ± 2.2 bcde
	F	32.5 ± 2.8 cde	18.4 ± 3.4 bcde	7.3 ± 1.6 cdef	0.57 ± 0.01 fghij	74.6 ± 2.7 bcde
	SF	51.7 ± 3.8 a	30.2 ± 3.8 a	8.7 ± 0.3 bc	1.33 ± 0.05 bc	65.4 ± 2.9 f
T0	No Zn	33.1 ± 3.2 cde	20.1 ± 3.2 bcde	10.5 ± 0.8 ab	0.4 ± 0.1 hij	73.2 ± 2.5 bcde
	S	32.3 ± 1.2 cde	14.8 ± 1.1 def	3.5 ± 0.5 g	0.34 ± 0.03 hij	77.4 ± 0.8 abc
	F	48.6 ± 2.5 ab	30.4 ± 2.7 a	10.4 ± 1.2 ab	1.13 ± 0.03 cde	65.2 ± 2.1 f
	SF	30.7 ± 1.4 de	20.0 ± 1.4 bcde	11.0 ± 0.8 a	1.92 ± 0.82 a	73.3 ± 1.1 bcde
Tc	No Zn	35.8 ± 5.4 cd	30.9 ± 5.2 a	10.2 ± 0.3 ab	0.24 ± 0.01 ij	64.8 ± 4.0 f
	S	30.7 ± 2.3 de	15.9 ± 2.7 cdef	5.7 ± 0.1 f	0.16 ± 0.01 j	76.5 ± 2.1 abcd
	F	31.3 ± 2.2 de	20.4 ± 1.9 bcde	7.7 ± 1.3 cde	1.10 ± 0.02 cde	73.1 ± 1.5 bcde
	SF	31.6 ± 5.3 de	20.5 ± 4.5 bcde	8.7 ± 0.2 bc	0.36 ± 0.02 hij	73.0 ± 3.5 bcde

Values are expressed as mean (n = 5) ± standard error. For each parameter, different letters (if any) indicate significant differences according to LSD (least significant difference) test at  $\alpha = 0.05$ .

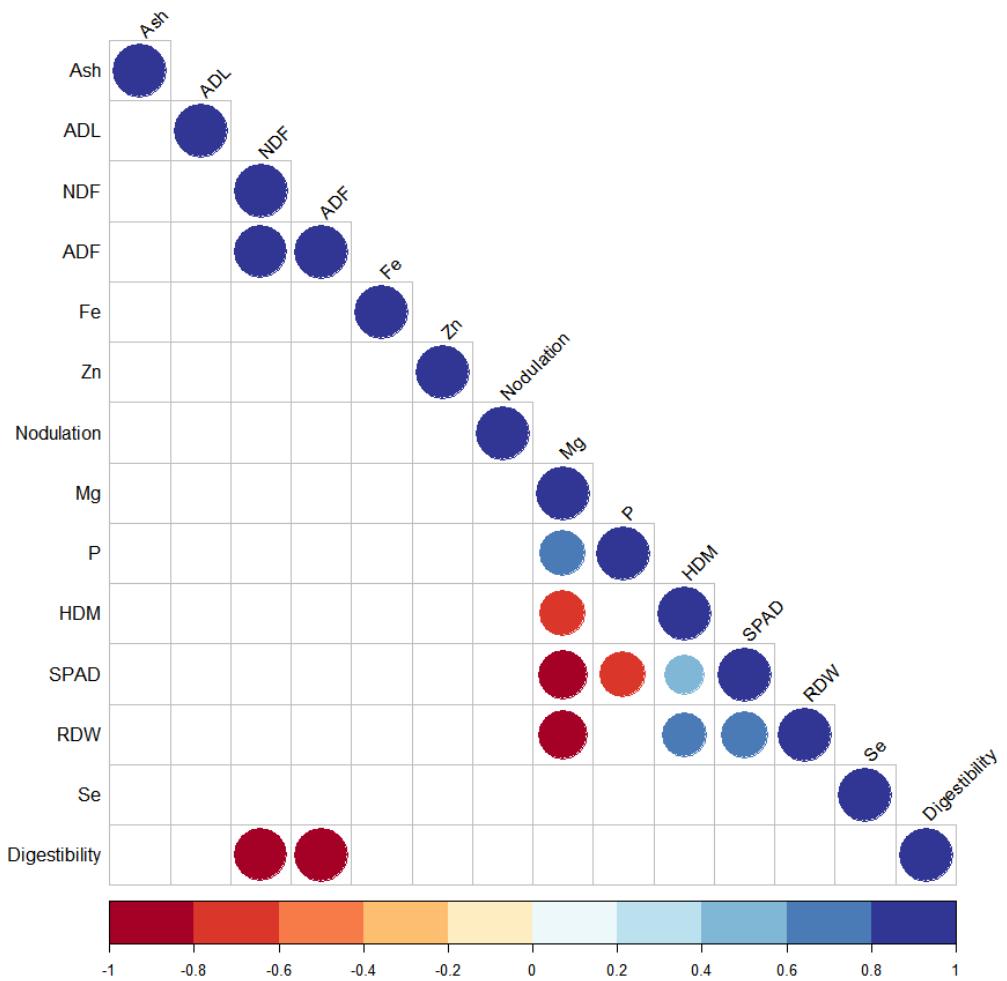


Figure S1. Correlation Matrix showing the significant Pearson correlations ( $p \leq 0.05$ ) between parameters investigated in the study. The robustness of the correlations is depicted using a gradation of colors, with darker colors indicating stronger correlations.