

MACRONUTRIENTS LEAF CONTENTS OF CORN IN INTERCROPPING WITH FORAGES OF GENUS *PANICUM* AND *UROCHLOA* IN SIMULTANEOUS SEEDING

TEORES DE MACRONUTRIENTES DO MILHO EM CONSÓRCIO COM FORRAGEIRAS DOS
GÊNEROS *PANICUM* E *UROCHLOA* EM SEMEADURA SIMULTÂNEA

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The planting of crops in degraded pasture areas is a formula used for decades by farmers to recover the productive capacity of pastures and soils. The integrated crop-livestock (ICL) consists of different production systems of grains, fibers, wood, meat, milk and agro-deployed in the same area, in intercrop, rotation or succession. Typically this integration mainly involves the planting of grain and pasture in the recovery or deployment. This work aimed to evaluate the macronutrients leaf contents of irrigated corn intercropped with forages of the genus *Panicum* and *Urochloa* simultaneously to sown corn. The experiment was conducted at the Farm for Teaching, Research and Extension, Faculty of Engineering - UNESP, Ilha Solteira in an Oxisol in Savannah conditions, in experimental area that had a history of no-tillage to 8 years (previous crop corn). The experimental design used was randomized blocks with four replications and five treatments: *Panicum maximum* cv. Tanzania sown simultaneously (CTS) corn; *Panicum maximum* cv. Mombaça sown simultaneously (CMS) to corn; *Urochloa brizantha* cv. Xaraes sown simultaneously (CBS) corn; *Urochloa ruziziensis* sown simultaneously (CRS) to corn, and corn without intercropping (CWI). The seeds of grasses were sown in spacing of 0.34 m, being sown with a seed drill with disc coulters mounted mechanism for no-tillage system at a depth of 0.03 m. There was no significant difference between the single corn tillage and intercropping with different modalities of forage genus *Panicum* and *Urochloa* to the leaf contents of N, P, K, Ca and Mg, demonstrating the non-compete forages with corn in a intercrop on the absorption of these nutrients. In respect to S, CTS presented higher content of S foliar when compared to CWI (Table 1). The absorption of nutrients by corn are not affect by the intercrop with forages of the genus *Panicum* and *Urochloa*, in simultaneously sown.

Table 1. Leaf contents of nitrogen (N), phosphorus (P), potassium (K), calcium (Ca), magnesium (Mg), sulfur (S) of corn intercropped with forages of the genus *Panicum* and *Urochloa* in simultaneous seeding. Selviria-MS, 2009/2010

Treatments	Leaf contents (g kg ⁻¹ of DM)					
	N	P	K	Ca	Mg	S
CTS	31.30	7.85	21.62	3.35	2.02	1.80a
CMS	31.62	7.52	21.87	3.32	2.00	1.72ab
CBS	38.35	7.22	20.50	3.25	2.02	1.60ab
CRS	29.72	7.07	21.37	3.37	2.10	1.62ab
CWI	28.27	7.32	21.37	3.32	2.02	1.52b
C.V. (%)	13.59	7.47	4.85	13.31	6.28	6.41
P>F	>.0005	>.0005	>.0005	>.0005	>.0005	<.0005

Means followed by different letters in the column differ each other

Keywords: integrated crop-livestock, nutritional status, *Zea mays*.

Acknowledgments: Fundacao de Amparo a Pesquisa do Estado de Sao Paulo (FAPESP)