

Palabras claves: centenos diploides y tetraploides, materia seca total, adaptabilidad, estabilidad ambiental.

Slowly and non-digestible tissues in *Elytrigia scabrifolia* y *E. Scabriglumis*

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The estimation of the percentages of slowly and non-digestible tissues allows the prediction of the nutritive value of forages. In this study, the percentages of tissues in sheaths and blades of two species natives of the Salado Basin and abundant in the Pampas range pastures (*Elytrigia scabrifolia* y *E. scabriglumis*) were determined as a primary evaluation of their forage quality. The estimations were done in the vegetative and reproductive stages. A split-plots design in space and time, with species as main plot, plant part (sheath or blade) as secondary plots, and three replications was used. Percentages of all leaf tissues were estimated by microscopic analysis of cross section and were grouped in rapidly and slowly plus non-digestible tissues. The variation of all leaf tissues between species, plant parts and growth stage, and the percentages variation of slowly and non-digestible tissues were analysed by principal components and by ANOVA, respectively. In all cases, the percentages of sclerenchyma were lower than 10% and those of slowly plus non-digestible tissues were lower than 45%. The percentages of slowly and non-digestible tissues did not differ ($P < .05$) either between species ($P < .05$) or plant parts, but increased 34% with the advancement of growth from the vegetative to the reproductive stage. Although the percentage of slowly and non-digestible tissues suggest that both species have an acceptable nutritive value, this rating could be altered by the degree of forage lignification.

Key words: *Elytrigia* sp., tissues, non digestible

Dry matter production and nutritive value of forage of *Digitaria eriantha* cv. Irene in two locations of the central semi-arid region of Argentina

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The aim of this experiment was to compare dry matter (DM) production rates and nutritive value of a warm-season grass, *Digitaria eriantha* cv. Irene, in two locations of Central Argentina, Santa Rosa (SR) and Villa Mercedes (VM). The plants were established in two identical groups of plots, within a randomised block design. DM rates were calculated from serial, out of phase clippings, and *in vitro* dry matter digestibility (IVDMD) and crude protein (CP) content analysed on subsamples. The study lasted for three consecutive growing seasons. Results showed that DM production rates were generally higher ($P < 0.05$) in SR than in VM, but IVDMD and CP content showed no clear trends between both locations. DM production tended to lower from year 1 to 3, related to processes of N depletion from soils (VM) and diminishing rainfall (SR). It is concluded that *D. eriantha* is a very promising warm-season grass to Central Argentina. Data of nutritive value obtained in one location can be used in others, but results of DM production rates should be taken under the conditions where they will be used.

Comparación de modelos utilizados para estimar la materia seca *in sacco* y la degradabilidad

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El objetivo del presente estudio fue comparar algunos de los modelos disponibles, utilizados para estimar la dinámica de la desaparición y la degradabilidad de la materia seca (MS) en rumen, en dos grupos de gramíneas: Verdeos invernales (VI) y perennes de crecimiento estival (GrE). Las muestras ($n = 327$) fueron incubadas en bolsas de nylon en el rumen de tres novillos Holando-Argentino, con fistula ruminal. Los datos experimentales obtenidos, fueron tratados matemáticamente utilizando distintos modelos para estimar tasa de degradación y degradación efectiva de la MS. La tasa de desaparición fue estimada a partir de dos modelos no lineales similares, con y sin tiempo de retardo y con una ecuación de primer