

EVALUATION OF CULTIVARS, PROGENIES AND CLONES OF
SPECIES OF THE GENUS *Lotus* L.^{1/}

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SUMMARY

Twenty two progenies of the cv. São Gabriel and seven american cultivars of *Lotus corniculatus* L. and forty two clones of *Lotus uliginosus* Schkuhr., were evaluated under some morphologic, physiologic, quantitative, qualitative and persistence aspects in two different experiments at the Agricultural Experiment Station of the Federal University of Rio Grande do Sul (UFRGS), Guaíba - RS, Brazil, from march of 1978 to may of 1979.

In the progenies and cultivars tests the following parameters were evaluated: average number initial and final of plants/m, mean percentage of reduction on number of plants, mean rate of growth in height of the plants, in cm/week, average total dry matter yield (DM) in g/m, mean percentage of crude protein in DM and mean percentage of digestibility "in vitro" of the DM. The analysis of variance showed statistics significance at level of 5% probability for the whole parameters mensurated.

In a polycross block experiment were evaluated the following parameters: mean rate of growth in diameter and height of the plants, in cm/week, mean diameter of rooting of the plants, in cm, beginning mean of flowering time in days after planting, average yield of seed in g/plant, average total dry matter yield of the regrowth after a time of drought, in g/plant and percentage of crude protein and digestibility "in vitro" of the dry matter. There was also significative differences at 5% level of probability for the whole evaluated parameters. For both experiments significant correlations were found between some pairs of observations.

In the work was evident the genetic variability of the different parameters evaluated, showing the possibility of their manipulations in future breeding works of the species of the genus *Lotus* L.

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