

Perspectives of utilization of native legumes in Rio Grande do Sul.

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The importance of legumes for animal production has been shown since a long time ago by many authors (Blaser, 1982; Petritz *et al.*, 1980). The inclusion of legumes on pastures promotes several advantages, such as an increase on animal production, as a result of better forage quality, a better forage distribution of forage yield along the year and an increase on soil fertility and microbiological activity, due to incorporation of N to the soil. Recently Dall'Agnol and Scheffer-Basso (2004) have related the general benefits of temperate and tropical legumes, as well as the situation of temperate and native legumes in the "Zona Campos" of South America (Dall'Agnol *et al.*, 2002).

Although temperate legumes are species considered important for many grazing systems, their lack of persistence has been pointed as the major limitation to their utilization, as well as bad management practices by the farmers (Beuselinck *et al.*, 1994). In Southern Brazil, the grazing systems used are typically extensive, with the native pasture being the base of most pastures. On those systems, legumes are not extensively used, but some of them have a relative importance. Among those, the most important are white clover (*Trifolium repens*), red clover (*T. pratense*), birdsfoot trefoil (*Lotus corniculatus*). These species are used as cultivated pastures or are over-sown on the native pastures, aiming an improvement on forage quality and yield distribution, but on both cases with poor persistence as earlier related.

Regardless of the importance that the maintenance and persistence of legumes on pastures have, very little attention has been given to their study and for the understanding of their relationships on the different grazing systems. This point is particularly true in relation to our native species, which demonstrates the lack of collaborative work among the different researchers and research institutes.

An increase in legume utilization is possible and one of the possibilities is through their inclusion on areas integrated with cultures, such as soybean-pastures, rice-pastures, etc. However, an increase on legume utilization, especially the natives, must be made with special care on conserving this valuable natural resource. This germplasm is unique, with species of excellent value of forage and it is our obligation to study and to preserve it for the next generations. Among the several genera and species with potential, it is worth mentioning: *Adesmia* (*A. bicolor* and *A. bicolor*); *Trifolium* (*T. polymorphum*, *T.*

riograndense and *T. argentinense*); *Desmodium* (*D. incanum*, *D. uncinatum*) and *Macroptilium*, *Vigna* and *Vicia*.

Finally, an increase on legumes utilization, natives or not, only will be possible if we can make a real integration of different areas of knowledge, such as plant pathology, microbiology and physiology, among others. Besides that we should make an effort to **decrease** the increasing number of burocratic barriers for germplasm exchange and collaborative work, including those existing in our home countries.

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