

## Preliminary studies on the influence of boron on forage quality of the pasture legume *Desmodium ovalifolium*

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### Abstract

The knowledge about genotype x environment interactions on quality components of tropical legumes is rather limited. In relation to plant nutrition it is assumed that micronutrients could have a major influence on forage quality since they are often essential constituents of enzymes and other proteins. Among the micronutrients boron (B) is required in plants in larger quantities than any other, although its function is not entirely clear yet. In this paper the role of B in plants is reviewed and results of an exploratory glasshouse experiment with two *Desmodium ovalifolium* genotypes are presented. They suggest a correlation between B concentration in the soil and forage quality traits of the species. Boron seems to reduce soluble tannin content and astringency in leaves, resulting in a higher *in vitro* digestibility of leaves. An indepth study under highly controlled climate chamber conditions is proposed.

**Key words:** micronutrients, genotype x environment interaction, condensed tannins, Near Infrared Reflectance Spectroscopy (NIRS).

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