UNIVERSIDADE TÉCNICA DE LISBOA FACULDADE DE MEDICINA VETERINÁRIA

CONTRIBUIÇÃO PARA O ESTUDO DE SILAGENS DE GRAMÍNEAS COM FOTOSSÍNTESE EM C₄

ABSTRACT

The aim of the experiments reported in this thesis were to test the ensiling potentialities of the tropical grass *Setaria sphacelata* var. *splendida* (Stapf).

Pre-wilted grass was used as a control treatment, and with the addition of a chemical additive (formic acid at 85%) and of fermentation stimulants (three commercial biological additives and molasses).

Organoleptic, microbiological and chemical analysis proved that silages obtained were, at the least, of good quality.

Control treatment gave inferior results when compared to the other treatments, and the molasses treatment gave the best results. Commercial biological additives gave good results as well, results that could have been more significant should the water carbohydrate content of the pre-wilted grass be superior.

These experiments have proved that, if we take in account the limiting factors of the tropical grass *Setaria sphacelata* var. *splendida* (Stapf) to produce good silages, implementing special ensilage techniques, the chances of producing bad quality silages are reduced.