

## ABSTRACT.

The review of literature included a comparison of sources of fodder for animals during the dry season and a discussion of the need for forage conservation in the humid tropics.

Ways of conserving were compared.

Three trials were carried out to compare the rate of drying of grass cut and turned regularly, and grass cut and conditioned with a crimper for hay made in the field.

Two trials were carried out making hay by drying artificially in a barn hay dryer to determine the speed of drying and estimate the cost of production.

Samples were taken for moisture content, leaf/stem ratio and for chemical analysis.

Analysis of weather records showed that apart from the actual dry season the best chance of making hay in the field would be around October or January.

For the barn dried hay unwilted grass took 40 hours of drying to reach 20% moisture at a cost of \$21.00 per ton and the grass wilted to 30% moisture took 18 hours to reach 20% at a cost of \$7.45 per ton.

In good weather grass could be dried to 20% moisture in 2 days, but if drying is delayed due to bad weather the quality of the hay is reduced. Crude protein losses from 40-70% were recorded.

Crimping was found to increase the rate of drying but increased the loss of leaf.

It was found that there was no advantage in turning the swath more than 2 - 3 times in a day. Handling when the grass was nearly dry increased losses.

No losses were recorded from hay stored for three months, and seemed of good quality in appearance and smell.

Cost of field drying was estimated at \$9.60 per ton.