

# The Potential of Agro-Industrial by-Products for Ruminants

Gordon, C. and McDonald, D. (1995)

## **[Abstract]**

Numerous by-products are potentially available for use in the formulation of animal feeds in Jamaica, particularly for ruminants. Some of the by-products are tabulated in Table 1.

Increases in the productivity and acreage of other products in the following years are expected to provide additional increase of by-products such as banana's, citrus, cassava, rice bran, wheat middlings, soybean and sugar cane products as animal feeds. Cassava, rice bran and sugar cane by-products such as bagasse or pith are used to a lesser extent and are not normal additions to commercial animal feeds. Cassava roots have been used basically by small farmers and in experiments (Inter-American Development Bank, 1983; Gordon, 1983). Rice bran, which is high in crude protein, has been used by small farmers in the Caribbean for production. Bagasse is used primarily in rations that utilize poultry litter, as it is the bedding source for birds. Poultry litter is also used as a feed source by itself in many goat, sheep and feedlot situations or mixed with molasses. Poultry litter as a feed source has a very inconsistent nutrient profile and therefore is difficult to make any impact on the commercial market. Bagasse on the other hand, is more consistent but lacks energy and nitrogen. Sugar cane pith appears to be of greater value to animals than bagasse as it has less crude fibre and it is easier to manage.