The Use of Food Industry Byproducts in Ruminant Nutrition

BY

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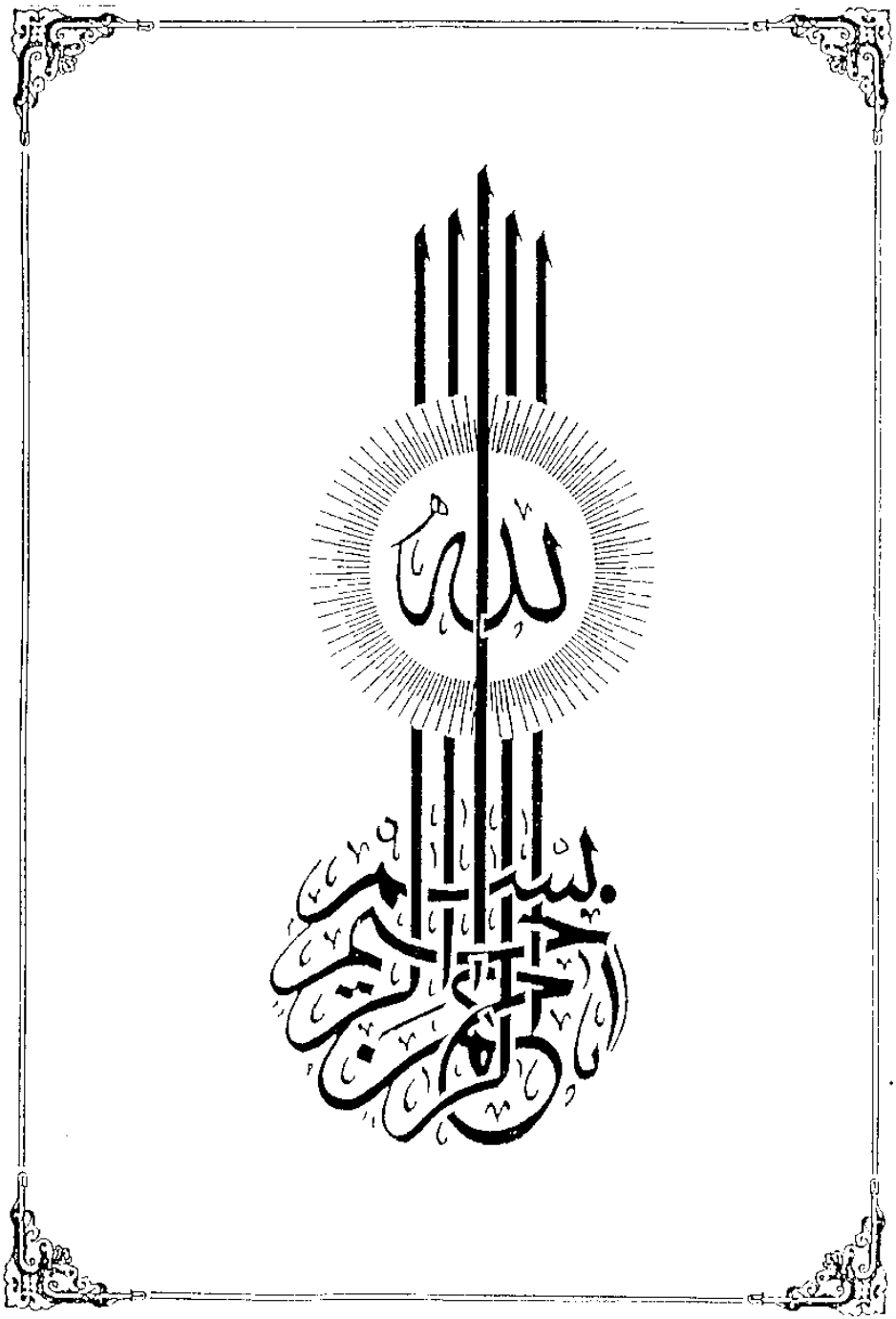

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ABSTRACT

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Cannery byproducts were collected from 5 different plants. Fruits (11 kinds) and vegetable (10 kinds) processing byproduct samples were analyzed for total moisture, crude proteins, ether extract, crude fiber, nitrogen free extract, organic matter and total ash. In the second part Pea pods and Artichoke crown leaves silage were used as sole roughage for lactating buffaloes in two different seasons. The summer season trial compared fresh Darawa or Berseem silage cannery byproduct silage. The winter season trial compared fresh Berseem or silage of Darawa with the same byproducts silages. The result indicated that silage of cannery by products could replace fresh Darawa and silage of Berseem in the summer and replace fresh Berseem or corn silage in winter without affecting animal performance. Economically, Artichoke residual could help in minimizing production cost. The third part compared nutrient Apparent digestibility coefficient by internal (ADL & AIA) and external (Co EDTA & Chromium Oxide) marker technique. The results indicated that no markers fulfill all good markers characteristics and the results of digestibilities not only affected by the marker and the type of ration but also affected by the nutrient under investigation.

Key Words : **Waste, Byproducts, Cannery, Food industry, Ruminant, Buffalo, Lactating, Nutrient, Internal Marker, External Markers, Acid Insoluble Ash, Acid Detergent Lignin. Cobalt, Chromic, EDTA.**

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