



CARDI

CARIBBEAN

AGRICULTURAL RESEARCH AND
DEVELOPMENT INSTITUTE

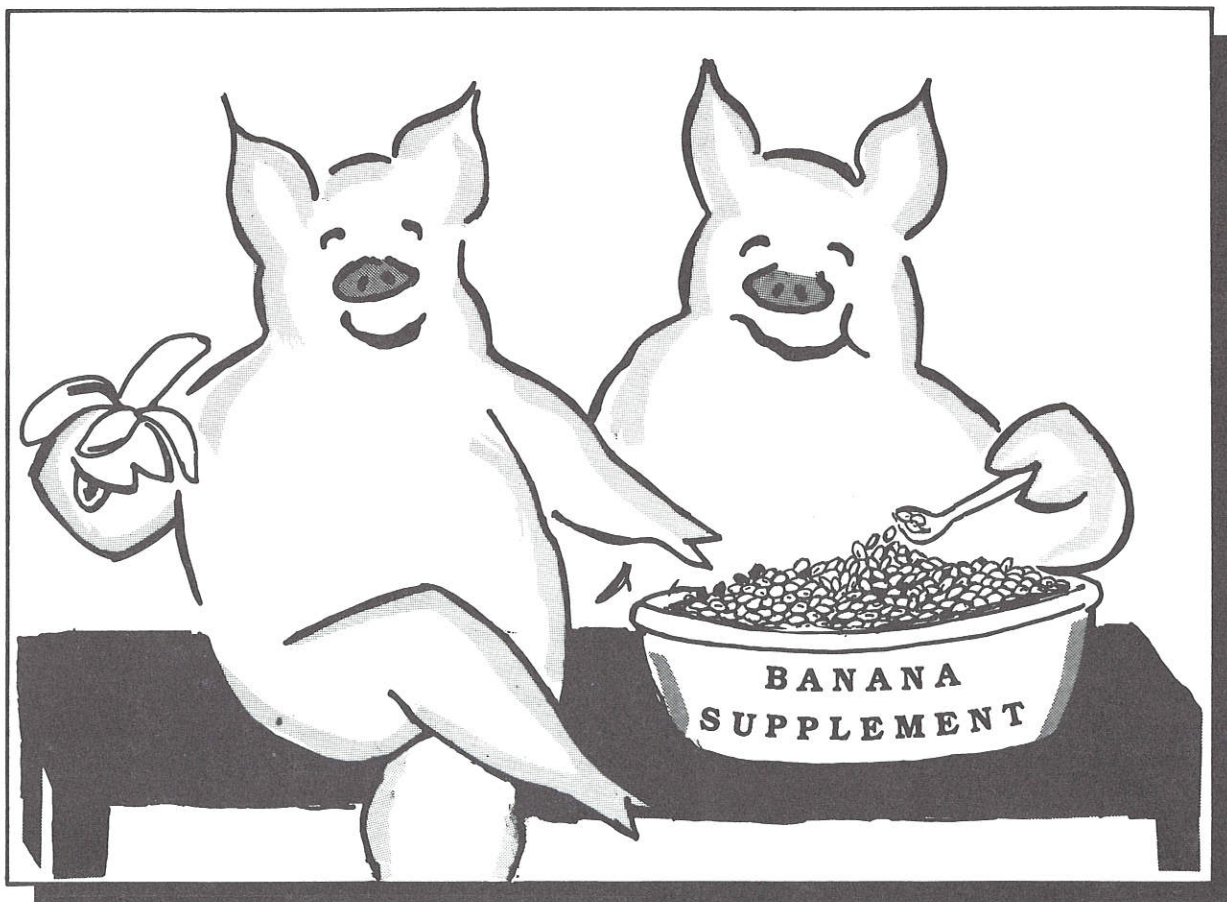
REPRINTED: JANUARY 1992

ORDER NO.: AP-F / 28-88

Factsheet

FEEDING PIGS ON BANANAS

Gerald Proverbs



*This publication was produced with assistance from
The Barclays Development Fund in the Caribbean.*



BARCLAYS

Pigs require large quantities of carbohydrates (energy) and moderate quantities of protein for growth and development. Approximately 350 lb. of carbohydrate and 112 lb of protein would be needed to bring them to slaughter.

In North America and Europe, corn, wheat and barley provide the energy at a reasonable price. In the Caribbean there are many sources of carbohydrates which are good for feeding to pigs but only a few crops are widely available at a reasonable price. One of them is bananas which are readily available in quantity in those CARICOM countries where they are grown for export to Europe. A large quantity of the fruit which is unsuitable for human consumption is available for livestock feed. These "reject" bananas are a good source of carbohydrates for pigs at all stages of the production cycle.

Nutritive Value of Bananas

The fresh whole banana with the peeling contains approximately 80% water. The dry matter is mostly carbohydrate with 1% crude protein, 1% fibre and 1% ash. Most, but not all, of the commercial varieties grown in the Caribbean conform to this chemical composition.

Feeding Bananas

Bananas are fed either green or ripe but feeding trials have shown that pigs will consume larger quantities of bananas daily if they are fed ripe. The difference in consumption between green and ripe fruit has been attributed to the difference in taste.

Other studies conducted in Latin America and by CARDI have shown that when growing pigs were fed ripe bananas together with 1.5 lb of a protein supplement daily, growth rate was approximately 1 lb per day with a feed conversion ratio of 8:1.

Work conducted in other parts of the world in the 1970s and corroborated by CARDI showed that when the supplement provides 24-30% protein, the highest growth rate is obtained and at the best cost per unit of gain. Because of the high moisture content of bananas it is necessary that the protein supplement also provides additional energy. Therefore supplements containing more than 30% protein do not perform as well as those with less protein because of their lower energy levels.

Porker/Market Pigs

In addition to bananas, pigs should be fed 1.5 lb of 24-30% protein supplement daily from weaning to market. The amount of bananas to feed depends on the weight of the pig. As they grow, pigs will consume more bananas and unless each pig receives the quantity recommended in the table it is unlikely that they will grow as fast as they could and reach market weight in the expected time.

Recommended daily feeding rate of ripe bananas to porkers/market pigs.

Average weight of pig (lb)	Quantity of protein supplement to feed daily (lb)	Quantity of ripe bananas to feed daily (lb)
24 - 50	1.5	7 - 8
51 - 70	1.5	12 - 13
71 - 125	1.5	18 - 19
126 - market weight	1.5	22 - 24 (max)

1 kg = 2.2 lb

Pregnant Sows

Pregnant dry sows also perform well on fresh bananas. They should be fed 10 lb ripe bananas and 1.5 lb of the 24-30% protein supplement daily from the day of breeding until day 76. On day 77, the quantity of bananas should be increased to 13 lb and the supplement to 1.75 lb and these quantities fed up to 110 days of gestation. After that time the sows should be fed 6 lb of a 16% sow feed per day (3 lb morning and evening) until they farrow.

Quantity of ripe bananas and supplement to feed to pregnant sows

Days pregnant	Quantity of ripe bananas per day (lb)	Quantity of 24-30% protein supp. /day (lb)	Quantity of 16% sow ration (lb)
1 - 76	10	1.5	-
77 - 110	13	1.75	-
111 - farrowing (approx. 114)		-	6

1kg = 2.2 lb

Nursing Sows

Nursing sows do not perform very well when fed ripe bananas and a 24-30% pig supplement. They are unable to consume 44 lb ripe bananas and 2 lb supplement required to provide the energy and protein for milk production. Furthermore, lactating sows invariably develop severe diarrhea when they consume more than 5 lb of ripe bananas daily and it is for this reason that ripe bananas are not generally recommended as the major source of energy for the lactating sow.