

PASTURES AND PIG-FATTENING.

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At the 1935 meeting of the New Zealand Grassland Association McMeekan read a paper on the nutritive value of pastures in pig-raising, and, in respect to fattening pigs, stated that grass "is not capable of materially reducing the total requirements of other food except under a low plane of feeding, the successful practice of which is dependent on economic considerations": he gave details of two feeding trials which showed that "no measurable amount of nutriment was derived from pasture by the pigs in these trials, no significant difference either in growth-rate or in economy of food-consumption being apparent."

'During the 1935-36 season a trial of a similar nature was conducted at the Ruakura Farm of Instruction, Hamilton, and a comparison made between baconers fattened in a sty and baconers fattened in cow pastures. The results were as follows :-

- (1) *Growth-rate* : Pigs grazed on cow pastures showed a daily increase in dressed weight of 0.88 lb. and the sty pigs 0.89 lb.

(In McMeekan's experiment quoted above "grass" pigs showed a daily increase in dressed weight of 0.75 lb., and "no grass" pigs 0.76 lb.)

- (2) *Economy of Food-consumption* : Pigs grazed on pastures required 564.5 gallons of separated milk per 100 lb. gain in dressed flesh and sty pigs 561 gallons separated milk.

(In McMeekan's experiment quoted above "grass" pigs required 533 gallons of separated milk and 18 lb. pollard per 100 lb. gain in dressed flesh, and "no grass" pigs 515 gallons of separated milk and 17 lb. pollard. In comparing the above trials it is to be noted that McMeekan's trials started with pigs of 40 lb. live-weight at the beginning and ended with pigs of 200 lb. live-weight. The Kuakura trials started with pigs of 73 lb. live-weight and ended with pigs 180 lb. live-weight.)

The information available shows that grass does not supply much actual food for fattening pigs; the same is probably true of special grazing crops such as lucerne, red clover, and white clover. The dairy-farmer's problem is to provide farm-grown food when grass is short: when there is plenty of grass there is plenty of milk and when there is no grass there is no milk. His problem is to balance the supplies of pigs for fattening to supplies of separated milk-no easy matter, as can be seen by the production of bacon pigs instead of porkers. Generally it is an actual shortage of pigs that induces the farmer to carry on pigs to bacon weights rather than waste separated milk. Although many farmers consider that the wintering of pigs is unprofitable, it is frequently found that the most successful pig-farmers do winter pigs-wintering them on farm-produced feeds. Connell(I) has stated that the farmers in the Manawatu district who are securing the most satisfactory returns

from pig-meat production are those who make considerable use of farm-grown feeds other than dairy by-products. He suggests the production of special crops for pig-feeding.- mangels, carrots, swedes, barley, and field peas. Investigations in Auckland show that the most profitable returns from pigs are secured on dairy-farms in the Bay of Plenty where maize is grown. If provision is made for wintering, pigs need never be sold in a store condition: selling unfinished pigs in the autumn and buying stores or weaners in the spring does not lead to profitable pig-keeping.

The actual provision of root and grain crops for pigs on dairy-farms is not a simple matter. The tendency is to all-grass farming, and, with good pastures, all-grass dairy-farming is quite profitable. The problem appears to be to find a suitable grain or cash crop that can be grown in rotation with roots and green crops for supplementary feeding—a crop that will bring in sufficient money to pay for all the cropping. In South Island rotational farming the cereals provide the cash that allows of the production of turnips and rape for fat-lamb raising. In the Bay of Plenty maize for sale and for pig-feeding allows of the cheap production of swedes for the winter feeding of the dairy herd; in South Auckland the production of early potatoes allows of the cheap production of mangels and carrots for the same purpose; in the Manawatu peas and barley do likewise. Until adequate provision is made for the autumn and winter feeding of pigs, any further investigation of the value of grass, lucerne, or red clover as a supplement to skparated milk hardly appears to be warranted.

REFERENCE.

(1) R. P. CONNELL: "Special Crops for Use in Pig-keeping," *N.Z. Jour. of Agric.*, April, 1936.

DISCUSSION.

(Follows next paper.)
