known and trials with bephenium embonate are necessary.

Internal parasitism was most severe under conditions of high stock density and where there was inadequate spelling of pastures from sheep. There were many good recoveries from unthriftiness by worm control alone, especially on heavy soils. Furthermore, in both our cobalt and selenium trials the maximum and most regular weight gains were obtained in the presence of worm control. The great advantage in weight gains by controlling parasites in addition to the use of cobalt and selenium has emphasised the harmful nature of the parasites encountered in these outbreaks.

References

E. D. Andrews and others, "New Zealand Journal of Agricultural Research", vol. 1, p. 125, 1958. p.

M. C. Armstrong, "New Zealand Journal of Agriculture", vol. 97, p. 241, 1958.

J. W. McLean and others, "New Zealand Veterinary Journal", vol. 7, p. 47, 1959. J. Scarnell and D. A. Rawes, "Veterinary Record", vol. 71, p. 163, 1959. P. L. Thomas and D. C. Elliot, "New Zealand Veterinary Journal", vol. 5, p. 66, 1957.

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Swedish Landrace Pigs for Breeding Scheme at Ruakura

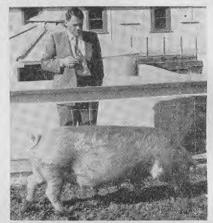
PUREBRED Swedish Landrace pigs imported from Australia by a New Zealand breeder are to be lent to the Ruakura Animal Research Station, where under the direction of D. M. Smith, Senior Principal Scientific Officer, their potentialities will be investigated and their possible use in the hybrid breeding programme explored.

THE first of the stock, an in-pig gilt, arrived at Ruakura on 21 August after a month's quarantine in this country. She farrowed a litter of 10 piglets in mid September.

Acquisition of Landrace stock opens the possibility of using the three-breed rotational cross system of breeding (Berkshire-Large White-Landrace) and thus keeping hybrid vigour up to a maximum. This system has been very successfully exploited in America and was studied there by Mr Smith several years ago.

The sow and her progeny will be tried out at Ruakura under standard conditions to compare growth rate, feed conversion efficiency, and carcass quality with the same qualities in New Zealand pigs, on which a great deal of data has been assembled at Ruakura.

Two Swedish Landrace boars are already in the country and two more are coming. An importing breeder has promised to make a total of six sows and two boars available to Ruakura. The Pig Producers Council, which has supported and encouraged the hybrid breeding work already done at Ruakura, is showing keen interest in the possibilities presented



by the acquisition of this new breed for use in the scheme.

The Swedish Landrace is performing very well in England. Some stock have gone to Northern Ireland, whence importation to New Zealand is permissible because of the absence of rhinitis there.

Mr Smith is enthusiastic about the future possibilities of pig improvement in New Zealand offered by use of Swedish Landrace boars across crossbred sows.

Mob Stocking of Ewes at Weaning

 $\mathbf{R}^{\mathrm{UNNING}}$ the ewes in large mobs after weaning is a management practice now widely adopted, but weaning is not done early enough on many farms to get the best results from mob stocking. Research has shown that once lambs are three and a half to four months old they will do as well away from their mothers provided plenty of clean, fresh grass is available for them. This can be arranged by increasing the stocking This can be rate for better control of the pastures during the spring flush on part of the farm and saving for the weaned lambs the paddocks from which the sheep have been removed; the top growth in these paddocks is controlled by the cattle.

By early weaning the mob of ewes can be used more or less as a mowing machine at a time when they can do some real good in cleaning up roughage from paddocks in turn, in cleaning up rough gullies and shady faces, and in the control of bracken fern, weeds, and small second growth. They can be crushed on to areas that want severe treatment or used on the poorer pastures while the best of the feed is saved for fattening stock.

It is surprising how white clover will flower and set seed after a mob of ewes has been crushed on to a paddock in November or early December. Paddocks that have been so treated and then spelled for eight to 10 weeks provide excellent feed for lambs in late February and March and the clover will thicken up through the reseeding. Having the ewes in a mob before shearing is of course a great convenience.

-E. C. AYSON,

Farm Advisory Officer, Department of Agriculture, Wairoa