## REVIEW SESSION-S. H. SAXBY

"PROBLEMS OF SCRUB CONTROL"-W. F. LEONARD.

"AN EXPERIMENT ON CONTROL OF FERN AT TUTAKI, MURCHISON"—R. INCH.

"THE INFLUENCE OF CATTLE ON PASTURE COM-POSITION AND SECOND GROWTH CONTROL"-E. MADDEN

There was no formal presentation of these papers as the audience had been asked to read them prior to this session. Mr Saxby discussed aspects of each briefly, and the authors added comment and showed slides to illustrate methods of control.

Mr Saxby doubted whether it was correct to say that scrub weeds were a problem of low-fertility lands; was it not, he asked, rather a question of lack of intensity of grazing associated with low fertility. Two of the papers had emphasised the effectiveness of weed control by good stock management. It was a good deal better to control weeds, if possible, with animals, from which the farmer got some return, than with chemicals.

## DISCUSSION

- Q. (H. Thorpe): Does Mr Madden consider that the weeds would have been eliminated more quickly if the country had been subdivided and stocked? set
- A. (E. Madden): This work was begun 20 years ago before aerial top dressing was under way. It was impossible to spread fertiliser by hand, and fencing was most expensive. One of these properties has had fertiliser and the other none, but if they could have put on fertiliser from the beginning the results would have been quite spectacular, and the country would not have deteriorated. However, it did deteriorate and they managed the best way they could.
- Q I am troubled with an increasing infestation of white and red manuka on a property on the east coast 40 miles from Blenheim. Is lime or molybdenum likely to have any effect on this soil? Are there any chemical sprays which would be effective in controlling this infestation which is between I and 4 inches high?
- (W. Leonard): The manuka blight kills the red manuka but not the white, therefore we cannot rely on the insect to control the white white, therefore we cannot rely on the insect to control the white one. Your local advisory officer would be able to advise what top dressing was required according to the soil type. If a competitive cover could be induced fairly quickly the increased grazing intensity would assist in the control of the smaller plants. None of the chemicals that we use on scrub weeds are any good on manuka.

  Comment: In the Waihi district 2,4,5-T has been used for the control of manuka but with this method you kill the clovers.

- A. W. Leonard): While 2,4,5-T could be of some use in the control of young manuka it cannot be recommended as a reliable treatment. Q. (N. Cullen): I am particularly interested in the time of grazing in
- Q. (N. Cullen): I am particularly interested in the time of grazing in Mr Inch's trial. Why did Mr Inch insist that it was necessary to graze the very early stage, and not allow the white clover to get a little more mature before grazing it?
- A. (R. Inch): The answer to this depends entirely on the growth of the bracken fern, which is a very vigorous plant in Murchison from October to New Year. If you put the stock on early, they will eat the bracken while it is in the palatable curly stage; and provided there is a little bit of grass amongst it, it does not seem to do the stock any harm. Once the fern becomes hard, the stock do not like it. We have found from experience in other grass trials that it pays to keep the sward open by grazing, rather than to spell it, and let the grasses keep the light from the clover in the early stages. The clovers were eaten down periodically; stock were put on for a week or a fortnight, and then taken off for a week, as it was not safe to leave the bracken for longer than a week. Stock were then put on again in heavy concentrations. Mr Rouse considers that 10 sheep to the acre was the minimum in a case like this. If you could double or treble this rate so much the better. This is pretty hard on all the growing plants, but by taking stock off every now and then the clovers and the grasses get the chance to come away. That is the chief reason for our grazing treatment. We had a false spring in the second year where the bracken came away much faster than it usually does at that time of the year, and it had to be treated accordingly.