

INTRODUCTION.

Review of literature.

Weed control has been studied with renewed interest particularly during the last three decades and there is a voluminous literature on the methods of control of weeds in arable land in various countries, but the literature on the control of weeds in pastures is by no means so complete. Much work has been done at Aberystwyth and the results have a wide application in temperate countries. Several useful contributions have also been made by the United States Department of Agriculture on the question of weed control under humid and semi-arid conditions applicable to extensive areas of pasture lands where effective and economic control could be obtained by the use of large scale machinery.

Ball, Crafts, Madson and Robbins (4) discuss the control of weeds in Alfalfa and weeds in lawns and golf greens and in the former case recommend crop rotation mentioning that "an Alfalfa field badly infested with Bermuda grass rarely repays cultivation; the best procedure is to plow it up and eradicate the pest". How far this method will be successful under tropical conditions where a pasture once established remains as such for a few years is a matter for speculation though one cannot question the soundness of the suggestion. In lawns and golf greens the authors suggest several methods of keeping down weeds among which are "proper watering, regular mowing, fertilizing" and also the use of chemicals. Here again the problem is slightly different since the ideals to be aimed at in the two cases differ. Thus in lawns and golf courses the idea is to maintain a thick close sward. In the case of pastures the object is to promote as thick and luxuriant a growth of the grass with a view to getting the maximum yield of nutrient per annum.

Tadulingam and Venkatanarayana (15) in their treatise on "Some South Indian Weeds" devote only about eight lines to the control of weeds in pastures mentioning that "Weeds of pastures cannot be suppressed by ordinary means of cultivation because the plough and the harrow are not often worked in grazing grounds". This is quite true for the reason mentioned earlier with regard to the period pastures once established are left to remain. Yet, beyond the method of manuring and thus encouraging a heavy growth of the grass by this and other methods, the authors offer no other suggestions. The work of Cox (7) on the eradication of ferns from pasture lands is again not strictly applicable here, for, in those parts of Eastern U.S.A. where ferns are weeds, cultivation cannot be practised owing to the steepy and rocky nature of the land and here two cuttings a year seem to kill all the ferns.

Scope of present work.

It will thus be seen that much of the work recorded in this paper is more of an investigational nature and the suggestions made with regard to control are only tentative until such time as they have been actually put into practice and tested out on a field scale.