

SUMMARY.

Two crops of Gold Dollar Virginia cigarette tobacco were grown at the Market Garden, College New Farm. The first crop of 1/6 acre was grown to provide information on certain chemical suckering agents which was in turn applied to the second crop of 1 acre. The first is referred to as the Pilot Experiment and the second as the Main Experiment.

Great difficulty was encountered in getting seedlings established in the field due to adverse weather conditions. The final stand in both crops was approximately 50% of a normal plant population (6,000 plants/acre), which made statistically valid experimentation almost impossible. Satisfactory information was obtained by using demonstration methods.

The chemical suckering agents consisted of Maleic hydrazide - 30 applied as a spray, two highly refined mineral oils and a vegetable oil. The hormonal action of MH-30 inhibited suckering but did not give the same degree of control as the oils. The oils displayed nearly equal effectiveness, but coconut oil caused undue damage to the plant stem which when severe caused death of the plant. Because of their less toxic effect on the plant, 25% oil:water emulsions were preferred to the 50% emulsions universally recommended. Citspray was preferred to Risella oil as it was easier to work with.

One acre of tobacco, the Main Experiment block, was costed from time of sowing to bulking and a comparison made with corresponding figures obtained by Wallis (1955). Labour costs were up, due to wage increases largely, use of proportionately more men than women, and an overall increase in labour used. Due to a poor yield, about 600 lbs. cured leaf, the enterprise suffered a loss

II. INTRODUCTION.

of about \$70. (supposing all the leaf cured had been sold at 72¢ per lb.).

Recommendations were made to concentrate future work on methods of transplanting. Failure to get a good stand of plants in the field appears to be the major fault in tobacco production at the College New Farm.

2. LAYOUT OF REPORT.

The report has been divided into basically two sections, of which the first deals with the general crop management; though this has been already dealt with fully by Greening (1954) and Wells (1955), and the second with experimental work. Since, however, two lots of tobacco were grown, (See Summary), details in diary form of their individual management where they differed from the general practice described in the first section, have been included in the account of the experiments. This it is hoped will reduce repetition and make for easier reference.

A third and final section headed "Recommendations" has been added with certain misgivings, as one year's experience is very inadequate on which to advise anyone on anything. Recommendations must therefore be first carefully considered and correlated with climatic and other factors, which have been fully included in the report for just this purpose, before they are acted upon.