

INTRODUCTION

There are many weeds of cultivated and waste land, of little direct economic importance, which become of greater significance if any disease to which they are susceptible can pass easily to crop plants.

Although a number of virus diseases of weeds have been recorded, in many cases work on the relationships of the viruses concerned has not been undertaken. Some virus diseases of crop plants are so common and appear so early even in isolated crops, that they might be expected to have alternative hosts. For example in Trinidad, reservoirs of infection for cowpea mosaic, okra mosaic, cucumber mosaic, eggplant mosaic and other virus diseases might well be expected to occur amongst the local weeds. Thus the study of suspected viruses of weeds, besides being of academic interest has practical considerations. For example, economical control of the "Kroepek" (Leaf curl) disease of tobacco has been obtained in the Dutch East Indies (Thung¹⁸) by roguing Ageratum conyzoides L. and two other susceptible weeds from around the tobacco fields. The roguing of virus infected crop plants is sometimes done, as in the production of seed potatoes in Scotland. Before this method is applied, however, it is important to know whether or not, wild reservoir hosts exist in and around the field, for it would be of little value to remove a few diseased crop plants, should the

virus (and vector) be abundant in surrounding weeds.

To date, no such work has been done in Trinidad, the nearest approach to it being described in a paper by Owen (10) on the virus diseases of the Malvaceae. Since the natural host range of a virus is one of the necessary prerequisites to the formulation of control measures, this study of the viruses attacking some weeds in Trinidad was made, to elucidate if possible, what viruses of economic importance were present in these plants.

Symptoms suggestive of virus infection have been seen on a number of weed species. A list of these, with a short description of their symptoms follows. The Malvaceae have been omitted, since full descriptions have been given for them by Owen.