

DISADVANTAGES OF WEEDS

It is convenient to distinguish those factors (1) associated specifically with adult bearing palms, (2) young non-bearing palms, and (3) those common to both.

ADULT PALMS

INTRODUCTION

Most nuts are harvested from the ground after they have dropped from the tree. It is therefore important that weed growth should be controlled so that workers will have no difficulty in seeing and collecting the nuts. In cases spot checks have indicated that up to 30% of ripe nuts are not collected.

The problem of weeds in coconuts is discussed under the following headings:

YOUNG PALMS

- (a) the effect of weeds on the palm and the significance of these effects,
- (b) the benefits to be obtained from weed control, and
- (c) the merits of the alternative methods.

Young palms are frequently seen among tall weeds. They are usually... growth will be affected... Some of the climbing weeds, such as *Mimosa umbellata* as found at Site I, (p. 2) they are difficult to control mechanically without damage to the palms. A brief review is given of previous work on the use of herbicides under coconuts. This is followed by a description of two field experiments to investigate the effects of twelve herbicides on young coconut palms. being in the order given. (Grafts and Robbins 1962). In many areas water is a seasonal limiting factor. Menon and Pandey (1958, a) suggest: 'Soil moisture is often the greatest limiting factor to the successful growth of the coconut.'

Rogers (1936) showed that the loss of moisture from the soil was much reduced under conditions of clean cultivation. Good (1956), working with different grasses as ground cover under apple trees, demonstrated that the degree of competition for water depends on the weed genera present and associated rooting habit.

Particularly since little fertilizer is generally applied to coconuts, weed competition for nutrients is likely to be important. This may be marked on soils with inherent low nutrient status.

The Darlington Herbicide/Fertilizer Experiment (Smith 1964, b) indicated increases in mean aggregate frond growth/palm/month