

Studies on the use of Hormone for the control of Cherelle Wilt  
of Cacao

Introduction.

A high proportion of the fruits of cacao never reach maturity. At some stage in their life-history they shrivel and mummify on the tree. This loss of the young fruit is known as "cherelle wilt" and there is good evidence that it is primarily a physiological and not a pathological disease. Pyke (1933) found that in Trinidad, the average loss of cherelles may be up to 69%. He observed that individual trees vary in respect of wilting; the ratio of pods wilted to pods set ranged from 19% to 92.5%. Hewison and Ababio (1930) observed losses between individual trees in the Gold Coast to vary from 22% to 84%. Murray (1954) found that cherelle wilt of pods larger than 5cm alone accounted for 80% to 88% of the potential crop.

Wilt may be a physiological thinning mechanism of the tree and therefore inevitable but some reduction in loss caused by wilt could result in greatly increased yields.

The stages of the shrivelling of a cherelle have been described by many workers. The fruit appears dull and later becomes soft. A green pod turns yellow, then brown and finally black. Blackening takes place in a red pod. The discolouration is uniform all over the pods although local patches may sometimes be seen. As soon as shrivelling starts, there is a rapid decrease in size until the pod is completely mummified.

In order to investigate some effective means of control, it is important to determine the factors contributing to cherelle wilt. There is general agreement among all workers that wilt involves many complex and interacting factors; but on the vital issue of the most important cause, many workers disagree.