

## **B-15 Investigation of the possibilities of using agro-chemicals for the control of cherelle wilt of cacao**

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Although the cherelle wilt of cacao, is believed to be a natural mechanism of thinning out of excess fruits, it is also known that some cherelles are wilted due to insect attacks, fungal infections, nutrient and water deficiencies. A cacao plantation in the Matale district where the pod setting was poor, was selected to investigate the effect of 2 fungicides, an insecticide and foliar nutrient on cherelle wilt of cacao. Preliminary observations revealed that the fungi (*Phytophthora palmivora*, *Botryodiplodia* spp., and *Fusarium* spp.) and insects (aphids) were present on wilted and healthy cherelles. 10 cacao plants (approx. 10 years old) were used per treatment. The treatments were: 2 fungicides; (“Benlate” and “Ridomil”), one insecticide, (“Chlorpyrifos”) one foliar nutrient (“Maxicrop”) and the control. All the chemicals were applied as per instructions given by the respective manufacturer. All the wilted cherelles on experimental plants were removed at the initiation of the study.

The counts of cherelles (wilted and healthy) and mature pods were recorded at 2 weekly intervals.

The cherelles were categorized into 2 groups; large cherelles (above 2.5 cm in length), and small cherelles (below 2.5 cm in length). Results showed that the treatment effects were significant only in the counts of large healthy cherelles and mature pods. The number of large healthy cherelles is important since these could later develop into mature pods. The highest number of large healthy cherelles in the “Chlorpyrifos” treatment revealed that the major reason for cherelle wilt at the experimental site was “aphids” and not any fungi. However, the effect of “Maxicrop” that provided the micronutrient also cannot be neglected.