



Aqueous extracts effects of seeds of *Thevetia peruviana* and *Azadirachta indica* on the development of *Phytophthora megakarya* in locality of Biakoa (Cameroon)

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ABSTRACT

Objective: The objective of this work was to evaluate, the impact of aqueous extracts of seeds of “yellow oleander” *Thevetia peruviana* (AETP), *Azadirachta indica* (AEAI) “neem” and Ridomil Gold Plus 66WP in black pod disease in Cameroon during two consecutive years.

Methodology and results: A completely randomize bloc device containing four treatments (control, AETP, AEAi and Ridomil[®] and three replications was used in the farm. Extracts were applied twice in a month at the dose of 16.67 g/l while Ridomil[®] was applied one time a month at the dose of 3.33 g/l to the heights H1 and H2. Disease distribution across various pod distribution development stages showed that mature pods were the most susceptible to *P. megakarya*. A significantly difference is observed between the different treatments on all parameters evaluated. The disease rates were 7.92 %, 5.38 %, 8.94 % and 36.24 % in the plots treated with fungicide, AETP, AEAi and untreated respectively, in 2013, and 10.95 %, 7.85 %, 16.21 % and 37.83 % in the same plots in 2014. The major results obtained compared to the rate of rot showed that AETP was more efficient than Ridomil[®] and AEAi during these campaigns.

Conclusion and application of results: This study showed that aqueous extracts are promising and could be an effective and cheap formulation for the biological control of black pod disease. They have to be applied twice in a month at the dose of 16.67 g/l.

Keywords: Black pod disease, biological control, plants extracts, Ridomil[®], neem, yellow oleander.