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Research gaps on passion fruit diseases in Kenya

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ABSTRACT

The passion fruit industry contributes substantially to the Kenyan economy. However, farmers have experienced significant yield losses during the past two years, leading to the need for research to identify the causal pathogens and develop effective management methods. Towards this end. consultations were planned with key players in order to identify a potential research topic that could be addressed as part of a study leading to the award of an M.Sc. degree at Kenyatta University in 2010 - 2011. The first meeting was held on 9th April 2010 at the Kenya Agricultural Research Institute (K.A.R.I) Thika During the discussion, it was pointed out that the major cause of the drop in passion fruit production has been disease infestations, primarily fungal and viral pathogens. The main fungal diseases have been identified to be Fusarium wilt and the dieback attributed to *Phytophthora* spp., while the main viral disease is caused by the woodiness virus. It was further observed that substantial research has been undertaken on these diseases leading to reduced incidence in

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Proceedings of the 3rd International e-Conference on Agricultural BioSciences 2010 Page: 66 – 67; Abstract ID: IeCAB09-330a

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some cases. However, in the recent past, the dieback disease has increased in importance. The disease is characterized by severe rapid infection leading to yield reduction of over 60%. The knowledge available suggests that the disease involves a complex of several organisms. Its epidemiology has also not systematically and comprehensively investigated. been Considering the current and increasing importance of the dieback disease to the passion fruit industry, it was identified as one of the potential areas for research which could have immediate impact on the livelihoods of the passion fruit industry dependents. It was therefore agreed that a research project will be implemented to more deeply investigate the etiology and epidemiology of the dieback disease. It is expected that the outcomes of this project will contribute towards sustainable management of the disease and at the same time generate data for a Master of Science degree thesis.

Key words: research, passion fruits