Frosty Pod Rot Disease: reducing the risk of its introduction to the ICGT.

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Abstract

Frosty Pod Rot disease caused by the basidiomycete Moniliophthora roreri is the most devastating disease of cocoa (Theobroma cacao). This disease, which targets only the pods, can reduce yields by over 80% within a few years after pathogen establishment. In recent years FPR has invaded the last hold-outs in Mesoamerica. It breached Mexico and Belize around 2005, El Salvador around 2009 and expanded its range into South America, entering Bolivia in 2012. Most recently FPR made its first incursion into the Caribbean where it was officially reported in Jamaica, in 2016. This invasive plant pathogen poses a serious threat to the cocoa industry in Trinidad and Tobago as well as the wider Caribbean. The full management cascade recommended for invasive plant pathogens is applicable to Trinidad and Tobago: prevention; early detection and rapid response; and impact mitigation using various control approaches.

This paper presents the actions the Cocoa Research Centre, the University of the West Indies, to avoid the arrival of the disease and the measures to be put in place by the Ministry of Agriculture, Lands and Fisheries, Trinidad and Tobago to detect and eradicate FPR if it does. It prioritizes actions to be undertaken to cost-effectively manage this disease if it should become established in Trinidad and Tobago.

Key words: Cocoa, frosty pod rot, prevention, early detection and rapid response, Moniliophthora roreri, Theobroma cacao, Trinidad and Tobago