Preventing the spread and mitigating the impact of cocoa diseases in the Caribbean.

G. Martijn ten Hoopen¹,², Romina Umaharan²

¹CIRAD, UPR 106 Bioagresseurs, F-34398 Montpellier, France
²Cocoa Research Centre, University of the West Indies, St. Augustine, Trinidad and Tobago

Abstract
With the arrival of frosty pod rot (FPR, caused by Moniliophthora roreri) in Jamaica, the insular Caribbean is now home to three of the “big five” of cocoa (Theobroma cacao) diseases. Black pod disease of cocoa (caused by Phytophthora spp.) is ubiquitous in the region whereas witches’ broom (WB, caused by M. perniciosa) and FPR are still restricted to a few countries. The recent arrival of FPR however, is particularly worrying since it is considered to be the most destructive of all cocoa diseases.

Even though the Caribbean contributes little to global cocoa production, it ranks second when it comes to fine flavor cocoa. Moreover, cocoa remains an important source of revenue for a large number of people in the Caribbean. Unfortunately, much of the varieties grown, known for their fine flavor qualities, have little resistance to diseases, especially FPR and/or WB. On top of that, most cocoa producing countries in the region are poorly equipped to prevent the arrival of FPR or WB or eradicate them once they do arrive. Thus, continual spread of these diseases in the Caribbean will have a severe impact on the fine flavor cocoa sector and the livelihoods of those depending on cocoa.

In order to prevent further disease spread within the Caribbean, it is necessary to implement a major programme integrating awareness raising, capacity building, and development of early detection and rapid response measures for eradication. Additionally, countries will have to prepare for when these diseases do become established. The introduction of elite, highly productive cocoa germplasm combining resistance to WB and FPR and good quality attributes is urgently needed. Good agricultural practices that enable maximal expression of these attributes should be developed with and communicated to farmers and other relevant stakeholders. Such an undertaking will have the added benefit of revitalizing the sector and increasing productivity.

This can only be successfully realized however, through a concerted effort among all cocoa producing countries bordering or in the Caribbean. There is an urgent need to make this financially and politically feasible. Only through such a concerted effort will cocoa remain a driver for the sustainable development of the Caribbean.

Key words: Cocoa, Caribbean, frosty pod rot, witches’ broom, prevention, early detection and rapid response, Moniliophthora perniciosa, Moniliophthora roreri, Theobroma cacao