

Phytosanitary constraints on Bourbon vanilla: past and present situations and perspectives for control.

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Abstract :

Madagascar, Réunion, Mayotte and Comoros produce annually more than 1200 tonnes of vanilla, recognized under the label Bourbon for its high quality. This production is a major income for tens of thousands of farmers of the area who predominantly grow vanilla in small traditional plots and supply, since the beginning of the 20th century, more than 50% world consumption.

Field surveys conducted between 1997 and 2009 to assess pest and disease incidence in the vanilla plantations of the South Western Indian Ocean (SWIO) islands showed that the main phytosanitary constraints that hamper or threaten vanilla development in the area are: Viruses (*Cymbidium mosaic virus* and potyviruses), the fungus *Fusarium* and water mold *Phytophthora*, and the scale *Conchaspis angraeci* (Hemiptera : Coccoidea). Analyses of the data obtained, revealed varied levels of incidence of these pest and diseases from island to island and according to the year of survey or plot management. Perspectives for improving the phytosanitary status of vanilla plantations in the SWIO area will be discussed, highlighting the importance of prophylaxis and the opportunities for using genetic resistance.