

Proposed Policy Measures to Reduce Impact of *Fusarium* wilt on the Cavendish Banana Industry in the Philippines

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The dreaded trans-boundary *Fusarium* wilt of banana, caused by *Fusarium oxysporum f. sp. cubense* tropical race 4, FOC TR4, has now devastated many Cavendish banana production areas in the Asian Pacific region including Australia, China, Indonesia, Malaysia, Philippines and Taiwan. This has been well-established in the recently concluded consultation workshop on the “Socio-economic Impacts of *Fusarium* Wilt Disease of Cavendish Banana” held on November 11-15 in Davao City, Philippines. The consultation workshop, which was attended by 12 speakers from seven countries, was sponsored by FFTC, PCAARRD and partner BAPNET of Bioversity International.

The Cavendish banana is a thriving industry in the Philippines. In 2012, more than 82,000 ha are planted to Cavendish banana, earning annual export revenue of US\$471 million, and giving livelihood to around two million people. Given this huge potential, experts say an effective strategy to mitigate the impact of *Fusarium* wilt on the Philippine Cavendish banana industry needs to be developed as soon as possible.

Since 2006, when the first outbreak of FOC TR4 has been reported in Mindanao, banana growers have actively been collaborating with the government, private sector and Bioversity international to help curb down the spread of *Fusarium* wilt in the island. In fact, a task force has been formed to implement quarantine regulation, eradication, GPS survey and R&D activities. There have been moves to raise public awareness, strengthen capacity building in the propagation of healthy tissue culture plantlets, evaluation and utilization of introduced Cavendish somaclonal variants from TBRI, Taiwan (which were deposited and maintained in the international germplasm transit center of Bioversity international), and the utilization of beneficial microbial organism to enhance health and growth of Cavendish banana plants. Despite all these efforts, however, there is still the pervading threat of a possible wipeout of the banana Cavendish industry in the Philippines within the next five years. The seriousness of the situation has led the banana export growers’ association to help craft an emergent action plan which is intended to be submitted for the policymakers’ considerations

Based on Taiwan’s experience in coping with *Fusarium* wilt of Cavendish banana, the following suggestions have been made to improve the efficacy of disease management of *Fusarium* wilt in the Philippines:

1. Public awareness: Many small growers in Mindanao still lack the correct information on identification, management and mode of transmission of FOC TR4 in the field. A better

scheme to raise public awareness about this vicious banana disease entails more extension service activities.

2. Disease monitoring/survey: According the viewpoint of the Mindanao banana growers, the current information on FOC TR4 infested acreage of Cavendish plantation collected by government units seemed limited within 150 ha only in Mindanao. This, according to them, may still be somewhat underestimated from the total infested acreage.
3. Propagation of tissue culture plantlets: There is an increasing demand for healthy tissue culture seedlings of commercial variety by banana growers. Improvement of efficacy in propagation of healthy tissue culture seedlings of preferred Cavendish banana cultivars or improved types of somaclonal variant such as GCTCV-219 with good resistance to FOC TR4, will be helpful in slowing down the impact of crop loss in grower's farm.
4. Institution of specialized banana research unit: Banana is such as important crop in terms of staple food or dessert in the Philippines. It is therefore wise to create and establish a banana research institute to sustain and improve the Philippine banana industry;
5. Cooperation with international circle: The initiation of more research projects in collaboration with international units, universities, or institutes working on banana *Fusarium* wilt will shorten time and be value-adding to develop suitable advanced technology to better manage the spread and control of the disease.

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