

***Trichoderma asperellum* Samuels, Lieckfeldt & Nirenberg strain MV 020013 - promising agent for management of *Fusarium oxysporum cubense* TR4 Race**



***Trichoderma asperellum* Samuels, Lieckfeldt & Nirenberg cepa MV 020013 - promisorio agente para el manejo de *Fusarium oxysporum cubense* R4T**

<https://eqrcode.co/a/R3cYMh>

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Dear editor:

The Tropical Race 4 (TR4) of *Fusarium oxysporum* f. sp. *cubense* (FOC) is a threat to the production of plantains and bananas in Latin America due to its devastating effect and difficult control. Based on these antecedents, the strain MV 020013 of *Trichoderma asperellum* Samuels, Lieckfeldt & Nirenberg (*Ta*.13), from the National Center for Plant and Animal Health (CENSA) in Cuba, was evaluated against a FOC-TR4 isolate at Real Strong Agriculture Innovation, in the Philippines. The dual-culture technique was used in a PDA medium at 28°C for 12 days. The inhibition percentage of pathogen growth on the co-culture was calculated and compared with that of the control without the antagonist. This strain of *T. asperellum* showed high efficacy in controlling this pathogen. At the sixth day of culture, the percentage of FOC TR4 inhibition was 55.60 %, and, on day 12, the antagonist strain had overgrown the *Fusarium* colony and completely inhibited its growth. This makes evident the presence of mycoparasitism and the possible release of toxic metabolites to the plant pathogen by the antagonist. This result shows the potential of the strain *Ta*. 13 of *T. asperellum* against the causal agent of Panama Disease TR4, being a promising strain that should be evaluated to determine the form of application, dose and efficacy in the control of this disease under field conditions.

Sincerely,

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The authors declare that they have no conflict of interest.

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