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Version 1

ISOLATION OF PHYTOPATHOGENIC FUNGI V.1

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We use this protocol and it's working

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Abstract

To control a disease it is essential to know its causal agent. A correct diagnosis provides a considerable amount of basic information to select correct control methods. An accurate diagnosis always starts with a representative sample of the damaged tissue, from which a portion is taken, to isolate the causal agent. In the case of phytopathogenic fungi, there are several isolation methods, depending on the tissue or substrate in which they are found. This protocol describes the isolation and purification of phytopathogenic fungi from leaves and fruits of different tropical crops.

Attachments



ISOLATION OF
PHYTOPA...
15KB

Troubleshooting



Fungi Isolation

1

Command

1. Cut diseased plant tissues, taken from the advanced margin of lesions, into small pieces (5 × 5 mm) with a scalpel

new command

Command

2. Disinfested by immersing them in 3% NaOCl solution.

new command

Command

3. Rinsing with sterile distilled water three times

new command



Command

4. Transferred each small piece onto 90 × 15 mm Petri Dish containing Potato Dextrose Agar (PDA) medium

new command

Command

5. Incubated at room temperature (25°C) for 7 days

new command

Fungi Purification

2

Command

1. Cut in the edge of each fungi colony, with a scalpel a mycelial segment of approximately 5 × 5 mm

new command

Command

2. Transferred each small mycelial piece onto 90 × 15 mm Petri dish containing water-agar medium (2%).

new command

Command

3. Incubated at room temperature (25°C) for 5 days.

new command

Command

4. Observe the fungal colony on a stereo microscope and with an insulin syringe needle (29 gauge) cut one hyphae tip.

new command



Command

5. Transferred hyphae tip onto 90 × 15 mm Petri Dish containing Potato Dextrose Agar (PDA) medium.

new command

Command

6. Incubated at room temperature (25°C) for 7 days.

new command