



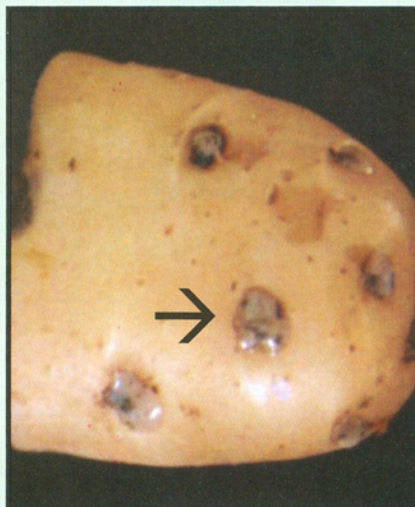
May 2010, No.171

Occurrence and management of a new race of bacterial wilt of potato

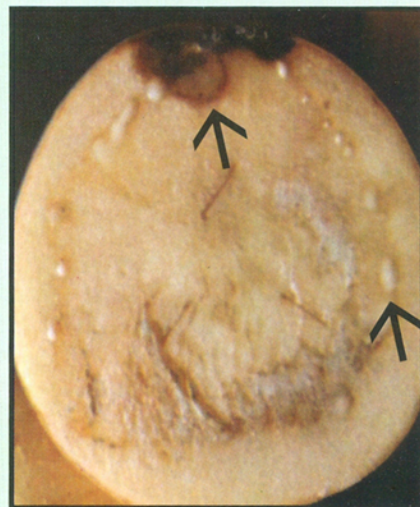
Bacterial wilt is an important disease of potato caused by *Ralstonia solanacearum*. The strain commonly encountered in soils of Mauritius is Race 1. However, in 2005, a new race (Race 3) was identified.



The wilting symptom of aerial parts caused by Race 3 is similar to that of Race 1



Tuber symptoms caused by Race 3 tend to be more severe. Bacterial exudation is visible at the eyes of the tuber



Internal damage caused by Race 3 consists of exudation at the vascular ring and intense rotting

As for Race 1, the new race is transmitted by seed potato, contaminated soil, irrigation water and personnel. As opposed to Race 1, it is more capable of causing damage to potato under cooler conditions.

From 2005 to 2008, localized infection by Race 3 has been observed in the north, south and west of the island but its presence in other parts of the island is not excluded. It is assumed that the new race is established in the country. It has been found to infect potato and tomato but it can also attack eggplant and geranium.

How to manage this disease?

- ✓ **Crop rotation:** plant in fields that have no recent history of cropping with solanaceous plants such as potato, tomato and eggplant
- ✓ **Sanitation:** carefully remove infected plants and crop debris and avoid moving into infected areas of the field that would cause contaminated soil to be disseminated
- ✓ **Cultural practices:** do not plant before end of April and beyond August and avoid excessive irrigation
- ✓ **Source of seed:** use certified seed

Note: Contact the MSIRI for any suspected cases of bacterial wilt

Your attention is drawn that guideline and/or advice is restricted for the purpose for which it is recommended only. MSIRI board shall not be responsible for any act that may arise out outside the purview of these guidelines.

