

# Apex rot

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## Cause

Causal agent is unknown.

## Geographical distribution

Barbados, Guadeloupe, Jamaica, Martinique, St Kitts and Nevis.

## Symptoms

The initial symptom of apex rot is the drying of the spindle leaves (ROTT and FELDMANN, 1991). It is linked to a necrosis of the internal tissues above the meristem which can be seen in a longitudinal section of the upper part of the stalk (Figures 1 and 2).

Rotting progresses towards the base of the stalk which dies and takes on a mummified aspect (Figure 3). The entire foliage can dry out and fall. No side shoots develop after death of the apical meristem. Diseased stalks are randomly distributed within sugarcane stools and mixed with healthy stalks (Figures 4 and 5). Up to 15% mummified stalks of cultivar B69566 were observed in sugarcane fields in Guadeloupe.

## Diagnosis

Attempts to isolate pathogenic bacteria or fungi from apex rot showing stalks have so far been unsuccessful.

## Strains of the pathogen

No information is available.

## Transmission

No information is available.

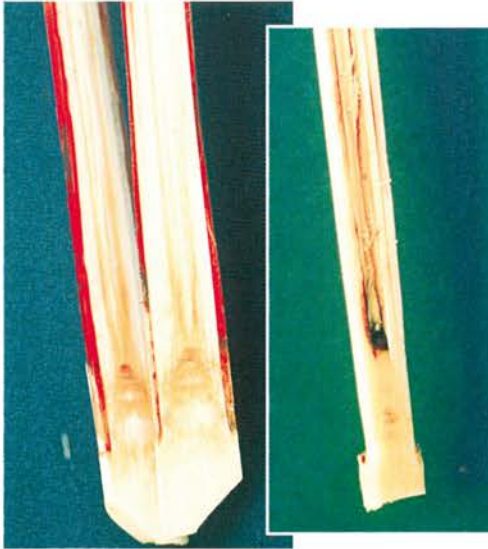


Figure 1. Necrosis of the internal tissues above meristem (P. Feldmann).



Figure 2. Necrosis of leaf tissue observed after removal of external leaves (P. Feldmann).



Figure 3. Mummified aspect of a stalk affected by apex rot (P. Rott).



Figure 4. Stalk affected by apex rot (J. Daugrois).



Figure 5. Stalks killed by apex rot (P. Feldmann).

## Host range

Sugarcane is the only reported host for apex rot.

## Epidemiology

No information is available.

## Economic importance

Apex rot might cause yield reduction in susceptible cultivars such as B69566 in Guadeloupe, but experimental data are not available.

## Control

Use of resistant varieties is the most effective means of control and, therefore, susceptible cultivars should be eliminated.

## Reference

ROTT P., FELDMANN P., 1991. Les maladies de la canne à sucre en Guadeloupe : situation actuelle et méthodes de lutte mises en place. *In*: Actes de la Première Rencontre Internationale en Langue Française sur la Canne à Sucre, Montpellier, France, 10–15 juin 1991, p. 90–94. Nogent-sur-Marne, France, Association Française de la Canne à Sucre.