



Information Sheet

2. DISEASES

2.9 Pokkah boeng

Importance

Pokkah boeng is a common and usually mild disease, the symptoms of which can occasionally be seen in most varieties (see Figure 1). It is caused by the common fungal pathogens *Fusarium moniliforme* and *F. subglutinans*. Infection of the spindle leaves and upper stalk tissues normally follows damage caused by hot weather. Stalks with mild symptoms usually grow out with little damage. However, a few varieties, such as N15 and N34, are highly susceptible. For these, infected stalks may be common and may become distorted. In severe cases the top of the stalk may rot and die back. This can cause significant crop loss.

Symptoms

- Chlorotic markings towards the base of the young leaves. As the affected leaves mature, irregular reddish stripes and specks develop within the chlorotic area.
- Malformation of the young leaves accompanied by wrinkling, twisting and shortening of the leaves and distortion of the stalk.
- In severe cases, the growing point may be killed and the stalk dies back.



Figure 1. Symptoms of pokkah boeng, showing distorted growth and chlorosis; left, leaf damage; right, growth recovering.

Cause and spread

- By wind-blown spores of the common fungi *Fusarium moniliforme* and *F. subglutinans*.
- Irrigation water trapped in the upper leaf axis during very hot weather.
- Drift of herbicides and growth regulators, damaging differentiating tissues at the top of the stalk.

Control measures

- Where highly susceptible varieties are identified during selection in the SASEX cane breeding programme, they are discarded.
- Little can be done to prevent pokkah boeng, other than planting tolerant varieties. Most South African varieties are tolerant.

Notes

- *Fusarium moniliforme* and *F. subglutinans* are usually regarded as minor pathogens. Provided the symptoms are mild, pokkah boeng is a disease of minor concern. It has been of recent interest because the otherwise very promising variety N34 proved to be susceptible and was withdrawn in 1999, shortly after release.
- As symptoms can be similar, it is sometimes assumed that a variety is susceptible to pokkah boeng when it suffers distorted growth due to phytotoxicity from herbicides or growth regulators.

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