Yellow spot disease

Introduction
Yellow spot is a disease of the wet tropics, being favoured by warm, wet conditions. As a result it is usually more severe between Tully and Gordonvale, although it can occur in most districts. The disease was first observed in Queensland in 1950.

Causal agent
Yellow spot is caused by the fungus Mycovelllosiella koepkei. Spores are produced from fungal growth on the underside of the affected leaf which gives a fluffy appearance.

Symptoms
As the name suggests, yellow spot causes a yellow lesion on the leaf blade. Lesions are irregular in shape and vary in colour and size depending on the sugarcane variety.

As lesions age, their size increases from minute chlorotic spots to lesions with a range of colourings and up to 10 mm or more in diameter. Lesion colour may be yellow, brick red, red brown or brown black. The crop canopy may appear ‘dirty’ or ‘rusty’ in appearance and the disease is sometimes mistaken for sugarcane rust.

Symptoms are seen after the onset of the wet season and usually peak at the end of April into May. The start of cool dry conditions in winter usually signals the end of the disease epidemic.

Yield Loss
Research shows that yield losses of up to 20% may occur in susceptible varieties, with CCS losses of over two units. CCS reduction results from the fungus reducing the ability of leaves to photosynthesise at a time when sugar accumulation occurs in the maturing crop.

If you suspect you may have seen this disease please contact the exotic pest hotline on 1800 084 881, SRA, or your local Productivity Service

Management
Control of yellow spot relies on the growing of resistant varieties. Varieties are screened for resistance. Blocks of cane with moderate to high disease levels should not be harvested early in the season because of potential low CCS levels in these crops. By delaying harvest, sugar content may rise to acceptable levels with growth of the new crop canopy.

Image 1: Yellow spot leaf symptoms.

Image 2: Yellow spot damage to whole cane plant.

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