

MAPLE (*Acer palmatum* 'Sango Kaku')
Bacterial Blight; *Pseudomonas syringae* pv. *syringae*

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Observations of winter injured tissue and symptoms of bacterial blight of maple, 2002 – 2003.

The objective of the trial was to determine if winter injured tissue and/or pruning wounds developed symptoms of bacterial blight. Observations were made in a block of 'Sango Kaku' and 'Oshi Beni' Japanese maples planted in 1999 on a 5 x 20 ft spacing. Trees were pruned on 29 Aug 02 to shorten long shoots and keep tree canopies from touching. Urea fertilizer was broadcast around each tree on 3 Sept 02 at 87 lb/A then plots were irrigated to stimulate late season growth. Shoots with late season, tender growth were tagged on 18 Oct 02. Plots were not inoculated with bacteria this year. Incidence of bacterial blight was evaluated on 14 Apr 03 by recording the number of tagged shoots that had winter injury, symptoms of bacterial blight and shoot dieback.

The first, major killing frost was on 31 Oct 02 with a low temperature of 19°F referred to as the Halloween freeze. (It also got down to 17°F a few days later on 2 Nov 02.) The dormant season rainfall was below normal. Lowest dormant season temperature (after the late Oct / early Nov freeze) was 25 F recorded on 8, 12, 25 and 26 Jan 03. All tagged shoots had symptoms of winter injury where the new fall growth was ash gray with dead leaves still attached. Only 2 out of 11 tagged 'Oshi Benni' shoots and 12 out of 18 tagged 'Sango Kaku' shoots developed any black tissue. The blackening observed generally occurred at the cut surface of the shoot and did not extend beyond the next node. Some shoots developed bacterial blight symptoms by 10 Mar 03. Only 5 out of 18 tagged 'Sango Kaku' shoots developed the extensive black dieback typical of bacterial blight. None of the tagged 'Oshi Benni' shoots developed these extensive symptoms. Very little disease developed during either the dormant or growing seasons on any of these trees except for one that had symptoms of *Verticillium* wilt.