

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

J. W. Pscheidt and John P. Bassinette  
Dept. of Botany and Plant Pathology  
Oregon State University  
Corvallis, OR 97331-2903

**Bactericides for management of bacterial leaf spot and dieback of maple, 2011.  
Efficacy of Management Tools for Bacteria – IR-4 Ornamental Protocol Number 11-006.**

Dormant Japanese Maples (*Acer palmatum* 'Bloodgood') planted spring 2010 into #10 sized pots with 'Sun Grow Sunshine Mix SB40' media (35 to 40% Canadian sphagnum peat moss, fir bark, pumice/cinders, dolomitic limestone, gypsum and a wetting agent) were used for this experiment. Pots were spaced 5 feet apart at the Botany and Plant Pathology Field Laboratory, Corvallis, OR. Bactericide treatments were arranged in a randomized complete block design where each bactericide treatment consisted of 4 single tree replicates. All bactericides were applied using a hydraulic handgun sprayer at 100 psi such that 0.75 gal of a spray suspension was applied per 4 trees. Treatments were applied on 1 Apr (buds break), 7 Apr (buds 1 inch growth), 16 Apr (first leaf unfolding), 21 Apr, 1 May and 6 May (10 inch shoot growth). A set of nontreated and all bactericide treated trees were inoculated on 13 Apr (just before the 3<sup>rd</sup> bactericide application) with  $5 \times 10^7$  cfu/ml of *Pseudomonas syringae* pv. *syringae* originally isolated from lilac. Bacteria were applied using a Stihl SG 20 backpack pump style sprayer. Another set of 4 nontreated trees were not inoculated. No fertilizer, insecticides or herbicides were applied to trees in pots. Disease incidence and phytotoxicity was evaluated on 16 Apr, 19 Apr, 25 Apr, 29 Apr, 2 May, 9 May, 16 May and 23 May. The height of each bush was recorded on 1 Apr and 24 May.

Early spring conditions during bud break and early shoot growth was characterized as cool and wet. The incidence of bacterial blight on nearby lilac shoots inoculated one month earlier was over 80%. No disease developed on any of the trees in the trial. Trees treated with either rate of Kasumin developed a washed, light red color more typical of sun bleaching in the summer. These trees clearly stood out from the normal deep burgundy color typical of this cultivar.

Treatment and rate/100 gal	Change in Plant Height (cm)*
Nontreated, Non-inoculated.....	8.3
Nontreated, Inoculated.....	7.5
A91800A WG at 1 oz .....	9.3
Citrex at 18.2 fl oz.....	3.0
HM-0736 at 14.4 fl oz.....	9.8
Kasumin at 45 fl oz.....	9.0
Kasumin at 64 fl oz.....	7.0
CG100 at 38.4 fl oz.....	12.0
Regalia at 1 gal.....	1.5
Aliette at 12.8 oz .....	15.3
Nu-Cop 50 DF at 1 lb .....	10.3

\* Means without letters do not differ significantly (P=0.05).

Acknowledgements

We wish to thank the Dr. Ken Johnson lab for inoculum preparation.