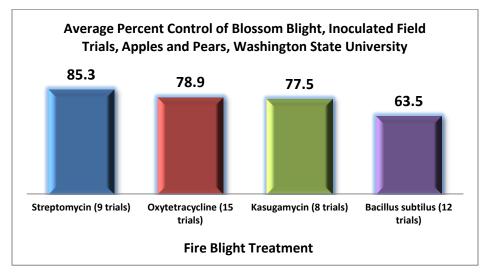


Resistance Focuses Attention on FireLine[™] 17 WP and Alternatives To Control Fire Blight in Apples and Pears

Technical Bulletin – No. 2

Oxytetracycline – the active ingredient in **FireLine**[™] **17 WP** – has shown itself to be a consistently effective performer against fire blight, *Erwinia amylovora*, since its introduction in response to widespread resistance to streptomycin more than 30 years ago.¹ This conclusion is drawn from independent university trials where inoculation with streptomycin-sensitive fire blight bacteria ensured a high level of disease pressure and allowed streptomycin – the active ingredient in **FireWall**[™] **17 WP** – to be included for comparison. The chart below summarizes these results from Washington State.²



For simplicity, average percent control shown for each active ingredient is summed across multiple trials and years, across both apples and pears. In these trials, oxytetracycline delivered consistently effective control of fire blight (blossom blight) while performance of kasugamycin, a relatively new antibiotic to the U.S., was comparable to oxytetracycline. *Bacillus subtilus*, a "biological" control product derived from bacteria and marketed under name of Serenade[®], showed a moderate degree of control.³ While FireLine offers fire blight control second only to FireWall, integration of biological products (e.g. Serenade) with FireLine may create even more effective fire blight management programs.⁴ See AgroSource Technical Bulletin No. 1 for discussion on streptomycin resistance management programs, particularly as it relates to controlling fire blight innoculum and shoot blight.

For more information, visit the AgroSource website at <u>www.agrosource.net</u> Always read and follow label instructions.

¹ FireLine and FireWall are trademarks of AgroSource, Inc.

² Data summarized from research trial work conducted by Timothy J. Smith, Washington State University

³ Serenade is a registered trademark of Agraquest.

⁴ Consult with your professional pest control advisor/consultant or area extension agent before tank mixing or rotating specific biological fire blight control products with FireLine.