Characterization of fungicide resistance in *Venturia inaequalis* populations in Virginia

Sasha Cahn Marine

Dissertation submitted to the faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

In

Plant Pathology, Physiology, and Weed Science

Keith S. Yoder, Committee Co-Chair
David G. Schmale III, Committee Co-Chair
Antonius B. Baudoin
Erik L. Stromberg
Mizuho Nita

March 28, 2012
Blacksburg, VA

Keywords: *Venturia inaequalis*, apple scab, fungicide resistance, sterol-inhibitor, strobilurin, seasonal variability, microclimate, Virginia

Copyright © 2012, Sasha C. Marine
Dear Dr. Marine,

Plant Health Progress and The Plant Management Network are pleased to grant you permission to include the article you’ve specified ("Resistance to Myclobutanil in Populations of Venturia inaequalis in Winchester, Virginia" – manuscript # PHP-RS-07-0113 and doi:10.1094/PHP-2007-1113-01-RS) as part of your dissertation.

Congratulations, and please let me know if we can be of any further assistance.

Sincerely,

Kurt Gegenhuber
Assistant Editor
kgegenhuber@ascisec.org

Plant Management Network
http://www.plantmanagementnetwork.org

Plant Health Progress
http://www.planthealthprogress.org
Dear Sesh,

APS does not require authors to sign over copyright to Plant Disease notes. Copyright remains with the author, so you are free to include it in your dissertation and we are pleased to have you do so.

Good luck with your dissertation.

Best regards,

Karen Cummings
Director of Publications
The American Phytopathological Society
3340 Pilot Knob Road
St. Paul, MN 55121