

Preface

The First North American Root Weevil Workshop was held at the Oregon State University North Willamette Research and Extension Center in Aurora, Oregon, November 1–2, 2001. The participants discussed topics including root weevil biology, detection, and monitoring, as well as the population dynamics and integrated pest management of root weevils in different parts of North America.

Highlights of the meeting included a description by Sharon Collman (now with Washington State University Extension) of a 17-species complex of root weevils that affect nurseries or landscapes in the northwest region. Sharon also presented a brief overview of root weevil predators, parasitoids, and pathogens. A presentation by Richard Mankin (USDA-Agricultural Research Service) showed that it was possible to detect root weevil larvae feeding on plant roots using sensitive acoustic instrumentation, and that different weevil species had unique acoustic “signatures.” Basic rearing techniques and methods for conducting trials with adults were covered in two papers presented by Richard Cowles (Connecticut Agricultural Experiment Station). Ralph Berry and Len Coop (Oregon State University) demonstrated the pest phenology modeling feature of their pest management program in mint. Producers with Internet access can run models forecasting the development of strawberry root weevils based on user-provided weather data, or input from one of the hundreds of weather stations plugged into the system.

Rufus LaLone (J.M. Smucker Co.) provided an industry perspective on root weevils by considering the effects of different species on agricultural production in the Northwest. Given the weevils that are out there, what is the impact in the end product? In a nutshell, one grower with a weevil infestation can affect many other growers. Jim Todd (Willamette Agricultural Consulting Co.) presented data showing that *Barypeithes pellucidus*, once considered a minor pest, has been increasing in importance in strawberries and conifers, and the strawberry root weevil has been observed using grass as an alternate host. This last observation should not be a surprise, given the opportunity provided by Oregon’s vast acreage of grass seed fields.

The final two papers in these proceedings are from invitees who had prepared reports but were unable to attend the workshop. The paper by Joe DeFrancesco et al. deals with the efficacy of soil-applied insecticides (chloronicotinylns, carbamates, and biological) for root weevils in strawberry. The paper by Bryon Quebbeman et al. gave results of tests on new chemical insecticides (chloronicotinylns and carbamates) for the control of strawberry root weevil larvae and adults in mint.

—Peter Gothro, Robin Rosetta, and Richard Mankin, Editors

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Workshop Agenda

Thursday, November 1, 2001

- 8:00 a.m. Registration
- 9:00 a.m. Introductions and Welcome, *Peter Gothro*
- 9:30 a.m. **Biology & Life History of Root Weevils: Part I**, *Sharon Collman*
An Aggregation of Weevils—Notes from the Census of Weevils in Nurseries and Landscapes
Lessons from the Board Trap Survey in a Rhododendron Nursery
- 10:30 a.m. Coffee break
- 10:45 a.m. **Biology & Life History of Root Weevils: Part II**, *Sharon Collman*
Root Weevil Acoustics—*Richard Mankin*
All Things Weevilish—*Jim Fisher*
Growing up in a Small Midwestern Nursery—*Dan Herms*
- Noon Lunch
- 1:30 p.m. **Weevil Control: Part I**, *Rich Cowles*
Parasitoids of Root Weevils—*Sharon Collman*
Controlling those “East Coast Adults”—*Rich Cowles*
West Side Story—*Sven Svenson*
Weevils in the Jam—NOT!—*Gary Melchior*
- 2:45 p.m. Coffee break
- 3:00 p.m. Roundtable discussion
- 5:30 p.m. Dinner at Langdon Farms Golf Club

Friday, November 2, 2001

- 8:30 a.m. **Bionomics/Monitoring: Part I**, *Robin Rosetta*
Weevil Management Survey
IPMP Demo—*Ralph Berry*
- 9:45 a.m. Coffee break
- 10:00 a.m. **Bionomics/Monitoring: Part II**, *Robin Rosetta*
General comments from the floor
- Noon Lunch
- 1:30 p.m. **Future Research/Regional Project**, *Peter Gothro*
Identify Problem Areas:
Local species composition
Scouting and monitoring
Thresholds
Developmental models
Who’s working on what?
- 2:30 p.m. Coffee break
- 2:45 p.m. Roundtable discussion
- 3:30 p.m. Wrap-up, *Peter Gothro*