Report to the 2018 BCFGA Convention

From the

Crop Protection Committee

Crop protection issues have been very active once again. We held one Crop Protection Committee meeting during the year, but that seems like it is not enough to keep up with all of the information and give direction, so we will plan more meetings in the coming year.

The best news of the year is that, after detections of Apple Maggot in west Kelowna (2015) and Kelowna(2016), no Apple Maggot were detected in 2017. CFIA continues to uphold the quarantine status for Apple maggot - meaning that the Okanagan is still considered "apple Maggot free". We wish to thank the many organizations and people who help with Apple Maggot, including Howard Thistlewood and his staff who designed improved trap placement, the CFIA who responded like lightning to map hosts around the detections, harvested of fruit in the vicinity around the find, and handled the trapping, with important assistance from SIR. Susanna Acheampong from the BC Ministry of Agriculture is also involved and coordinated funding for additional trapping in 2016 and 2017.

It was quickly determined to increase 2016 monitoring in the area of the find. Also, it was decided to complete the monitoring of the whole valley area over 2 years completing in 2016, instead of three years completing in 2017, using a sampling methodology developed by Dr. Howard Thistlewood at the Summerland Research and Development Centre. The Sterile Insect Release Program contributed by taking on the extra monitoring in 2016. Growing Forward 2 provided additional funding for this activity and Susanna Achaempong, the provincial tree fruit entomologist played a very important role throughout the planning process.

The good news is that no further Apple Maggots were found *in the vicinity of the first find* - a West Kelowna residential area. Since there is no breeding population established and a second life stage (e.g. an egg or a larvae) found, the area continues under quarantine, but with extra vigilance.

In 2017 Brown Marmorated Stink Bugs (BMSB) have become established in urban areas, with some very high concentrations in 'downtown' Kelowna (near Sutherland Avenue and Ethel Street for example). BMSB is not a quarantine pest, as its movement is virtually uncontrollable. The pest flies far and also 'hitch hikes' on vehicles and on exported products. Entomologists have suggested that growers inspect vehicles after visiting urban areas to ensure that BMSB is not present on the vehicle, though this seems difficult to implement in practice.

The Tree Fruit Subcommittee of the BC Plant Protection Committee includes the BC Ministry of Agriculture, BC Tree Fruit Cooperative field services, BCFGA, Summerland Research and Development Centre (also Aggasiz research station), national pest identification specialists at CFIA. All are involved in coming up with plans to slow and reduce the impact of BMSB. The BC Cherry

Producers Association is leading an industry committee on BMSB. Key elements of planning include increased monitoring, identification of the Samurai Wasp which will potentially lead to commercial rearing and release of this BMSB egg parasitoid. Many people are very concerned and active in the search for BMSB solutions.

The federal and provincial government adopted a Plant and Animal Health Strategy in 2017. BCFGA actively participated in the development of the Strategy, with BCFGA director Deep Brar attending a key planning session leading up to the announcement in July. The strategy will provide an important reference to our actual achievements - for both government and industry.

A recent CFIA review of imidacloprid, known as Admire, has resulted in notice of intention to withdraw the product. The BCFGA and CHC have been active in seeking to retain this important tool in the protection of the crop.

The BCFGA continues to nominate three producer-directors to the Sterile Insect Release Board. Glen Lucas also attends Board meetings. SIR continues to be a unique partnership between regional government and growers. SIR is making enormous headway in many of its priorities and plans, but I will leave it up to SIR General Manager Melissa Teche to present that detail.

The BCFGA sponsors a horticulturist to attend and represent the tree fruit sector at the annual Minor Use Meeting, which seeks to place priorities for pest control through new pesticide label uses at the CFIA and to develop new methods of integrated pest control through the national Pest Management Office.

Finally, the BCFGA in entering into the year of a pilot project on Apple Clearwing Moth. BC Investment Agriculture Foundation provided funding for this project. The project is composed of three parts:

Zone 1, the South Okanagan and Similkameen will see pheromones deployed in areas that are as discrete from other areas as possible. Previous efforts at pheromone control were unsuccessful, but deployed in irregularly in an area. Pheromones will be provided to the selected areas to provide three years of coverage.

Zone 2, the Central Okanagan not including all of Winfield, will see pheromones deployed in all farms. About one-half of the farms received the pheromones in 2016 and 2017, and the final allotment will be this year.

Zone 3, the North Okanagan including part of Winfield, will use a variety of measures to protect trees from ACM.

Bucket traps will be deployed in all areas of the valley in 2018, following previous deployments in 2012, 2014, and 2016. The trap captures are being identified and counted by a contractor, with results to

be mapped by SIR later this Spring. It is important to note that areas where pheromone Mating Disruption is in place will have "zero" trap counts, as the traps are 'shut down' by the pheromone.

All areas are being monitored with trunk surveys for larvae and this information will be cross-referenced with treatment types and also bucket trap results.

The Apple Clearwing Moth project is large and ambitious, and we are conducting it on a very tight budget. I am very hopeful that we will achieve insight that will let us control and reduce the population of this pest. Growers must to continue monitor and spray to reduce damage from Apple Clearwing Moth, regardless of whether pheromone is in place.

It is important to note and to thank the efforts of our partners, including the Sterile Insect Release Program, the Canadian Food Inspection Agency, the Pest Management Regulatory Agency, and the Pest Management Centre of Agriculture Canada. The scientists at PARC and the BC Ministry of Agriculture are critical to our pest control objectives.

As your Chair, I have encouraged the staff and Executive to consider a no-pesticide or reduced-pesticide approach. For apples, we are almost there (indeed, the organic producers would say we are there). This involves all of us, including marketers. That makes this scope of change a challenge, but the possibility of differentiating our product in the marketplace and 'monetizing' the good work that growers do to minimize pesticide use, including the SIR program efforts, will help us compete in a market increasingly dominated by the very large farms in Washington State.

If you are interested in serving on the Crop Protection Committee, please contact Glen Lucas or me.

Respectfully submitted,

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Chair, Crop Protection

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