

Soybean Aphid Scouting Cards and Threshold Postcards

Purpose:

To create a simple and concise scouting card that growers and consultants can use to properly identify soybean aphids and their natural enemies, understand the components of the threshold guidelines and which key growth stages are involved in the threshold.

Methods:

A multi-provincial working group comprised of specialists from Ontario, Quebec and Manitoba was established through the Pesticide Risk Reduction Program to develop and deliver key messages on soybean aphid management to all soybean growers through various extension components. The extension entomologists from each province worked together to develop soybean aphid scouting cards and threshold postcards for in-field use for the spring of 2007. The English version was translated to French by the Quebec extension entomologist.

Results:

Both the 4 page scouting card and 2 page postcard (Fig. 1 and 2) were developed in both French (5000) and English (25,000) and are available at all provincial ag offices, with electronic versions available on the following websites: Ontario Soybean Growers www.soybean.on.ca, USDA PIPE network website www.sbrusa.net and will be placed on the Pesticide Risk Reduction website in early 2008.

These scouting cards were very successful. Quebec growers experienced the heaviest soybean infestations for that province to date in 2007 and all copies of the French version were used, and are no longer available in stock. Approximately 5000 copies are still available in English for future use. Supplies of the threshold postcards are more robust, with approximately 10,000 English and 3000 French still available. Distribution of these will continue in 2008 or can be set aside for distribution in future outbreak years.

Summary:

Soybean aphids are the most important soybean insect pest that Canadian soybean growers have been dealing with ever since its arrival in Ontario and Quebec in 2001 and Manitoba in 2002. Extensive research has been done to determine the best management strategies for this pest, including understanding its phenology, proper identification of the pest and its natural enemies, as well as thresholds and spray timings, all of which need to be taken into consideration when making management decisions.

Thanks to the funding from the project, 30,000 Canadian soybean growers will have the proper tools needed to help make sound management decisions for soybean aphids for years to come. Copies of the scouting ID cards and threshold postcards are available across all three provinces where soybeans are grown. Remaining copies in stock will be made available throughout the winter of 2007-08 at grower events like the Southwest

Ag. Conference, Eastern Crops Conference, Diagnostic Days and the Joint Ontario Corn, Soybeans and Wheat Conference.

Improper field scouting and aphid population assessments can lead to mistimed applications of chemical control resulting in economic loss for growers and has negative impact on important natural enemies of soybean aphids. By increasing grower's awareness of soybean aphids, threshold assessments and control strategies, they will be better equipped to make sound management decisions. This will not only result in optimizing economic return for the 30,000 growers who obtained the various components for this project but will reduce the risk of misapplications of insecticides which in turn helps to promote natural enemies proven to be effective at keeping aphids below threshold.

Figure 1. Front cover of the French and English and centerfold of the English Soybean Aphid Scouting Card



Figure 2. English Version of the Soybean Aphid Threshold Postcard



Next Steps:

A Canadian Soybean Aphid Management Publication is in development and will be made available for the spring of 2008. Pending funding Soybean Aphid Scouting Videos will be developed in Ontario in-season and will be made available online and on DVD to growers and consultants.

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Location of Project Final Report:

OSG website: www.soybean.on.ca

USDA PIPE network website www.sbrusa.net