

**Harmonized surveillance of common waterhemp (*Amaranthus tuberculatus* (Moq.) J.D. Sauer) as a model of national collaboration.** Flores-Mejia, S.<sup>1</sup>, Obeid, K.<sup>2</sup>, Schnell, J.<sup>3</sup>, Picard, A.<sup>4</sup> and Kora, C.<sup>5</sup>

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The Canadian Plant Health Council was launched in 2018 with the goal to implement the Plant Health Strategy for Canada through improving coordination of plant health surveillance and enhance response to pest threats across Canada. Different working groups were formed under the Council focussing on three key pillars: biosecurity, emergency response and surveillance. The surveillance group has established three Communities of Practice (CP) targeting specific pest topics (diseases, insects, and weeds) to enhance coordination in plant pest surveillance and monitoring. Established with participation of experts from federal and provincial governments and institutions, as well as grower representatives, these CPs facilitate collaboration, information sharing and harmonization of surveillance and monitoring protocols across the country.

The Weeds Surveillance Community of Practice (WSCP) chose to focus on *Amaranthus* species, primarily common waterhemp (*Amaranthus tuberculatus* (Moq.) J.D. Sauer) and Palmer's amaranth (*A. palmeri* S. Watson), as they pose a significant threat to Canadian agricultural production. Both species are very competitive and resistant to multiple herbicide groups, making their control quite challenging. At this time, only common waterhemp has been found in Manitoba, Ontario and Quebec. Coordinating surveillance efforts across provinces has provided early detection of common waterhemp which is key to the implementation of successful management strategies. This undertaking will also help with the identification and early detection of Palmer amaranth.

Currently, the WSCP has 27 members from 14 various institutions across Canada. The group has published a harmonized protocol for monitoring *Amaranthus* species, featuring genetic tests available to detect herbicide resistance, relevant resources, as well as contact information for reporting suspected cases. The group has created a common repository for literature regarding these species, and examined different data collection and sharing methods. The WSCP forum allows sharing of information regarding weed management and provides opportunities to develop collaborative projects.