

MANAGE RESISTANCE*Now*

**Welcome to the Manage
Resistance Now
quarterly newsletter!**



Hello from Manage Resistance Now,

This quarterly newsletter is aimed to keep you updated on the latest resistance management information. In each newsletter you can expect to find ready to use promotional materials that can be easily incorporated into your own presentations and social media, relevant events, news, and highlights of our latest resources and campaigns.

In this edition you'll find:

- NEW factsheet: palmer amaranth (EN and FR)
- Harvest and post-harvest tips for managing resistance
- Plant Canada 2024 recap
- Shareable social media graphics
- Links to Manage Resistance Now resources

A special welcome to our new partner:

- Réseau végétal Québec



**Réseau végétal
Québec**

We appreciate your help sharing information to raise awareness of pest resistance and promote the valuable resources on the Manage Resistance Now website:

manageresistancenow.ca.

We welcome your suggestions for additional resources that would be helpful for you, your stakeholders, and of course, Canadian growers.

NEW fact sheet: palmer amaranth

We're pleased to share a new resource, developed in partnership with the Canadian

Plant Health Council. Available in [English](#) and [French](#), this shareable PDF gives a helpful overview of what palmer amaranth is, the potential impacts it can have, and how to look for it in your field.



Palmer amaranth is rapidly spreading throughout North America and threatening crop production. What makes Palmer amaranth such a challenge is its prolific seed production (100,000 – 500,000 seeds/plant) and because the small seeds are easily dispersed through the field.

It is one of the most widespread and economically damaging agronomic weeds in the Southeastern U.S. and has been shown to reduce soybean and corn yields by 79% and 91%, respectively. Not only is Palmer amaranth more competitive than other amaranth (pigweed) species, but it is also resistant to multiple herbicide modes of action.

To date, there are no known established populations of Palmer amaranth in Canada; however, it has spread to fields in Northeastern U.S., and other parts of the world from its native origin of Southwestern U.S. To read more about palmer amaranth and how to prevent it from causing significant economic damage to Canadian growers, [click here](#).

Harvest and post-harvest tips for managing resistance

It's hard to believe summer is almost over and we are into harvest season! You might not think about it, but harvest is a good time to watch for resistance development and preventing the spread of resistance. When harvesting, you should be planning for next year's crop. It's never too early to plan your crop rotation, certified seed selection, and pest control strategy. Thinking about resistance management during harvest will ensure you are prepared for preventing and managing resistance challenges, and therefore, reduce your potential loss and damage due to resistant pests.

Below are a few tips from Manage Resistance Now for managing resistance during harvest:

- Keep records! Record where persistent [weeds](#) were in the fields, if you had troubles controlling [insects](#) or [diseases](#) with your chosen control method. This way, you can appropriately plan for next year to control pests by investigating alternative control methods and prevent the risk of resistance development.
- Use harvest weed seed control equipment – installing a weed seed mill on your combine can [help to avoid kochia weed seeds from being spread across the field](#). Kochia is a good target for harvest weed seed control

- because its seed shatters very late in the season.
- Expect volunteer plants to emerge in the field in the year(s) following a HT crop. This can be the [result of seed loss before or during harvest](#), or transfer of seed by farm equipment. Consider volunteer plants as weeds and factor them into your weed control plans.
 - Thoroughly [clean equipment between fields with expected resistance](#) to remove all remaining seed or grain and limit transfer to other fields.
 - Disease pathogens can persist on stubble, in certain weed populations, in soil between seasons and over the winter. Crop rotation, especially with crops that are not susceptible to the same diseases, [can help break the disease cycle](#).
 - Removal of diseased plants [greatly reduces, or eliminates, inoculum available for subsequent disease development](#).
 - Rotate crops with [different seeding and harvesting dates](#). Risk of weed resistance is shown to be the lowest in fields with fall-seeded crops, forage crops, or where three or more crop types (e.g. cereal, oilseed, pulse) are grown over a six-year period.
 - Consider [post-harvest grazing](#) of growing weeds.



Suspect you have resistant weeds at harvest?

Our friends at [Keep it Clean](#) would like to remind Canadian growers to read and follow the label to find the application rate, timing and pre-harvest interval (PHI) before applying any crop protection product. Improper or off-label use of pesticides is illegal and may result in unacceptable product residues, putting market access at risk. The temptation to control resistant weeds at harvest with a product not in accordance with the label is *never* the solution. Try the best management practices above and refer to Manage Resistance Now to control resistant weeds in accordance with labels and industry best practices. Please share this reminder with grower networks!

From our partners

Did you know winter annual weeds like stinkweed, flixweed, and shepherd's purse germinate in the fall, survive the winter and continue growing in the spring? A recent article from the Saskatchewan Pulse Growers, [Post-Harvest Weed Control](#) discusses the importance of controlling winter annuals and reducing the risk of resistance development.

Wild oat problem? The Canadian Weed Science Society article [Soil Applied Granular Herbicide Application](#) explains the advantages of fall application to control wild oats.

Check out Canola Watch article on [how to contain herbicide-resistant kochia](#) and a [quiz](#) for managing fall weeds.

Media kit

Download engaging content and shareable resources [here!](#)

If you would like to request hard copies or French resources, please [contact us](#).



Social media

Please like and share our posts on [Twitter/X](#) and [Facebook](#). You can also download and post content directly on your channel. Remember to tag [@protectyourland](#) and use [#cdnag](#) [#agtwitter](#)



News

- Discover how Agriculture and Agri-Food Canada researchers are using innovative techniques to tackle invasive weeds across the Prairies in this [AAFC article](#).
- Learn about how integrated weed management (IWM) practices are helping reduce herbicide resistance by incorporating non-chemical methods alongside traditional herbicide strategies in this [Western](#)

Events

Promoting Manage Resistance Now at Plant Canada:

CropLife Canada was a proud sponsor of the Federation of Canada's plant science societies recent event in Winnipeg (Plant Canada 2024). Luis Luque, Brittany Lacasse and Jennifer Hubert hosted a booth and a panel to raise awareness of Manage Resistance Now and to facilitate greater engagement with the scientific community. During our panel discussion, public and private sector views were brought together to raise awareness of the importance of proactive prevention of insecticide, fungicide and herbicide resistance, how to use Integrated Pest Management (IPM) strategies in resistance management, and the importance of public-private initiatives like the Manage Resistance Now (MRN) platform. The panel encouraged the scientific community to participate in public policy discussions to ensure government measures remain evidence and science based.



Producer article.

- Learn how Ontario growers are managing the fast-spreading waterhemp weed through diverse herbicide use and crop rotation in this recent [Farmtario article](#).

How do you manage pest resistance?

Join our “Hear from a Grower” campaign on social media! Share your experiences and tips to help raise awareness of this important issue. [Contact us](#) or find MRN on Twitter/X [@protectyourland](#).

Would you like to suggest content ideas, upcoming events or other resources? Please contact the [Manage Resistance Team](#) with feedback and questions.

Herbicide tolerant crop stakeholder info session in Ottawa

CropLife Canada is hosting a government-stakeholder information sharing session on **October 17, in Ottawa** to share views and information related to herbicide tolerant crops. The objective of the fall information session on HT crops has the goal to facilitate collaboration. We want to foster a seed sector common understanding of the current landscape of herbicide resistance in Canada, including novel HT crops, how BMPs are determined and communicated and regulatory oversight in Canada. We envision that this collective understanding can help inform the need for ongoing government oversight of herbicide tolerant traits and the needs for stakeholder cooperation to improve implementation of BMPs. A limited number of spaces remain. Please reach out if you or a colleague is interested in attending.

Are you looking to promote Manage Resistance Now at your next event? Download resources and logos [here](#). Looking for hard copies of resources? Please [contact us](#).

Please feel free to share this newsletter with colleagues in your organization. If you have colleagues who would benefit from these updates, please email the [Manage resistance Now](#) to have them added to the distribution list.



**MANAGE
RESISTANCE** *Now*



Try email marketing for free today!