

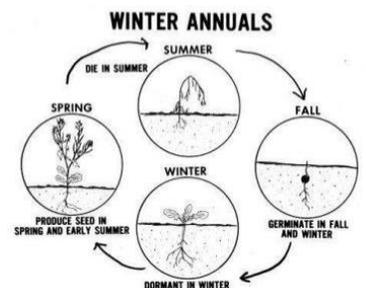


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## Successful Weed Management in 2019

Looking at spectrum of weeds that Ontario farmers deal with, they can be loosely classified into 3 categories: perennials, annuals and biennials. Perennials are weeds that pose as one of the most difficult weeds to control because they can survive upwards of three or more years. Biennials have a unique lifecycle because they need 2 years to fully develop; year one is given to vegetative growth of the plant and year two is for reproductive growth. Perennial and biennial weed pressure is increased where no-till and strip-till management practices are used because there is no damage caused to the root system of these weeds.

Annual weeds are any weed that completes its lifecycle in a single year. These weeds can be further classified as either summer or winter annuals. The most common lifecycle of weeds in Ontario is summer annuals; these weeds germinate in the spring and are fully mature by the fall (ex. Ragweed, Eastern Black Nightshade and Lambs quarters). The fall months signal the beginning of germination for winter annual weeds. These weeds will produce a rosette that allows them to overwinter and continue their lifecycle during the spring months. It is especially important to manage these weeds early in the spring while they are still young and actively growing.



Above: Winter annual weeds growth cycle

## Common Winter Annuals

Bluegrass is one weed that is making itself seen in fields across the countryside this spring. It will appear in patches across headlands and can easily spread throughout your field on tillage equipment because of its clump-like growth habit. It can be identified from having no hair on its leaves and the distinctive boat-shaped tips on its leaves (Figure 1). If you find yourself facing this weed in a corn field, consider adding Acuron to your product list for 2019 because it offers two Group 27 chemistries that are effective to manage this weed.



Figure 1: Annual Bluegrass



Figure 2: Canada Fleabane Roseette. Be sure to control this weed before it enters the bolting stage.

While rain may keep you and your planting equipment out of the field, it certainly doesn't stop weeds from growing. Figure 2 shows a Canada Fleabane rosette that I found last week. The size of this weed demonstrates just how important it will be this spring to have multiple modes of effective action in your spray tank. For a soybean program, include products like Eragon or Dicamba for taking down already emerged Fleabane and Sencor for its residual value on later season Canada Fleabane (yes, this weed has two different life cycles!). Early season and effective control of this weed is critical – trying to control Fleabane once its past the bolting stage is just a revenge spray.

Chickweed, Shepherd's Purse and Purple Deadnettle are three other winter annual weeds that deserve honourable mentions when it comes to weed management; each of these weeds are alternative hosts for various pests. With increasing pressure of Soybean Cyst Nematode (SCN) around the province, these three weeds can all be found on the list for alternate hosts of SCN. Fields with heavy Chickweed pressure provide an alternate host for Black cutworm. Knowing this, it brings the importance of weed management to a new level.