

## Crabgrass control during a hot summer

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Updated from an original article written by Aaron Hathaway and Kevin Frank.

Crabgrass has been enjoying the high temperatures in Michigan by invading turfgrass areas.



Crabgrass emerging in drought-stressed turf. Photo by Kevin Frank, MSU.

High temperatures and dry conditions in June has crabgrass now appearing in many turf areas. Keep in mind that in contrast to our cool-season turfgrasses that have optimum growing temperatures of about 65-75 degrees Fahrenheit, crabgrass is a warm-season annual that will thrive in the high temperatures of 80-100 F. So as cool-season turf growth has slowed in the last several weeks, crabgrass is now exploding in growth. If post-emergence crabgrass control is in your plans, here's a herbicide primer. Herbicides will be primarily referred to by their active ingredient.

There are two main options for post-emergence crabgrass control in cool-season turf: quinclorac (Drive XLR8) or fenoxaprop-ethyl (Acclaim Extra). Both products are effective for post-emergence control of crabgrass. However, there are also some key differences between these products (see table):

- Quinclorac can boost broadleaf activity when tank-mixed with other broadleaf-specific herbicides, especially phenoxies like 2,4-D and MCPP.
- Quinclorac can provide excellent control of some broadleaves, like white clover and dandelion, on its own.
- Quinclorac can miss excellent post-emergence crabgrass control when crabgrass is at the two-to-three tiller stage.
- Add a methylated seed oil to quinclorac to improve efficacy.

When crabgrass is small (one-to-three leaf – one tiller) or when it is gorilla-sized (four tillers and over), quinclorac will provide excellent control of crabgrass and is very safe when applied to new cool-season turf seedings.

Fenoxaprop-ethyl is equally effective as a post-emergence crabgrass herbicide and differs from quinclorac in these ways:

- Fenoxaprop-ethyl can be applied at any crabgrass growth stage and provide excellent control.
- Fenoxaprop-ethyl can provide better goosegrass control than quinclorac.
- Fenoxaprop-ethyl won't provide any broadleaf weed control on its own and should not be tank-mixed with phenoxy herbicides.
- Add a non-ionic surfactant to fenoxaprop-ethyl to improve efficacy.

There are other herbicides that can provide good post-emergence crabgrass control. MSMA can be effective for crabgrass control but is labeled for use only on golf courses and sod farms. Dithiopyr (Dimension and others), in addition to preemergence control, can be used for postemergence control on crabgrass up to one tiller. Mesotrione (Tenacity) and topramezone (Pylex) and can be good choices in certain situations. Both of these products can be applied on the same day of seeding Kentucky bluegrass (be careful and read the label about applications on other cool-season turf species) for crabgrass control during establishment. Also, both can provide good control of some broadleaves as well. There are many tank-mix options available and warranted depending on the mix of weeds that may be present in different areas.

For homeowners, quinclorac is the most readily available product in formulated ready-to-use products. [Michigan State University Extension](#) advises you read these labels to find out how to best use them and in which situations they may be best utilized.

Comparison of quinclorac and fenoxaprop-ethyl herbicides		
Question	Quinclorac	Fenoxaprop-ethyl
Lose some post-crabgrass efficacy?	Yes - 2-3 tiller growth stage.	No - works well at all growth stages.
Stand-alone broadleaf activity?	Yes - particularly white clover, dandelion and speedwell.	No
Good tank-mix partner?	Yes - synergistic effect when mixed with phenoxy herbicides (2,4-D, MCPP).	No - do not mix with phenoxy herbicides as there is some antagonism.
Goosegrass control?	No	Yes
Turfgrass injury?	No - safe on newer seedings.	Sometimes - can injury some Kentucky bluegrass cultivars in high heat.

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