

# Agronomy Spotlight



### Weed Calendar for the Corn Belt

The differences in emergence characteristics of weed species are one of the reasons why weed management is such a difficult task. Knowing when weeds emerge can help improve weed management systems by increasing scouting efficiency and help determine optimum weed control tactic timing (seedbed prep, herbicide application, cultivation, etc).

Table 1. Weed emergence sequence of common troublesome annual weed species in the corn growing region.

Herbicide Application Timing & Weed Emergence										
Winter Annual		Burndown/ Preplant		Postemergence				Fall Applied		
Common Name	Latin Name	March	April	May	June	July	August	September	October	November
Annual bluegrass	Poa annua									
Downy brome	Bromus tectorum									
Wild mustard	Brassica kaber									
Field pennycress	Thlaspi arvense									
Shepherd's purse	Lolium perenne L. ssp. multiflorum									
Horseweed (marestail)	Conyza canadensis	****	****	***				***	****	****
Purple deadnettle	Lamium purpureum									
Wild carrot	Daucus carota									
Henbit	Lamium amplexicaule									

Early Season Emergence Season - Long Emergence

\*\*\*\* Winter annual life cycle pattern

Herbicide Application Timing & Weed Emergence										
Summer Annual Broadleaves		Burndown/ Preplant		Postemergence				Fall Applied		
Common Name	Latin Name	March	April	May	June	July	August	September	October	November
Common lambsquarters	Chenopodium album									
Eastern black nightshade	Solanum ptycanthum									
Pennsylvania smartweed	Polygonum pensylvanicum									
Palmer amaranth	Amaranthus palmeri			• • • •	• • • •	• • • •	• • • •	• • • •		
Morningglory spp.	Ipomoea spp.			• • • •	• • • •	• • • •	• • • •	• • • •		
Common ragweed	Ambrosia artemisiifolia									
Giant ragweed	Ambrosia trifida									
Redroot pigweed	Amaranthus retroflexus			• • • •	• • • •	• • • •				
Velvetleaf	Abutilon theophrasti		• • • •	• • • •	• • • •	• • • •				
Common waterhemp	Amaranthus tuberculatus			• • • •	• • • •	• • • •	• • • •	• • • •		

	Early Season Emergence	• • • •	Early - Mid Season Emergence
	Extended Diapause Giant Ragwe	ed Emerge	ence

Herbicide Application Timing & Weed Emergence										
Summer Annual Grass		Burndown/ Preplant		Postemergence				Fall Applied		
Common Name	Latin Name	March	April	May	June	July	August	September	October	November
Large crabgrass	Digitaria sanguinalis		• • • •	• • • •	• • • •	• • • •				
Wooly cupgrass	Eriochloa villosa		• • • •	• • • •	• • • •	• • • •				
Barnyardgrass	Echinocloa crus-galli			• • • •	• • • •	• • • •				
Green foxtail	Setaria viridis		• • • •	• • • •	• • • •	• • • •				
Giant foxtail	Setaria faberi		• • • •	• • • •	• • • •	• • • •				
Yellow foxtail	Setaria glauca		• • • •	• • • •	• • • •	• • • •				
Goosegrass	Eleusine indica	• • • •	• • • •	• • • •	• • • •	• • • •	• • • •			
Fall panicum	Panicum dichotomiflorum			• • • •	• • • •	• • • •	• • • •			

• • • • Early - Mid Season Emergence



#### Identification

#### Grasses



Annual bluegrass.

Photo courtesy of Shawn Wright, University of Kentucky, Bugwood.org.



Downy brome.



Large crabgrass collar region, left, and seedhead, right.

Photos courtesy of Steven Gower.



Wooly cupgrass.

 ${\bf Photo\ courtesy\ of\ Bruce\ Ackley, The\ Ohio\ State\ University,\ Bugwood.org.}$ 



Barnyardgrass.

Photos courtesy of Bruce Ackley, The Ohio State University and Howard F Schwartz, Colorado State University, Bugwood.org.



Green foxtail.

 ${\bf Photo\ courtesy\ of\ Bruce\ Ackley, The\ Ohio\ State\ University,\ Bugwood.org.}$ 



Giant foxtail.

Photo courtesy of John D. Byrd, Mississippi State University, Bugwood.org.



Yellow foxtail.

Photo courtesy of Howard F. Schwartz, Colorado State University, Bugwood.org.





Goosegrass.

Photo courtesy of John D. Byrd, Mississippi State University, Bugwood.org.



Fall panicum.

#### **Broadleaves**



Horseweed (marestail).



Wild mustard. Photo courtesy of Steven Gower.



Shepherd's purse. Photo courtesy of Steven Gower.



Horseweed (marestail).



Wild mustard. Photo courtesy of Steven Gower.



Shepherd's purse. Photo courtesy of Steven Gower.





Eastern black nightshade.



Pennsylvania smartweed.
Photo courtesy of Bruce Ackley, The Ohio State University, Bugwood.org.



Palmer amaranth.

Photos courtesy of Stephen Gower.



Common waterhemp seedlings (left) and stem (right).

Seedlings photo on left courtesy of Stephen Gower.



Morningglory species (ivyleaf morningglory pictured).

Photo courtesy of Stephen Gower.









Giant ragweed.

Photo courtesy of Steven Gower.



Redroot pigweed.

Photo courtesy of Stephen Gower.



Velvetleaf.

### Sources

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 $Steckel, L.\ 2019.\ Barnyard grass\ management\ in\ soybeans.\ Take\ Action\ Herbicide\ Resistance\ Management.\ \underline{http://iwilltakeaction.com}.$ 

### Legal Statements

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Performance may vary, from location to location and from year to year, as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible and should consider the impacts of these conditions on the grower's fields.

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