# Weed Emergence Sequences

## Knowledge to guide scouting and control

Knowing when weeds begin to emerge can improve weed management by helping to determine when to scout fields and implement control tactics. Although the initial emergence date for weeds varies from year to year, the emergence sequence of different weeds is fairly constant. Each group below includes weeds that begin to emerge at similar dates. Most weeds emerge over a prolonged time period, so weeds from earlier groups may still be emerging when later groups begin to emerge. The GDD (base 48) information is an estimate of heat units required to reach 10% emergence. However, weed emergence is influenced by several other factors than air temperature, including cloud cover, soil type and moisture, and crop residue.

For some species, the majority of emergence occurs in a short time period (2-3 weeks), whereas other species may emerge over a prolonged period (8-10 weeks).

Short

Medium

The duration of emergence for species is indicated by the color background where its name appears.

Early

Group 0 Emergence occurs in fall or early spring.

Winter annuals normally complete emergence prior to planting of corn or soybeans. Examples: Horseweed (marestail), white cockle, field pennycress, shepherd's purse.

### Group 1

Emergence begins several weeks prior to corn planting.

GDD < 150



Giant ragweed



Lambsquarters



Penn. smartweed



Common sunflower

Emergence Date

#### Group 2 Emergence begins soon before or at corn planting.

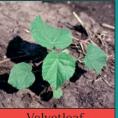
GDD = 150-300



Woolly cupgrass



Common ragweed



Velvetleaf



Giant foxtail





Yellow foxtail



Black nightshade



Common cocklebur



Group 4 Emergence begins after corn emergence.

Late GDD > 350



Fall panicum

Waterhemp

Morningglory sp

### IOWA STATE UNIVERSITY

**University Extension** 

Integrated Pest Management IPM-64

#### This poster is a joint project of:

Iowa State University University Extension

University of Minnesota Extension Service

University of Wisconsin Cooperative Extension

United States Department of Agriculture Agricultural Research Service

#### Funding provided by:

North Central Region Integrated Pest Management Program

Leopold Center for Sustainable Agriculture