

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

Long

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

Group 2

Emergence begins soon before or at corn planting.
GDD = 150-300



Woolly cupgrass



Common ragweed



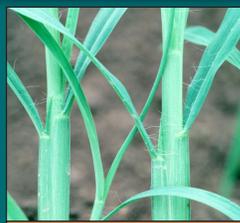
Velvetleaf



Giant foxtail

Group 3

Emergence begins at end of corn planting season.
GDD = 250-400



Yellow foxtail



Black nightshade



Common cocklebur



Wild proso millet

Group 4

Emergence begins after corn emergence.
GDD > 350



Large crabgrass



Fall panicum



Waterhemp



Morningglory sp.

Emergence Date

Late

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