**Arrest®**

**OTHER NAMES**
Agricultural products: Poast®, Poast Plus®, Vantage®
Common/generic name: sethoxydim

**HISTORY**
Discovered by Nippon Soda in late 1970’s, developed by BASF
First registered on soybean and cotton in early 1980’s, later registered on peanut, forage legumes, and numerous vegetable crops
The first of a large group of postemergence herbicides that selectively controls grasses in broadleaf crops
Arguably, a landmark herbicide in American agriculture

**HERBICIDAL ACTIVITY**
Very specific, narrowly focused mode of action
Inhibits an enzyme critical in plant’s fatty acid synthesis and thus cell growth
Symptoms are slow to be expressed
  o Growth of grasses ceases in 2 days
  o Obvious symptoms take 1-2 weeks to develop
Broadleaf plants are not affected by Arrest®, since the enzyme in broadleaf plants is less sensitive to inhibition than the same enzyme in grasses. Some grasses are tolerant of Arrest® and these grasses rapidly detoxify the herbicide.

**BEHAVIOR IN PLANTS**
Quickly absorbed by plant foliage *(rain-fast after 1 hour)*
Actively translocated throughout the grass plants, where it accumulates in the growing points of foliage and roots (important for perennial grass control)

**BEHAVIOR IN SOILS**
No significant activity in the soil
Rapidly degraded

**WEED CONTROL IN FORAGE LEGUMES**
Arrest is for postemergence control of annual and perennial grasses
Weed size is the critical factor for determining when to spray Arrest®
  o Smaller grasses are more effectively controlled than larger grasses, although there is more margin for error with Arrest® than other herbicides (for example Slay®)
Weeds should be actively growing at time of treatment
  o Avoid spraying during drought, temperature extremes, or immediately before or after mowing
Rate: 2¼ - 3¼ pt./A (or 1½ - 2¼% Arrest® solution in water for hand-sprayer)
Two applications, one month apart, will likely be needed for perennial grass control (johnsongrass, bermudagrass, quackgrass, etc.)

ADJUVANTS, ETC.

**Arrest® and Vantage® labels are written with high rates and no adjuvant requirements**
Other sethoxydim herbicides require the use of a crop oil concentrate and their herbicide rates are correspondingly lower
Always follow the herbicide label for adjuvant recommendations

CROP ROTATION/FUTURE PLANTINGS
No crop rotation restrictions

MISCELLANEOUS

Arrest® will control most grass species; including grass crops - wheat, rye, oats, barley, ryegrass, grain sorghum (milo), and corn.
Perennial grasses are difficult to control with Arrest®. Multiple applications will be needed. Tillage between forage plantings will help weaken the perennial grasses and improve control with Arrest®.

**Do not tank-mix Arrest® with other herbicides.** The Arrest® molecule is fragile and is less effective when combined with other herbicides compared to separate herbicide applications. Separate herbicide applications by at least 3 days.