

# Slay®

## OTHER NAMES

- ☐ Agricultural product: Pursuit® (BASF), other proprietary products premixed with Pursuit
- ☐ Common/generic name: imazethapyr

## HISTORY

- ☐ Discovered by American Cyanamid in 1981
- ☐ Registered on soybean in 1989, peanut in 1991
- ☐ Later registered on alfalfa, clover, and leguminous vegetables

## HERBICIDAL ACTIVITY

- ☐ Very specific, narrowly focused mode of action
- ☐ Inhibits an enzyme critical for amino acid synthesis, which is critical for plant growth
- ☐ **Symptoms are slow to be expressed (1 - 2 weeks)**
- ☐ Tolerant plants rapidly detoxify Slay®. Susceptible plants cannot or slowly detoxify Slay®

## BEHAVIOR IN PLANTS

- ☐ Quickly absorbed by plant foliage (**rain-fast after 1 hour**)
- ☐ Slower rate of absorption by roots from soil
- ☐ Moves throughout the plant after absorption
- ☐ Drought and temperature stresses will alter the degree of absorption and translocation

## BEHAVIOR IN SOILS

- ☐ Significant soil residual activity (**in some crops, soil applications are preferred**)
  - A bonus by providing residual weed control
  - A liability by stunting/killing susceptible future crops
- ☐ Soil pH will affect persistence
  - Soil pH less than 6.5 will cause binding to soil, but Slay® can be 'released' to active state when soil is limed – can affect susceptible future crops
- ☐ Will not leach (downward movement) in soil

## WEED CONTROL IN FORAGE LEGUMES

- ☐ Slay® is for postemergence weed control
- ☐ Weed size is the most critical factor determining when to spray Slay®
  - **Smaller weeds are more effectively controlled than larger weeds**
- ☐ Forage legumes should be actively growing, at least **though the 2<sup>nd</sup> trifoliage stage of seedling forage legume growth**
- ☐ If sprayed on established plantings, it may be necessary to mow forage, wait about 1-2 weeks, they spray
  - Excessive forage growth may intercept herbicide, causing poor weed control
- ☐ Rate: 3 – 6 fl. oz./A
  - Can be split between two applications, maximum of 6 fl. oz./A per year.

## ADJUVANTS, ETC.

- ☐ **Always non-ionic surfactant or use crop oil concentrate with Slay®**
  - In addition, northern latitudes include UAN (liquid nitrogen fertilizer) or sprayable grade AMS (ammonium sulfate)

- Help with spray droplet deposition and foliar absorption of Slay®
- Refer to Slay® label for specific directions

#### CROP ROTATION/FUTURE PLANTINGS

- **These are bonafide restrictions – customers need to pay attention**
  - Plant these anytime after Slay® treatment: *pea, soybean, peanut, lima bean*
  - Plant these at least 4 months after Slay® treatment: *alfalfa, clover, rye, wheat*
  - Plant these at least 8½ months after Slay® treatment: *corn*
  - Plant these at least 9½ months after Slay® treatment: *barley*
  - Plant these at least 18 months after Slay® treatment: *oats, sorghum/milo, sunflower*
  - Plant these at least 40 months after Slay® treatment: any crop not listed (*rape/canola, chicory, ryegrass*)

#### MISCELLANEOUS

- **Slay® should be used only on clover and/or alfalfa.**
- **Slay® cannot be used on seed blends that include chicory, rape, or ryegrass**
- **Sprayer calibration is critical**
- Slay® is truly a “Thoroughbred” herbicide. At one time, Pursuit was the most widely used herbicide in the U. S. However, Slay® will not control every weed species. Refer to sample label for list of weeds controlled.