Herbicide efficacy depends on application windows

Herbicide efficacy depends on application windows. The timing of herbicide applications is critical to ensure optimal control of weeds. Applying herbicides according to the labeled stages of growth can improve efficacy. Timing of applications is critical to achieve the desired control of weeds.

Postemergence Herbicides are applied to emerging or emerged crops. They injure weeds that emerge after the application while not affecting the crop if it were emerged. Still other herbicides, such as glyphosate (Roundup) or paraquat (Gramoxone SL), will only control weeds as they germinate, with no activity on plant foliage. Other herbicides, such as pendimethalin, will only control weeds before they emerge. Herbicides like pendimethalin may be more effective if applied when weeds are very small, emerging, or emerging/germinating.

Preemergence Herbicides are applied preplant or preemergence. These herbicides are applied before the crop emerges. They are generally more effective on grasses but would kill the crop if it were emerged. Still other herbicides, such as trifluralin (Outrider) and chlorimuron (Beeyond), will control emerged weeds and prevent the development of seedlings. They act to inhibit seed germination and prevent emergence of new weeds.

Developmental stages are not based on the size of the crop but rather on the number of leaves, presence of tillers, emergence of main roots or flag leaf, and the development of vegetative and reproductive development allowing for the safe application of grass herbicides. The accompanying charts indicate the stage of crop development as benchmarks for application timings. The accompanying charts indicate the stage of crop development as benchmarks for application timings.

Herbicides listed contain only a single active ingredient intended as a quick guide for herbicide selection in wheat. Herbicide programs that are effective on the targeted weed, environmental conditions at the time of application, and broadleaf herbicides in winter and spring wheat. The information provided is intended as a guide for selecting herbicides in wheat.

The accompanying charts indicate the stage of crop development as benchmarks for application timings. Nearly all herbicides labeled for postemergence herbicide programs that are effective on the targeted weed, environmental conditions at the time of application, and broadleaf herbicides in winter and spring wheat. The information provided is intended as a quick guide for herbicide selection in winter and spring wheat.