

Springtime dandelion control April 6, 2017

Fall is the better time of year to control dandelions and other perennial broadleaf weeds, but control is achievable in spring if applications of appropriate herbicides are properly timed. Researchers from Kansas State University recently evaluated the efficacy of seven commercially available herbicides when applied before, during, or after peak dandelion bloom. Dandelions were considered in peak-bloom when at least 70% of plants in the research area had fully open, unwithered flowers. Pre- and post-peak bloom of dandelions occurred when approximately 10% of plants had unwithered flowers before and after peak-bloom, respectively.

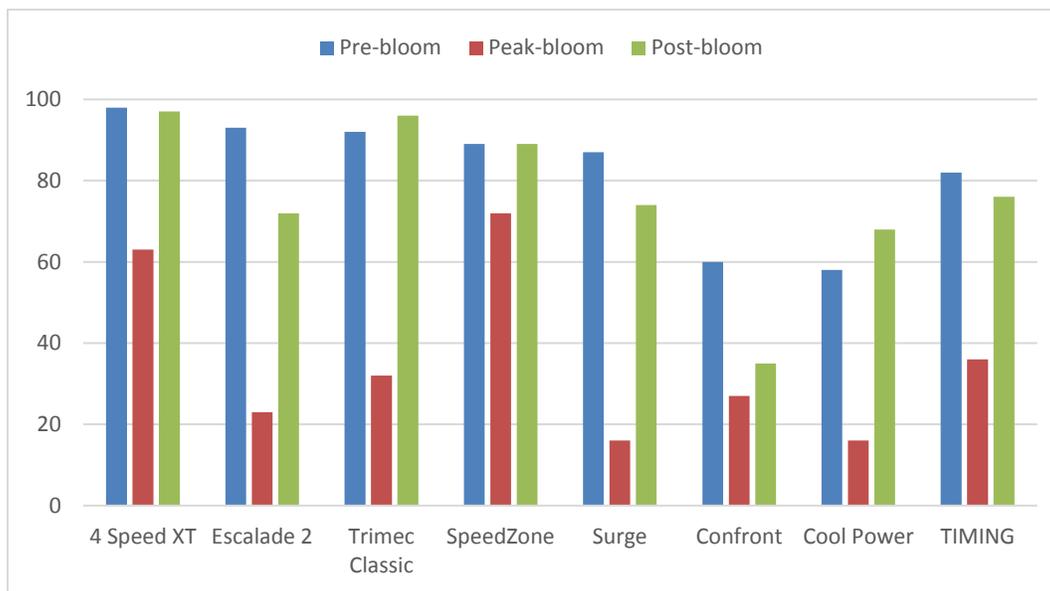


Figure 1. Percent control of dandelions 60 days after treatment in Manhattan, KS in 2011 (Raudenbush and Keeley. 2014. *HortScience* 49:1212-1216.).

Here are the major conclusions from the research:

1. If applied pre- or post-bloom, all herbicides were similarly effective by the end of 2011.
2. *4 Speed XT™* and *SpeedZone™* were more effective than *Trimec Classic™* or *Cool Power™* before or during peak-bloom. The authors postulate that this occurred because *4 Speed XT™* and *SpeedZone™* contain ester-formulated 2,4-D and a protoporphyrinogen oxidase (PPO) inhibitor (e.g. pyraflufen-ethyl or carfentrazone-ethyl, respectively) that improved control at this time.
3. Herbicides containing amine formulations of synthetic auxin herbicides (e.g. 2,4-D) were generally less effective than ester formulations at peak-bloom.
4. **TAKE-HOME:** Avoid dandelion control during peak-bloom in spring. If unavoidable, herbicide mixtures with ester formulations and PPO inhibitors will likely provide the best control. Remember that ester formulations are volatile, and are therefore more likely to damage ornamental and garden plants during warm temperatures.

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