

Professional Use: How late is too late to control dandelions and other weeds this fall?**Oct 10, 2014**

We are now in the prime season for broadleaf weed control starting about September 15, but there is plenty of time in the fall for good, if not even improved, control over earlier applications. Furthermore, applications made now have very little chance of affecting near dormant trees and ornamentals, unlike with spring applications made around non-target species that are leafing out and/or blooming. Nebraska research in agricultural fields reported in 2003 showed 2,4-D and/or dicamba were more effective in controlling dandelions and Canada thistle when applied 1 to 10 days after the first fall frost than when applied 5 to 11 days before the frost (Wilson and Michaels, 2003). Earlier work by Bruce Branham at Michigan State showed that even though early September applications were effective in controlling broadleaves yet that same fall, September applications were less effective long-term than applications made in October and November (Figure 1). More recent work on ground ivy at Purdue shows that herbicides like triclopyr (Turflon) that are very effective on ground ivy, retain their effectiveness when applied regardless of the first frost and as late as early- to mid-November in Indiana (Figure 2) (Reicher and Weisenberger, 2007). However, herbicides with lower activity on ground ivy were most effective from Oct 1 through Nov 1, and efficacy decreased outside of this window. This study showed that broadleaf applications should be effective when made into the first week or two of November, but control may not be seen until spring. However, herbicides that contain carfentrazone (FMC's Quicksilver, PBI Gordons' Powerzone and Speedzone) will still give a response in 7 to 14 days even when applied in late October or early November. More recent studies at Purdue were applied in Fall of 2007 used two highly effective herbicides on ground, triclopyr (Turflon) and fluroxypyr (Spotlight), and applied them with and without carfentrazone (QuickSilver) on Sep 15, Oct 15, and Nov 15. QuickSilver had similar effects on both herbicides, dramatically improving short-term control from November applications (Figure 3). Though one might suspect that QuickSilver would decrease long-term control because the quick burndown could limit herbicide translocation, QuickSilver did not decrease long-term control from these herbicides as rated the following May (Figure 4). Similar to our previous work, Turflon applied as late as Nov 15 provided over 90% control by the following May of the very difficult-to-control ground ivy. We repeated this research at UNL in fall of 2010 with the then popular herbicide Imprelis, which is now off the market. The same trends occurred, even on the extremely difficult-to-control Nebraska ground ivy (Kohler et al., 2004) (Figure 5 and 6). The take home message is that broadleaf herbicides can be very effective when applied well into the fall and applications this late will control perennials as well as winter annuals that have already germinated. If quick knockdown is required for immediate customer satisfaction in applications later in the fall, using products or tank mixes that contain carfentrazone will give a rapid burndown while not decreasing long-term control.

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References:

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2. Reicher, Z. J., and Weisenberger, D. V. 2007. Herbicide selection and application timing in the fall affects control of ground ivy. Online. *Applied Turfgrass Science* doi:10.1094/ATS-2007-0831-01-RS.
3. Wilson, R. G., and Michiels, A. 2003. Fall herbicide treatments affect carbohydrate content in roots of Canada thistle (*Cirsium arvense*) and dandelion (*Taraxacum officinale*). *Weed Sci.* 51:299-304.

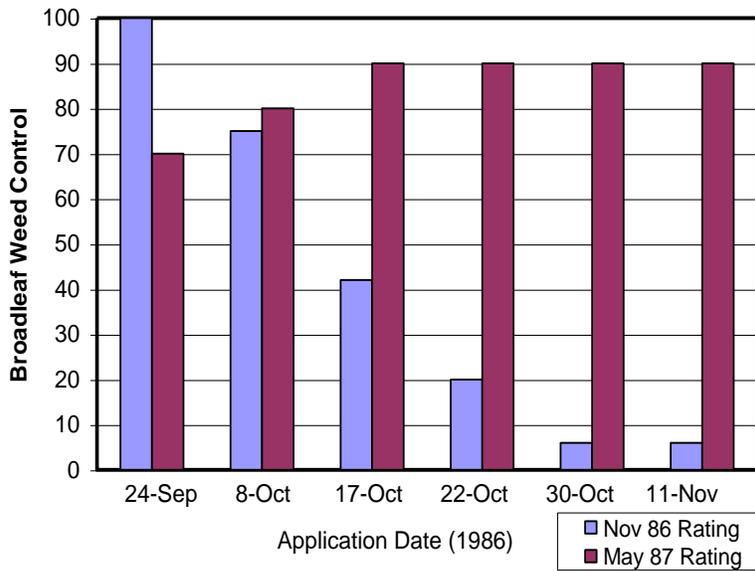


Figure 1. Effect of fall timing of broadleaf herbicides on control rated in Nov after application and again the following May. Note how Sep 24 applications were most effective when rated the following November, but later applications were more effective when rated the following spring (Michigan State 1986).

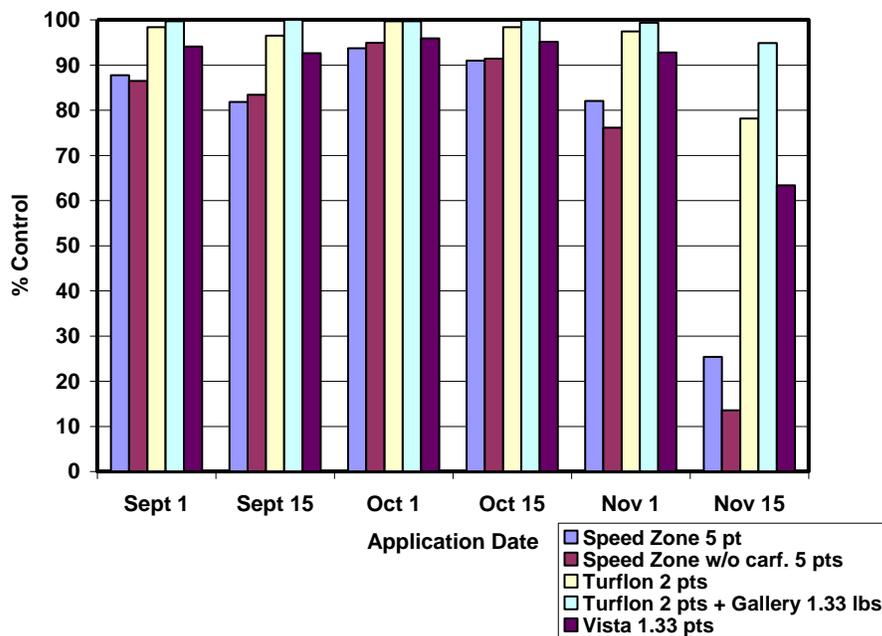


Figure 2. Three year averages of effects of herbicides applied in fall on ground ivy control when measured in May the following year. Turflon (triclopyr) or Vista (or Spotlight, common name fluroxpyr) retained effectiveness regardless of application date, whereas the efficacy of the 2,4-D-based carfentrazone suffered outside of Oct 1 through Nov 1 window. (Purdue 2007).

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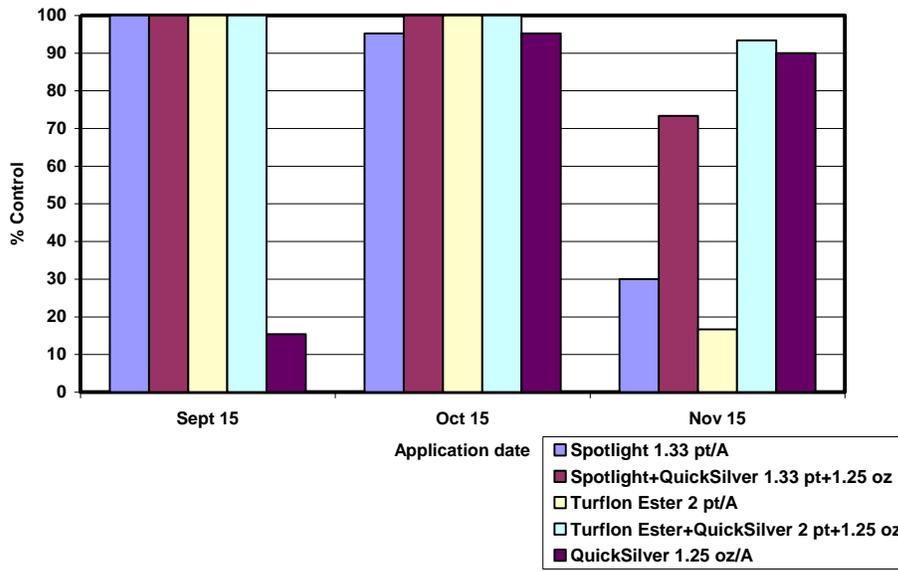


Figure 3. Short-term control of ground ivy rated in December from Spotlight or Turflon with and without QuickSilver. Turflon and Spotlight applied in Sept or October provided adequate control by December. Combining QuickSilver with both products dramatically improved control when applications were made in November (Purdue 2008).

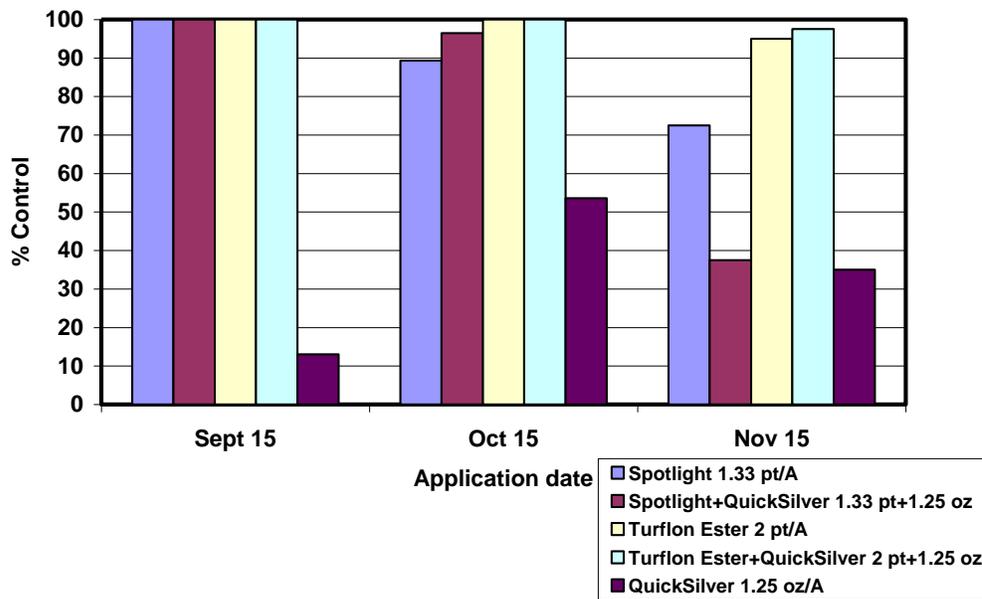


Figure 4. Long-term control of ground ivy rated in May after fall applications of Spotlight or Turflon with and without QuickSilver. Turflon and Spotlight applied in Sept or October provided excellent long-term control. Triclopyr applied in November provided over 90% control by May. Combining QuickSilver with both products had no statistically significant effects either positive or negative on long-term control (Purdue 2008).

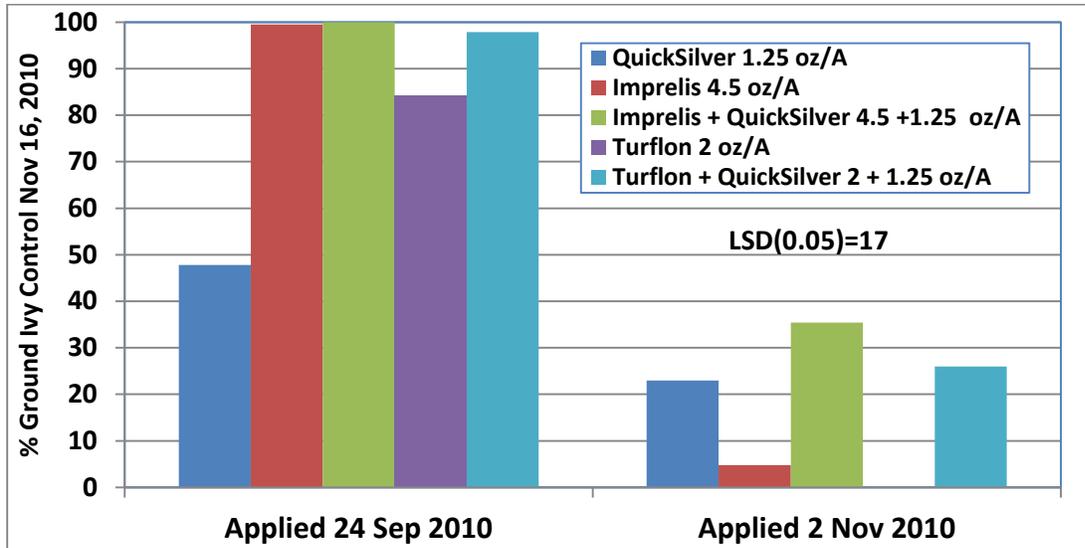


Figure 5. Short-term control of ground ivy rated on Nov 16 after fall applications of Imprelis or Turflon with and without QuickSilver. Turflon and Imprelis applied in September, but poor short-term control when applied on 2 Nov. Combining QuickSilver with either product dramatically improved speed of control when applied in November (Univ of Nebraska-Lincoln, 2011).

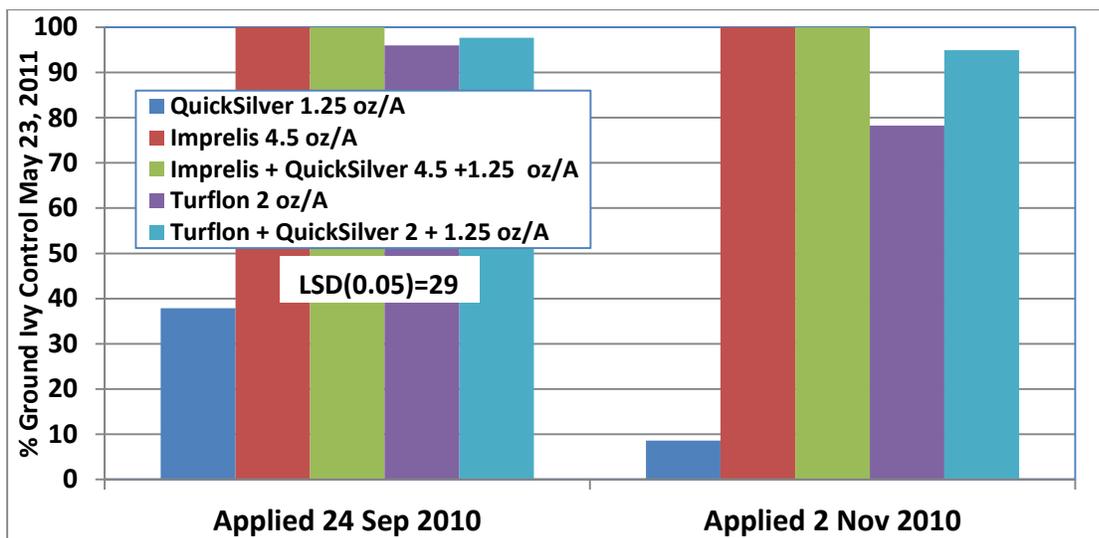


Figure 6. Long-term control of ground ivy rated in May after fall applications of Imprelis or Turflon with and without QuickSilver. Turflon or Imprelis applied in Sept or November provided excellent long-term control. Combining QuickSilver with both products had no statistically significant effects on long-term control November (Univ of Nebraska-Lincoln, 2011).