

February 9<sup>th</sup> 2017

My name is Jonathan Chamberlin. I was raised in Shelburne Vermont. I am a 6<sup>th</sup> generation Vermonter. I grew up hunting and fishing, and often worked for local farmers. I attended Purdue University where I earned a Bachelor's degree in Agronomy. I returned to Vermont after graduation and obtained my Commercial Pesticide Applicators License in 1999. My wife, our two children and I, live in Addison where we enjoy the agricultural, rural landscape.

After obtaining my applicators license I began working with Vermont farmers to help them grow crops and manage their farmland. Since then, there have been many changes in options for weed control. These changes include advanced formulations in the chemistry of herbicides, increased availability of Roundup ready varieties, and new and different tillage options. In many cases these options are used together, with one option enhanced by using another.

I'm here to tell you the importance of one of these options to Vermont farmers, Atrazine. Atrazine is a broad spectrum weed control herbicide. It is one of the most critical tools available for a weed management program. It is used for the following reasons:

1. Its' chemistry offers broad spectrum control of annual grasses and broadleaf weeds.
2. It has a low usage rate, ½ - 2 lbs. per acre, with most usage rates under 1 lb. per acre.
3. It is affordable and economical to use.
4. It works synergistically with other herbicides. Mixing it with other herbicides makes those products more effective, often allowing for lower usage rates of those products as well as the Atrazine itself.
5. Combining it with other products also helps in the prevention of weeds becoming herbicide resistant. Different products have different modes of action in weed control. This allows for control by more than one avenue.
6. It is particularly effective on Ragweed and Bur cucumber, more so than other products available.
7. It is an important component in a pre-emergence weed control program. This control of the early flush of weeds helps the seed get off to a good start.
8. It is also a critical tool in enhancing the success of no-till cropping. Conventional tillage allowed for mechanical control of weeds (i.e. plowing, harrowing, etc.). In a no-till program there is little or no weed control mechanically so the weed pressure is much greater. Crops in a no-till program are likely to be poor if they must compete with weeds for sunlight and nutrients. Its' use in these circumstances will enhance the profitability of no-till practices. Successful no-till practices will then, in turn, aid in preserving and improving water quality.
9. Our use of Atrazine comes with very stringent label requirements and regulation. It has been proven effective and safe with proper use.
10. Of all the tools available for weed control, Atrazine ranks near the top in its' value and importance to farmers of Vermont.

Thank you for your time.

Jonathan Chamberlin, CCA, Commercial Pesticide Applicator, Bourdeau Brothers of Middlebury.