

# **Cotton Comments**

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**Common Groundsel Problems** 

Many producers have commented this year about troubles with a weed that we don't often notice....common groundsel (shown above). This year in particular it seems to be very widespread and more difficult to control. Some producers have had problems attempting to control this weed with applications of either 2,4-D or dicamba applied alone. In addition, glyphosate applied alone does not effectively control this weed and populations seem to be increasing in limited and/or no-till cotton fields. As the picture above indicates, this weed has grown vigorously since the first of the year and seems to be pushing horseweed concerns to the back burner. Now is a great time to be addressing horseweed concerns but we also want to be sure that our overall strategy will accommodate both problems. Our last newsletter (February 7<sup>th</sup>) outlined a few

things about this weed but we haven't had much experience or hard data. Although we mentioned that specialists in other areas of the Cotton Belt have seen success with combinations of glyphosate and dicamba (and some local testimonies concur), there seems to be difficulty and/or inconsistencies this year controlling this weed with this treatment. Unfortunately, this particular treatment (glyphosate + dicamba) is considered a standard for preplant control of horseweed and many have been

successful after adopting this plan over the last few years. Although this treatment does a great job on horseweed it seems at times to be insufficient for common groundsel. At this point we are not sure if these inconsistencies are related to the environment, application techniques, adjuvant choices or some other factor. What we do know is that since this weed can be so difficult to control we want to encourage anyone running standard horseweed programs





to thoroughly scout their field before deciding on a treatment strategy. If indeed this weed is present along with horseweed we recommend some changes in the treatment plan. Fortunately we were able to evaluate several treatment options over the last 30 days. A few producers have expressed interest and/or already applied paraquat with a phenoxy (dicamba or 2,4-D) herbicide and seen good results. To date 0.5-0.75 lb ai/A of paraquat (Firestorm) plus the usual 0.25 lb ai/A of dicamba or 1.0 lb ai/A of 2,4-D seems to be relatively effective. However, there are some things to note when using paraquat. It is not uncommon to see great results at 7-14 days after treatment (DAT) and then experience a breakdown by 25-30 DAT. This is actually what we are seeing this year in our own trials as well as in producer fields. Tank-mixes of 0.5 lb ai/A of Firestorm plus either 2,4-D (1.0 lb ai/A) or dicamba (0.25 lb ai/A) looked great early but are now showing signs of regrowth (pictured above).

Based on what we have seen this year, if this weed is relatively small at application time (less than 6 inches) then the likelihood of paraquat plus a phenoxy achieving complete control are much greater. As weed size increases, the longterm effectiveness of those treatments begins to decrease. In addition, the paraquat rate applied will definitely influence control. If choosing this route we recommend applying a minimum of 0.75 lb ai/A paraquat (32 oz/A Firestorm) with your choice of 1.0 lbai/A 2,4-D or 0.25 lb ai/A dicamba. A few other things to remember if using a paraquat plus phenoxy treatment: number one, at least 10 GPA is recommended, secondly sometimes you don't get much grass control out of paraquat and often times thistles may escape control. Also, it may be necessary for an additional or sequential application of paraquat (Firestorm) to finish things off. Usually a second application is made 15-30 days later, depending on when the regrowth occurs. Also, in my experience, when common groundsel is present there

is a high likelihood that horseweed is also present. So, part of the challenge is that we need a treatment that will effectively control a broad spectrum of weeds that includes horseweed, common groundsel and any grassy weeds present. In order to do this we may need to consider a three way tank-mix. Many of you are probably familiar with the new product Sharpen. As stated in our last newsletter, it can be very effective when trying to control horseweed and the same is especially true when going after common groundsel. The down side is that it also provides no grass control and does not typically perform well enough to stand alone. Although glyphosate applied alone has proven weak on common groundsel it has performed well when tank-mixed at 48oz/A with 1oz/A of Sharpen. Unfortunately this combination doesn't quite do the trick on horseweed, especially if it is glyphosate resistant. Therefore, in order to achieve good horseweed and common groundsel control we need to throw in our 2,4-D or dicamba. In case your thoroughly confused now here is the recommendation that has been providing acceptable control of both common groundsel and horseweed:

#### 48 oz/A Glyphosate (4lb) + 1.0lb ai/A 2,4-D (or 0.25 lb ai/A dicamba) +

#### 1 oz/A Sharpen + 1% MSO (methylated seed oil) + 17 lb/100 gal of AMS (ammonium sulfate)

Some have already asked about subtituting replacement products for the adjuvant component and/or the ammonium sulfate and our answer to that is as follows. The label is clear about which adjuvants can be used. We have had good results when following the label's MSO recommendation. Also, genuine spray grade ammonium sulfate is recommended (by BASF) for the best activity with Sharpen. I know many cringe when reading a tank-mix recipe such as this because sometimes it seems to take longer to mix than to spray. However, while we all wish there was a more simple solution, the options outlined have proven themselves thus-far. For growers interested in our standard horseweed information please refer to the February 7<sup>th</sup> newsletter (Click here). Also, when using Sharpen there are some additional things to remember. The label states that 42 days and 1 inch of rainfall must occur after application before cotton may be planted (for applications at 1 oz/A). Using off-label adjuvants is not recommended and will definitely reduce the effectiveness of this herbicide. Growers should also take note of the restrictions on coarse soils (cotton injury may occur on coarse soils with less than 1.5% organic matter). It is our intent to try to supply growers with the best options available when it comes to controlling problem weeds. Hopefully the studies we have recently initiated will provide some much needed data that we can depend on in the future.

S.O.

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