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Cold Weather and Postemergence, Spike Stage Herbicide Applications in Corn

We have observed quite a bit of corn emerging over the last couple of days. It is likely that recent windy, then rainy conditions prohibited many fields from receiving soil applied herbicides. Since almost all soil applied chloroacetamide:atrazine premix products can be applied to emerged corn, it will be tempting to spray these fields as soon as they are dry enough to drive across. Here are a few important points to keep in mind.

- 1) Cool, cloudy weather and wet soils slow the corn plants ability to metabolize (detoxify) herbicides. Corn will be stressed after coming through the cool, wet period and will be more susceptible to showing herbicide injury symptoms. This is a typical condition under which we see atrazine injury and chloroacetamide injury.
- 2) As a general rule, do not apply chloroacetamide:atrazine premixes in nitrogen solutions if the corn is emerged. Nitrogen solutions are effective in promoting herbicide uptake and causing necrosis on leaves by themselves, resulting in severe injury. Most labels state that atrazine premixes should only be applied in water if the corn has emerged. A few products do allow postemergence applications in nitrogen solutions, but consult the label if you have questions about a specific product.
- 3) Another general consideration involves tank mixtures of 2,4-D with a chloroacetamide:atrazine premix and applying this mixture to emerged corn. The acetochlor (Harness, Degree, Keystone) labels indicate that 2,4-D should not be applied within 7-14 days before or 3-5 days after planting, but before crop emergence. This restriction is written into to the label because of crop injury concerns. Applications within 7-14 days before planting can injure corn by being washed down into the corn seed germination zone (seed furrow). Applications after corn planting can cause injury if the combination of products comes into contact with corn foliage. If in doubt about crop injury potential of a specific chloroacetamide:atrazine premix, consult the label to see if it is allowed or do not tankmix 2,4-D with atrazine premixes and apply to emerged corn.
- 4) If the field has a dense infestation of emerged weeds and an aggressive adjuvant system will be needed to increase postemergence herbicide activity, wait a few days to allow the corn to recover from the cold stress before applying herbicides.

For Free Herbicide Labels
see the web sites

www.cdms.net

and

www.greenbook.net

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