

Management to Ensure a Future with Ag Chemicals

On a recent steamy Sunday afternoon, I darkened the door of my favorite barber shop for a haircut. I greeted the barber, a good friend, and he got to work. We chatted for a few minutes about our lives and the state of local sports teams (Go O's), but suddenly my attention was snatched away by an advertisement on the television. The television was reflected in the polished mirror, now blaring, "IF YOU OR A LOVED ONE, HAVE BEEN EXPOSED TO THE DANGEROUS AGRICULTURAL CHEMICAL, PARAQUAT, YOU MAY BE ENTITLED TO FINANCIAL COMPENSATION." My heart sank as my head drooped, thus resulting in an interesting trimline in the back.

For the curious, paraquat dichloride salt is the active ingredient in some agricultural herbicides. Its mode of action is as a cell membrane disruptor (Group 22 Herbicide). These products help producers manage a broad spectrum of weeds in many agronomic crops at both pre-plant and preemergence applications. Paraquat, like any chemical, should always be used carefully. When properly applied, it provides some of the best early season weed control to get crops off to the best start possible.

In a litigious society, it is imperative as growers we do our part to minimize the risks associated with restricted use pesticides, not only for the safety of ourselves, our employees, and our environment but also to maintain the opportunity to use these effective products.

Before applying a product containing paraquat, we must check that our Paraquat Safety Training Certification and MDA Certified Pesticide Applicator credentials are up to date. The courses and subsequent certifications ensure that we stay educated about current best practices in handling and applying these products.

When handling these products, always follow label instructions and certification course guidelines. When temperatures rise in spring, we must wear the necessary personal protective equipment (PPE), including long-sleeve shirts, pants, socks, closed-toed shoes, chemical-resistant nitrile gloves, approved respiratory protection, and a chemical-resistant apron and face shield.

Applicators must follow similar guidance in PPE, per label instructions. Application of products containing paraquat must be made with the greatest care to minimize off-target movement. We should only use labeled drift-control additives to help ensure the product meets its intended target. Paraquat-containing products should not be mixed with suspended fertilizers and should only be applied in clear solutions.

In the field, applications should be made when wind speeds and gusts are less than 10 mph. Applications on warm, dry days require additional care by selecting the appropriate nozzles for coarse droplet size. Similarly, applications made at lower pressures minimize drift potential. Finally, seasoned applicators know the importance of boom height and field speed—in this case, with boom height not exceeding 10 feet above the soil surface.

These are just a few guidelines operators must observe when applying paraquat-containing products. This will ensure continued access to these effective products. It would be a shame to lose such an opportunity from improper use.

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