Don't Spray Before You Cut Wheat

SUMMER-FALLOWED WHEAT growers out in the Great Plains who'd like to get the jump on post harvest weeds by applying atrazine before harvesting wheat might be jumping out of the frying pan into the fire.

"If wheat is sprayed before harvest with atrazine, the grain will have a very high concentration of herbicide in it—a level so high the grain would be condemned and that you couldn't even feed to livestock," warns Daryl Smika, USDA agronomist at Akron, Colo.

Yet he admits that the practice has promise.

"In many cases, wheat has to be sprayed with 2,4-D before harvest to control weeds," he explains. "By mixing atrazine with the 2,4-D you'd save an application cost plus get a head start on weed control. Then too, chances of getting rain to activate the chemical are greater earlier in the Spring since rainfall is normally higher."

Apply Atrazine Early? "It would also be ideal to apply atrazine early since you've got fairly effective weed control then from shading the wheat crop—once that's removed, however, weeds can quickly develop. But if atrazine is already present in the soil, you'll have a better chance of controlling weeds," he says.

But because of the high concentration of atrazine which could show up in grain, Smika rules out liquid atrazine formulations.

"On the other hand, we've had some very successful results with granular formulations," he adds.

"What's more, if the granular atrazine is applied after the wheat heads out, there's little chance of harming the wheat plant. At that point, the plant has stopped taking up almost everything but moisture."

While granular formulations of atrazine hold promise for pre-harvest application, Smika notes that commercially availability is a problem.

"Then too, it takes moisture to activate the granular atrazine—and if it doesn't rain, the atrazine just sits there. We've had atrazine granules lay on the soil surface for 6 months—by delaying activation that long, you're running a high risk of chemical carryover and crop injury," Smika says.

Plenty of Potential. "But all this isn't to say that the idea won't work," he concludes. "I think the idea has plenty of application. Maybe not with atrazine, but with other herbicides in granular formulation which we're currently working with and show potential."