

## **Herbicide Resistance and Application Method**

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It is generally accepted that any amount of pesticide application will amplify resistant biotypes. But if application is unavoidable, are there beneficial application practices or technologies that can minimize the harm? Yes there are. The avoidance of repeated sublethal dosing can delay the onset of polygenic resistance. We will discuss main causes of low dosing, including poor water quality and how to test for it and treat it, lack of turn compensation and the PWM options that provide it, as well as variable deposition due to either canopy type, aerodynamic turbulence, or boom movement. We will also propose spot sprays as a means of more economically delivering multiple mode of action tank mixes. But no matter how well one applies products, the act of spray application is the single most detrimental action one can take for resistance development, and in the long run it will be worthwhile and necessary to pursue alternatives to pesticides.