

Fungicide Use in Field Crops

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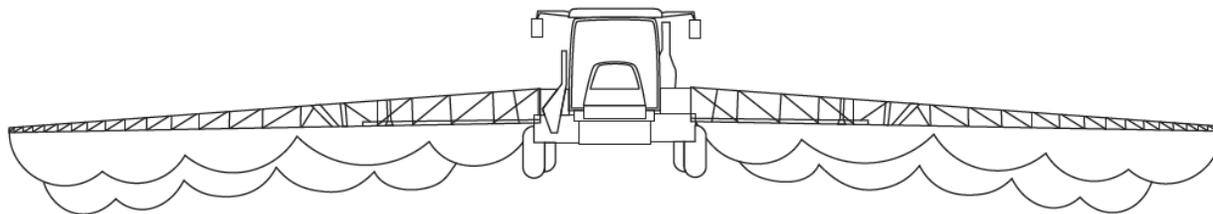
In 1755, M. M. Tillet discovered the application of lime to plant seed could be used to manage seedborne fungi such as *Tilletia tritici*, the cause of [wheat bunt](#). Although use of fungicides occurred in field crops as early as the 1600s, Tillet's discovery started what could be called the fungicide revolution. Scientific knowledge and fungicide use has increased dramatically since that time, and fungicides, along with other pesticides, have become an extremely important crop protection tool. New discoveries continue to refine and improve fungicide products and disease management. However, the prolific and diverse nature of plant pathogens, coupled with the misuse of fungicide products, has led to fungicide-resistant pathogens. This "resistance treadmill," where new fungicide products eventually decrease in usefulness due to pathogen resistance, is a driver not only for the discovery of new fungicide products, but also educational efforts aimed at preserving the fungicide tools currently available.

The primary goal of this [Crop Protection Network](#) publication is to help protect field crops from plant disease through increasing knowledge of fungicides and promoting best practices. Farmers, agronomists, and others must deal with these crop protection issues on a daily basis. Supporting goals include mitigating fungicide resistance, increasing clarity of communication when discussing fungicide-related topics, and integrating fungicide use within the larger, whole-farm management plan.

With these goals in mind, *Fungicide Use in Field Crops* addresses current fungicide issues by considering the most recent advances in fungicide science while building upon past discovery. The publication will help equip fungicide applicators, educators, agribusiness employees, students, and others with a baseline of information needed to effectively manage diseases of field crops using fungicides. Importantly, it will also help determine when it is best *not* to apply a fungicide. The authors wish to highlight the importance of fungicides as tools for yield protection, while at the same time considering economics, human health, environmental responsibility, and preservation of fungicide effectiveness.

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