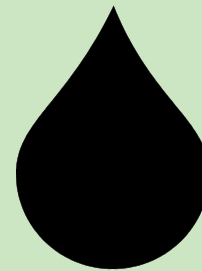


# Groundwater

## AGRI-BUSINESS STEWARDSHIP

*Brought to you by the Michigan Agri-Business Association  
through a grant from the Michigan Groundwater Stewardship Program*



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The objective of this document is to provide you with current and helpful information regarding groundwater protection, and the Michigan Groundwater Stewardship Program.

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### **Applying fungicide**

Diseases are a constant threat to crop, with some diseases becoming especially notorious in recent years, such as fusarium head blight, affecting small grains and soybean rust. Fungicide can be applied either on the ground or aerially. The important factor in fungicide application is timeliness.

### **Aerial application: Why it makes sense**

Aerial application offers three advantages over ground application:

- Aerial applicators can apply fungicide when fields are very wet, which lets you respond in a timely manner and rapidly to disease
- Aerial applicators can spray large acreages in a short period of time
- Aerial application eliminates wheel tracks in the fields

### **Recommended fungicide application techniques**

The correct application of fungicide can help prevent disease, maximizing yields and increasing profits. The correct and optimum aerial application of fungicide is a good investment for both agriculture and an important step to protect the land, air and water.

- Produce a “large fine” to “small medium” sized spray drop (300 to 350 microns). Use the USDA-ARS Web site as a starting point and water-sensitive paper to determine drop size.
- Minimum spray operating pressure should be 30 psi.
- Operate smaller and slower aircraft at a height of 8 to 10 feet above the sprayed surface and heavier aircraft at 10 to 12 feet.
- Apply the fungicide at 5 gallons per acre.
- Mount spray nozzles so they do not exceed more than 70 percent of the wing span. Nozzles mounted over 65 percent of the wing span are preferred. This will reduce the quantity of fines at the wing tip vortices and reduce drift.
- Produce a uniform spray pattern with tapered edges. A pattern test will show abnormal variations in your spray pattern.
- Most aircraft use uniform nozzle spacing except in the center. Nozzles in the center of the aircraft should have a spacing at least double to those mounted on the wings. A pattern test is the best way to determine the exact nozzle spacing and placement.
- Mount the spray nozzles as low as possible below the wing. This helps discharge spray into air with the least turbulence. Turbulence causes spray drop breakup and spray drift.

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