

Best Management Practices for Pesticides Use for Homeowners and Commercial Lawn Care

The Minnesota Department of Agriculture (MDA) developed voluntary Best Management Practices (BMPs) to bring awareness to homeowners and lawn care companies on proper and judicious use of pesticides for homeowners, lawn care companies, and golf course managers to help protect water resources, humans, and non-target organisms including pollinators.

Homeowners and lawn care companies are advised to carefully read, understand, and follow the pesticide product label.

The following are the BMPs for all pesticides used by homeowners and lawn care companies:

- Conduct regular scouting to identify pests such as weeds, insects, and diseases, and to assess if pest
 pressure justifies chemical pest control tactics. Use pesticides only when pest populations reach aesthetic
 threshold levels or when conditions favor pest development. Consult University of Minnesota Extension on
 the pest thresholds for lawn and turfgrass management. www.extension.umn.edu/garden/turfgrass/
- Whenever possible, use non-chemical pest control methods like prevention (sanitation, remove mosquito breeding areas, use of pest free seeds/transplants), physical barriers (landscape fabric, mulch, wraps/cages around plant stem), mechanical (hand removal, hoeing, insect and rodent traps, plant thinning/trimming), cultural practices (timely watering and fertilization, planting turf varieties tolerant to pest pressure), and biological control (promoting beneficial insects).
- Use pesticides only when needed and always apply them at labeled rates. Spot treat if the pest population
 is contained in one or few places and not widely distributed throughout the property. Select pesticides with
 low toxicity to humans and other non-target organisms, such as pollinators, pets, birds, etc.
- Calibrate and inspect application equipment properly prior to pesticide applications. Do not calibrate
 equipment near ponds, lakes, etc. To prevent contamination of water sources while filling a sprayer, do not
 place the end of the hose into the spray solution. Use an anti-siphon/backflow prevention.
- Avoid foliar pesticide applications if a rain event is expected soon after application. Do not apply pesticides directly to any water body unless labeled for aquatic pest control.



- Manage pesticide drift by following spray drift management recommendations/requirements given on the product label. For example, do not apply pesticide when wind is blowing >15 mph or under temperature inversion conditions.
- Look at active ingredient(s) on each product and keep record of active ingredients used for a specific pest. Avoid using same pesticide products within same chemical group or mode of action over an extended period of time to prevent pesticide resistance. Consult the University of Minnesota Extension on rotation of pesticide products with different chemical groups. www.extension.umn.edu/garden
- Check the product label for specific requirements for pollinators, such as honey bees, to minimize exposure to non-target organisms. Pesticide labels may contain statements on pollinator protection under "Environmental Hazards" or under the "Bee Advisory" box or under specific use. For example, "Do not apply this product while bees are foraging". Look for the bee sign on the label. Ensure all pollinator requirements on the pesticide label are followed while applying pesticides.
- Lawn care companies must always place warning signs immediately after pesticide application to caution neighbors. Homeowners are also encouraged to use signs to caution other people in the neighborhood. Place signs where everyone can easily see them before entering the treated area. Prior to pesticide application, communicate with your neighbors to keep kids or pets off the treated area. Follow all warning sign requirements for applying pesticides to turf. For warning sign requirements visit: www.mda.state.mn.us/chemicals/~/media/Files/licensing/chemicals/warningsignsturf.pdf
- Clean pesticide application equipment regularly. Follow product label directions for cleaning application
 equipment and disposing the leftover pesticide solution. Check pesticide equipment for any leaks during
 cleaning.
- Store pesticide products in a safe and secure place which is out of reach of children. Keep pesticides in their original containers and placed in a secondary container to prevent any potential leaks from wear and tear of the original containers.
- Always use the label approved Personal Protective Equipment (PPE). The use of PPE is intended to prevent
 pesticide exposure to the applicator by creating a barrier between the applicator and pesticide. Keep PPE
 in a clean and safe place to avoid contamination. Always keep the product label or Safety Data Sheet (SDS)
 for emergency situation.
- Spread the word in your community about these BMPs to increase awareness regarding the proper use of pesticides. Homeowners and lawn care companies are highly encouraged to contact the University of Minnesota Extension or the MDA with any questions related to pesticide use for lawn care and ornamental.

The MDA has also developed more detailed Best Management Practices for Turfgrass Pesticides: www.mda.state.mn.us/protecting/bmps/turfbmps.aspx