

HEALTHY HOMES. HEALTHY FAMILIES.

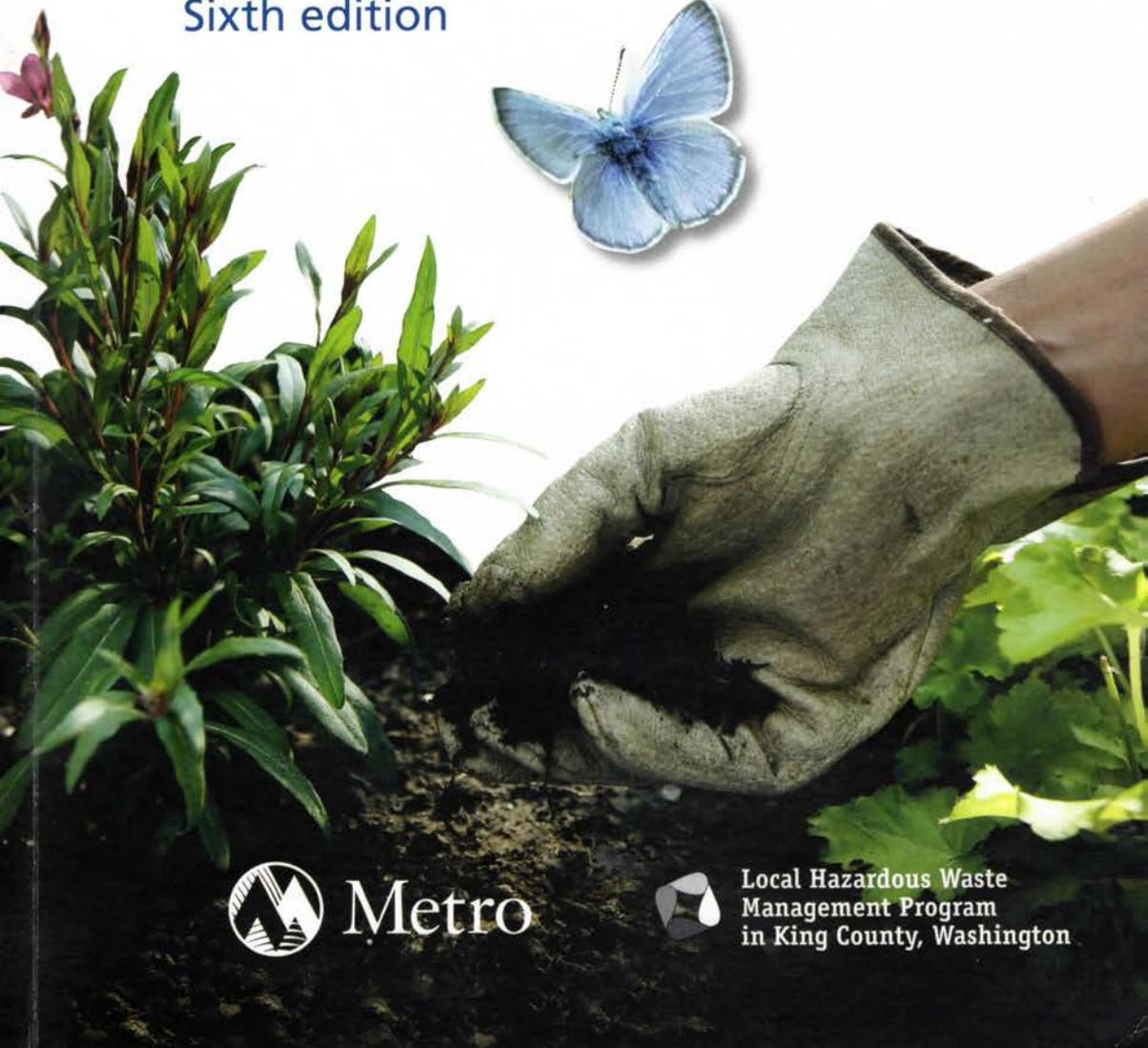
Grow Smart, Grow Safe



A consumer guide to lawn and garden products

600 pest controls and fertilizers reviewed for health
and environmental hazards

Sixth edition



Metro



Local Hazardous Waste
Management Program
in King County, Washington

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PRE-EMERGENT Weed controls

These products are used *before* weeds appear. They have no effect on existing weeds.

Short-term health hazard
Long-term health hazard
Hazard to aquatic life
Hazard to birds, bees or pets
Half-life in soil
Water pollution hazard

Active ingredients

Cultural, physical and mechanical methods.

LOWEST HAZARD

Mulch							wood chips, compost, bark, coconut coir, and other natural products
Plants							thick planting shades ground and inhibits weed germination
Weeding tools							hoe, trowel, hori-hori, etc.
Propane torch							fire-safety practices important when flame-weeding

Low-toxicity pesticide products exempt from EPA registration process. All considered low risk, but note cautions.

LOWEST HAZARD

Bradfield Organics® Luscious Lawn Granulated Corn Gluten	○	○	○	○	?	?	corn gluten
Concern® Weed Prevention Plus®	○	○	○	○	?	?	corn gluten
Down to Earth Corn Weed Blocker	○	○	○	○	?	?	corn gluten
Espoma Organic® Weed Preventer Plus Lawn Food	○	○	○	○	?	?	corn gluten meal
Preen® Vegetable Garden Weed Preventer	○	○	○	○	?	?	corn gluten meal

EPA-registered pesticide products

MODERATE HAZARD

Green Light® Portrait® Broadleaf Weed Preventer	○	●	○	○	●	○	isoxaben
Monterey Weed Impede™	○	●	●	○	○	○	oryzalin
Turf King Pennington Lawn Fertilizer & Controls Crabgrass	○	●	○	○	●	○	prodiamine

EPA-registered pesticide products

HIGHEST HAZARD

Scotts® Halts® Crabgrass Preventer	○	●	●	○	●	○	pendimethalin
Scotts® Turf Builder® with Halts® Crabgrass Preventer	○	●	●	○	●	○	pendimethalin
Lilly Miller® Casoron® Granules	○	●	○	○	●	●	dichlobenil

continued on next page

- Lowest hazard
- Moderate hazard
- Highest hazard

- NA Not applicable
- ? Not enough data

Products and methods not EPA-regulated may pose risks to the user and/or the environment. Follow all instructions and cautions on labels.

Note: Products lower in the table are more hazardous. Differences between close-ranking products may not be significant.

Choose lawn fertilizers with an N-P-K ratio of 3-1-2. Lawns growing in typical Pacific Northwest soil will benefit most from a fertilizer with an N-P-K ratio of 3-1-2 or multiples thereof. For example, a 6-2-4 ratio will help a lawn thrive.

Weed and feed is a pesticide. You won't find weed and feed in the tables in this chapter because it is both a fertilizer and a pesticide. Most weed and feed contains both a synthetic fertilizer and three different herbicides (herbicides are pesticides). Protect your family and local waters by instead pulling or spot-treating individual weeds. See "Weed controls" in Chapter 4.

How to understand a fertilizer label

Plants need a variety of nutrients to survive. Fertilizer labels indicate the percentage of each of the three major nutrients nitrogen: phosphorus and potassium.

The N-P-K ratio is the amount of nitrogen, phosphorus and potassium in a fertilizer. For example, "5-5-5" on a label means the product contains 5 percent of each nutrient.

Nitrogen (N) helps plant foliage grow strong.

Phosphorus (P) helps roots and flowers grow and develop.

Potassium or potash (K) is important for overall plant health.

BIG & HEALTHY PLANT FOOD

5-5-5

(N) (P) (K)

GUARANTEED ANALYSIS:

Total Nitrogen	5%
1% Ammonium nitrogen	
4% Urea Nitrogen	
Available phosphoric acid	5%
Soluble potash	5%

Fertilizers with larger numbers (such as 29-2-3 or 18-16-10) are typically synthetic fertilizers. They can cause plants to grow rapidly but are often quickly depleted. They also are more likely to run off into lakes and streams or leach into groundwater, polluting the environment.

Time-release varieties pose less risk of runoff. If you use high-nutrient fertilizers, look for words such as "pelletized," "coated" or "slow-release" on the label.

Fertilizers with smaller numbers (such as 4-2-8 or 5-7-2) are likely organic fertilizers. These products tend to feed your plants slowly over time. They are often made from natural ingredients such as seeds, kelp or mineral deposits. They also may contain important secondary nutrients and micronutrients such as calcium and iron. Look for words such as "natural" and "organic" on fertilizer labels.