

# Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in Wisconsin (A2809)



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# Organization

- Completely reorganized
- Contains chapters
- Tables numbered by chapter
- Sidebar chapter navigation
- Goal: increase ease of use

# Bonus Features

- Now have references and additional reading to point users to other relevant info.
- Added fertilizer analysis tables
- Added conversion tables

## 2. Soil Sampling

- A2100 revised to more clearly outline how to deal with contour strips and 5-acre grid point sampling
- A2100 is the soil sampling chapter
- A separate revised A2100 will follow

# 4. Soil and Crop Information

- Same humongous table of soil
  - Including new ones
- Terminology subsoil group no longer used, instead soil group
- Additions to the crop table incl.  $P_2O_5$  and  $K_2O$  removals
- Some crop removals were adjusted to reflect new UW data or match other published documents

# 5. Lime & pH adjustment

- New buffer pH lab method begin Jan. 1.
  - Lime recs have been updated to reflect the new method
  - New recs. will be as good or better without using hazardous chemicals in the lab.
- Lime rec. is still triggered by a soil pH more than 0.2 units below the target pH for the crop rotation
- Added info. on using S to reduce soil pH

# 6. Nitrogen

- MRTN for corn added
- N in starter counts towards the total amount to apply
- Added PPNT for corn and wheat
- Added PSNT for corn

# 7. Phosphorus and Potassium

- All  $P_2O_5$  and  $K_2O$  count toward the total amount to apply
- Recs. for L and VL soil test categories are in the same table as Opt. through EH
- L and VL usually have only one recommended rate regardless of soil group
  - These values are based on building up soil test levels over a 4 to 6 year period



# 7. Phosphorus and Potassium

- K buffer capacity for group D soils changed to reflect newer research data
- Corn silage switched to demand level 3 crop
  - Goal: better account for high K removal rates with silage
- Bottom end of EH soil test K level was increased for demand level 3 crops only
  - Goal: Keep soil test levels from falling below optimum (Opt) if soil test had previously been just inside EH range

# 7. Phosphorus and Potassium

- For small grains, separate recs. for
  - grain
  - grain + straw.
  - Old recs. assumed that straw would be removed

# 8. Secondary and Micronutrients

- Added a little more info.
- Sulfur availability index (SAI) updated; lab has been using new (SAI) for more than a year

# 9. Nutrient Credits

- Manure
  - Contains the availability coefficients and typical nutrient contents of manure that are in NRCS 590
  - Better description of how to calculate nutrient credits
- Added green manure N credits (from A5317)

# 10. Starter Fertilizer

- Info. on composition, rates, and placement of starter
- Table on probability of positive economic return to using starter based on relative maturity and planting date
- All nutrients in starter count towards rec.
  - For all crops – built into the NPK rec
  - Exception EH test level in corn – see table above

# Exercise