Iowa Organic Grape Survey -- 2002

• More of a challenge due to humidity/disease
• Most reported concern: herbicide drift; deer
• Most reported insect pest:
  – Grape leafhopper (2% damage level)
• Most reported disease:
  – Anthracnose (2% damage level)
  – Powdery mildew (5% damage level)
  – Black rot (on grapes) 5% damage level
Nutrient Management

- Nutrient management is based on a continual cycling of nutrients within the organic farm
- Animals integrated with system: on-farm or imported sources of manure or compost (60% of vineyards)
- Animals consume crops/crop residues and recycle nutrients into soil
- Cover crops supply up to 100 lb/acre N but require additional management (80% of vineyards)

Hoop-house compost
Livestock Integration
Poultry for Weed & Insect Predation

Jeff Kuntz
Multiple Purpose
Grape Cultivation
Jeff Kuntz’ System

- May - Day old chicks brooded to 6 weeks of age.
- Sweet corn is planted and is 18 to 36 inches in height before birds are released in June.
- Pheasants eat insects and lower vegetation, ignore corn.
- Netting keeps out predators.
Organic/Biodynamic Vineyard Floor

Manage around vines; cover crops in middles
Cover Crops

Frey Vineyards, Mendocino, California

Legume/grass mix:
- Clover/rye
- Bluegrass/clover
- Bell bean/rye
Cover Crops Add Life

Mixtures of flowering herbs for insectary plants and leguminous plants (for nutritional input)
Cover Crops

Frey Vineyards - Mowing prunings & cover crop

No-till drill used to plant cover crops
Compost for Organic Hort. Crops

- Raw manure can be applied 4 months prior to harvest but compost is recommended.
- Compost application rates vary from 1/2 ton to 10 tons per acre depending on soils/crop requirements.
- “Finished” compost is used to avoid N immobilization.
- Excess applications are avoided; nitrates in groundwater are regulated; P may be more important with new regulations.

Frey Vineyards Compost