

# 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



- Legume/grass mix:
- Clover/rye
  - Bluegrass/clover
  - Bell bean/rye

Frey Vineyards, Mendocino, California

# Cover Crops Add Life



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

# Cover Crops



No-till drill used to plant cover crops

Frey Vineyards-Mowing prunings & cover crop

# 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