



Northern New York Agricultural Development Program Practical Research & Results for Clinton, Essex, Franklin, Jefferson, Lewis & St. Lawrence Counties

Contact: Joe Giroux: 518-565-4730 ~ Jon Greenwood: 315-323-4814
Don Holman: 315-232-4185 ~ Ron Robbins: 315-583-5747
Sam Sherman: 518-962-4711 ~ Kirby Selkirk: 518-497-6038
www.nnyagdev.org



Protecting Our Natural Resources: Crop Nutrient Management

Northern New York Agricultural Development Program research into the complex mechanisms that influence interactions between fertilizer, manure, crops, soil, air and water has made tremendous strides toward reducing inputs (and farm costs) and improving agricultural environmental stewardship practices. Results to date include:

- conscious decision by NNY farmers to reduce/eliminate phosphorus (P) use
- farmer-use data on potential to reduce nitrogen (N) and potassium (K) use
- realized savings of 28% use of N fertilizer on six farms
- awareness of how to cut nitrogen use and when not to, and actual reduction of N use with corn crops
- completion of whole farm mass balance evaluations on 43 farms with drastic reduction in K balance and more field-based K management
- 4 field trials showing environmental, soil and crop benefits of shallow incorporation of manure
- increased interest and purchase of BMR sorghum sudangrass as an environmentally-sound alternative crop
- calibration of soil and tissue tests for soil sulfur levels
- overall reduction of production costs without sacrificing crop yields.



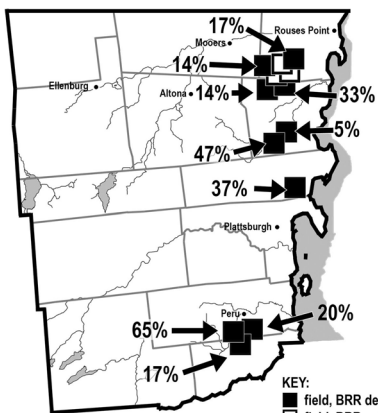
Teff plot at Canton, NY

NNYADP funding is needed to continue:

- **considerable farm cost reduction of corn production on high-fertility acreage through use of on-farm manure resource**
- **completing work initiated by the New York State Department of Agriculture and Markets and continued by the NNYADP to develop needed manure management strategies**
- **developing tests to evaluate need for sulfur on alfalfa**
- **developing tests to evaluate need for potassium on alfalfa**
- **evaluation of brown midrib sorghum sudangrass evaluation of teff as an emergency forage, rotational break and erosion control crop, green manure, pasture forage, and market crop.**



Left: NNYADP Co-Chair Jon Greenwood (left) and Ron Robbins congratulate Dr. Quirine Ketterings, for her award-winning agricultural environmental management projects conducted on Northern New York farms.



Protecting Our Crops and Our Neighbors' Crops: Brown Root Rot

Brown Root Rot, caused by the fungus *Phoma sclerotioides*, was first identified in New York State in 2003 in Clinton County (left: map of 2004 known BRR sites in Clinton Co.). The cold-weather disease damages alfalfa crops. BRR is currently found in NY, VT, NH, PA, ME, WY, and in areas of Canada.

NNYADP research has confirmed areas of BRR by field survey, has helped farmers begin to recognize the disease, and has begun creating management strategies.

Funding is needed to support NNYADP efforts to reduce crop losses to BRR, with resulting benefit to growers elsewhere in New York State and in other states impacted by the disease.