2018 – CROSS-COMMODITY RESEARCH NEEDS

High Priority:

- **Precision Ag Opportunities** to decrease variability in crops and increase vields.
- Cultural Practices for Yield and Quality Enhancement. Includes investigations of row spacing, populations, soil additives, seed treatments, fertility (timing, application, and materials), rotation, soil compaction management, improved interpretation of Soil Health test for vegetable production, tillage practices, cover crops and stand establishment.
- Long-term sustainable soil health management, conservation tillage.

 Management practices to minimize drought/flooding events. Soil remediation to reduce effects of flooding and drought.
- **Pesticide Evaluations.** Continue research to replace currently registered pesticides that might be lost due to regulations in the near future.
- **Root Rot Management.** For peas, beans, and beets. Includes new directions in cover crops or other cultural practices. Evaluate efficacy of currently labeled materials.
- **Seed Treatments.** Includes fungicides for soil-borne pathogens, and insecticides for seed maggots and other crop specific insect pests. Evaluate biopesticides. See individual crops below.
- **Weed Control.** Monitor for herbicide resistance. See individual crops below for specific problems.
- **Pest Management Strategic Plans.** Support for development of plans for processing crops through outside funding.
- **Economics of Processing Vegetable Production.** Generating information on costs of production and risk factors. Information will be used to develop a better crop insurance program. Leveraging outside resources, e.g. Cornell and NYS Farm Viability Institute.
- Adoption of New Marketing Opportunities/New Crops/New Products When They Arise.
- **Spray Technology.** Emphasis on the latest technology that will allow for the most effective application of pest management materials.

- **Non-chemical Pest Management.** Support for seeking external funding. This includes practices from biotechnology, organic agriculture, and traditional agriculture.
- **Better Farm Record Keeping.** Collaborate with other states and entities to develop effective ways to keep farm records needed to meet buyer expectations. Develop outreach programs to help farmers meet the need for electronic record keeping (software).
- **Phosphorus Management.** Includes support for seeking external funding as well as further study on variety response to added P on high P soils.
- **Organic Production.** Includes the feasibility of transitioning, non-chemical weed and pest control. Support for seeking external funding.