

## Soil Management in Berry Crops as a Model for Management Education Project Invites Commercial Berry Growers to Participate in an On Farm Demonstration Trial

Commercial berry growers in the Northeast have traditionally made standardized fertilizer applications based on crop age. This practice continues today, some 10 years or more after commercial berry crop guidelines for analysis-based fertilization programs became widely available. Adoption of soil health improving practices has also been slow.

Research demonstrates an analysis-based approach to berry crop nutrition provides increased yields along with better fruit quality and plant health. Use of soil health management practices (i.e. cover cropping) has been shown to reduce weed, nematode and soil-borne disease pressure, along with improving soil tilth, organic matter and nutrient content. Rising costs of products and concerns about environmental impacts of fertilizers make a whole farm approach to berry crop nutrient and soil management highly desirable.

Ag educators, frequently called on to cover multiple commodities and/or information areas outside their field of expertise, often struggle to assist commercial berry growers with berry crop soil and nutrient problems. No single comprehensive resource on this topic is currently available for either educators or growers.

A 2-year NE SARE Professional Development Project, led by Dr. Marvin Pritts, Small Fruit Horticulturalist and Berry Crop Nutrition Specialist, began in Fall 2011 to provide in-depth berry crop nutrition and soil management training and resources for ag educators and the commercial berry growers they serve.

Part I of the project, begun in September 2011, focused on helping ag educators build berry crop nutrient and soil management expertise through 1) a series of 12 in depth webinars and case study learning modules on the subject and 2) development of internet resources to be used by educators in grower training. To listen to the recorded webinars visit: <a href="http://www.fruit.cornell.edu/berry/production/soilnutrientmgmt/webinararchive.html">http://www.fruit.cornell.edu/berry/production/soilnutrientmgmt/webinararchive.html</a>

Part II of the project, which began in March 2012, is focusing on assisting ag educators to 3) develop and implement grower training programs and 4) carry out one-on-one consultations with participating growers. Year 2 will also involve educators in monitoring adoption and success of analysis-based berry crop nutrient and soil health management by growers.

A whole farm soil and nutrient management decision tool for commercial berry crops will be developed from existing resources. This tool, along with accompanying ag educator and commercial grower training materials, will be made available via the Cornell Fruit Reources Web site (<a href="www.fruit.cornell.edu/berry">www.fruit.cornell.edu/berry</a>) providing a "one-stop-shop" resource for ag educators interested in building skills or providing training and/or commercial berry growers interested in improving berry crop soil and nutrient management. Soil and nutrient management principles and practices gained through this project will have application to other crops currently or in the future.

Growers participating in the grower training portion of this project became eligible to be grower collaborators. As grower collaborators they are receiving, in return for their participation, one complementary Cornell soil health test and one Agro-One foliar analysis, along with related resource materials and a one-on-one discussion of test results with their educator trainer. Participating growers will receive a copy of the final report detailing project outcomes at the conclusion of the project. Project results will also be summarized in talks at the Empire EXPO berry sessions in 2013 and 2014, NY Fruit Quarterly and NY Berry News articles.

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