Spotlight

Grow Regulator Improves Rooting of Tea Cuttings

Tea is a plant widely used for its therapeutic characteristics, and its cultivation has expanded worldwide. To increase crop yields, the production of high-quality rooted cuttings is essential. However, tea is difficult to root, and requires the use of methods to increase the speed and uniformity of rooting to optimize plant viability. In a 2-year study, **Mello et al. (p. 599)** noted that treatment of cuttings collected at any time of year with 90 $mg \cdot L^{-1}$ IBA showed promise to enhance the production of viable cuttings.

Sustainable Soil Management Strategies for Strawberry

Utilizing cover crops, compost, and vermicompost are common soil management practices in organic systems, but are underutilized in strawberry production. **Beck et al. (p. 604)** evaluated summer cover crops, compost, and vermicompost treatments on soil nitrogen, yield, and other factors. Cover crops with compost increased soil nitrogen, but effects on strawberry growth and yield varied depending on the cover crop species. Small additions of vermicompost at planting increased strawberry yield and growth in year 2. Both organic and conventional strawberry growers can benefit from these practices, but additional research is needed to assess impacts on soil health in addition to yield.

Ambient Storage of Machine-harvested Cider Apples

Alexander et al. (p. 614) compared ambient storage of hand- and mechanically harvested 'Brown Snout' cider apples for two growing seasons. On average for 2014 and 2015, the percent fruit bruised and cut and the subsequent yield loss due to rotting were greater for machine harvest than hand harvest, and the differences increased with storage. Juice quality characteristics did not differ due to harvest method, but did differ with storage time and year. The harvester should be modified to increase yield, and fruit cold-stored or pressed within 24 hours of harvest to avoid significant yield loss.

Strip-Tillage and Rowcovers for Organic Cucurbit Production

When compared to bare-ground systems, strip-tillage for vegetable production has shown to increase soil health, with little impact on yield for several species. However, few comparisons have been made between strip-tillage and plasticulture systems. **Lilley and Sánchez (p. 628)** compared strip-tillage to plasticulture for the production of summer squash and muskmelon. The effectiveness of row covers for pest management also was examined. Yields in plasticulture treatments were higher than strip-tillage treatments in most comparisons. Rowcover use resulted in fewer insecticide applications and larger plants, but yield equal to without rowcover.

Organic Onion and Lettuce Are Good Choices for the Southeast

In two separate rotations of winter vegetables over 3 years, **Boyhan et al. (p. 637)** found that onion and lettuce consistently did well as winter vegetables in the southeastern U.S. Other crops such as strawberry, potato, broccoli, and carrot performed poorly or inconsistently. Soil carbon was maintained over the course of this study using summer cover crops, suggesting that addition of compost could be reduced or eliminated for some growers.

Aba-induced Chlorosis in Pansy: Does Fertilization Help?

Abscisic acid (ABA) is a plant hormone that induces stomatal closure and reduced water loss from plants. It has potential for use in extending retail shelf life by decreasing water use and reducing the need for watering in the store. However, ABA can also have unwanted side effects, such as leaf yellowing (chlorosis). **Kang et al. (p. 647)** studied whether higher fertilizer rates can prevent this chlorosis, and found that ABA can cause chlorosis, regardless of fertilizer rate. But since higher fertilizer rates increased leaf chlorophyll, they can be used to mask the chlorosis caused by ABA.

High-tunnel and Outdoor Production of Annual Bedding Plants

Given the high cost of traditional greenhouse production, many growers have turned to alternative low-cost systems, such as high-tunnel or outdoor production, for growing cold-tolerant spring annual bedding plants. **Olberg and Lopez (p. 651)** compared the growth and development of 10 annual bedding plant species grown in a high tunnel or outdoors. While flowering was delayed outdoors compared to in the high tunnel, plants were of equal or greater quality; and, for all but one species, delays were ≤7 days when plants received a 1-week acclimation period in the high tunnel prior to outdoor production.

Consumer Acceptance of Edible Lotus Rhizome

Lotus is an aquatic vegetable valued and extensively used for various culinary, medicinal, and pharmacological purposes in many Asian and Native American cultures. Domestic niche market development for edible lotus as a functional food and consumer acceptance has not been reported. An exploratory consumer acceptance study by **Traore et al. (p. 657)** found that lotus stir-fry was the most preferred value-added product followed by lotus chips and lotus salad. Socioeconomic characteristics such as gender, age, income, education, shopping habits, and type of meal purchased were factors affecting consumers' choice and willingness to recommend lotus fresh and value-added products.

Indiana Garden-based Youth Nutrition Program

A third-grade garden-based nutrition program was implemented across Indiana by a collaborative team that included Purdue University and the Cooperative Extension Service. **Kararo et al. (p. 663)** evaluated the program entitled "Eat Your Way to Better Health" by giving participants and their parents pre- and post-program questionnaires. The instrument measured self-efficacy for healthy eating behaviors in addition to self-reported fruit and vegetable consumption of self and family. Results include a self-reported increase in the diversity of fruits and vegetables consumed, as well as an increase in healthy eating self-efficacy.

Video Web Conferencing for Master Gardener Training

Video web conferencing (VWC) can make Master Gardener training more economical and accessible by decreasing instructor delivery and travel time. **Barton et al. (p. 669)** evaluated two Master Gardener training cohorts who alternately received VWC and face-to-face instruction for synchronous training sessions. Overall trainees' scored higher on application-oriented questions following face-to-face instruction, but this difference occurred in only two sessions. Both were broadcast remotely to a site with low Internet bandwidth, suggesting technical difficulties were likely responsible for reduced scores. Although Master Gardeners rated (five-point scale) the training's technical functionality low (1.8), they still rated its educational quality high (4.0).

Online Education Boosts University Student Enrollment

A 10-year study by **Sciarappa et al. (p. 677)** compared conventional, hybrid, and totally online formats of the same course, "Organic Farming and Gardening". The overall class grade averages of 811 undergraduate students for each format were 89.6%, 88.3%, and 86.8%, respectively. Comparing faculty performance and student satisfaction between the hybrid and the online versions found no significant differences in 16 survey categories. The major important difference was annual student enrollment, which averaged 25 for the hybrid format, 38 for the conventional format, and 91 for the highly preferred online format.

Edible-pod Peas as High-value Crops in the U.S. Virgin Islands

Snow pea and sugar snap pea are high-value crops typically grown in temperate regions. Temperature is the main factor limiting the production of edible-pod peas in warmer U.S. states and territories. **Ferrarezi et al. (p. 683)** evaluated edible-pod pea varieties in a tropical climate, and made recommendations to farmers in the U.S. Virgin Islands (USVI) based on yield. They report that edible-pod peas have potential as a specialty, short-season, high-value crop when grown in the cool-dry winter months of USVI. 'Little Sweetie' was the highest yielding variety evaluated under the conditions of this study for 2 consecutive years.