



## Consumers Prefer Locally Grown and Certified Organic Produce

Chamberlain et al. (p. 74) found differences in stated preferences for locally grown and certified organic produce among consumer groups in the mid-Atlantic region of the U.S. Preference for locally grown produce was highest among those age 37 years and older, White/Anglo participants, those without children living in their household, females, and participants with income levels \$25,000 and greater. Preference for certified organic was highest among those between age 21 and 36 years, Black/African Americans, Asian Americans, and Hispanic Americans, those with children living in their household, females, and participants with income levels of \$25,000 and greater.

## Aquaculture Effluent Added to Substrate for Petunia Production

The horticulture industry is continuing to evaluate alternative container substrates for floriculture crop production. Animal wastes have shown potential as an amendment. Recirculating aquaculture systems (RAS) discharge concentrated wastes, and methods to reuse the discharged nutrients are being investigated. Danaher et al. (p. 57) report that potting mix amended with dewatered effluent from a RAS was beneficial to container-grown petunia fertiligated with either water-soluble 20–10–20 fertilizer or municipal water. This experiment coincides with other research indicating commercial potting mixes amended with animal wastes provide adequate physical and chemical parameters for containerized plant production.

## Electronic Benefits Transfer Programs at Farmers Markets

Little is known of the experience of farmer-vendors who participate in Electronic Benefits Transfer (EBT) programs at farmers markets to accept Supplemental Nutrition Assistance Program (SNAP) benefits (formerly known as food stamps). Montri et al. (p. 38) explored farmers' attitudes regarding central terminal model EBT programs at selected Michigan farmers markets. Thirty-two farmers were interviewed. Farmers expressed a positive attitude toward EBT programs at farmers markets because market managers made

it easy for them to participate. Farmers also believed that accepting food assistance benefits attracted new customers to the market, thus expanding their customer base.

## Bermudagrass Varieties Differ in Germination Characteristics

Seeded bermudagrass utilization is increasing in the transitional climatic zone due to major improvements in overall quality. This has left a gap in the information relating to germination and establishment characteristics for most of these varieties. Deaton and Williams (p. 82) conducted a germination chamber study at five temperature regimes representing potential planting dates in Lexington, KY. The study quantified the differences in the speed of germination among 19 commercially available varieties and found significant differences among varieties, and temperature regimes. Significant interactions were also observed between variety and temperature regime.

## Pruning Strategies to Control Size of Macadamia Trees

There is some evidence of yield decline in crowded macadamia orchards. McFadyen et al. (p. 64) provided further support for the existence of such a decline, and examined the effectiveness of several different pruning strategies in managing such orchards. Selective limb removal had a short-term benefit in one study, but reduced yields in other studies. Side-hedging also reduced yield. Hedging the tops of trees caused a substantial reduction in yield. The effectiveness of the strategies examined might be improved with a better understanding of the physiological responses to pruning.

## Learning Style, Study Method, and Performance Not Correlated in Plant ID Courses

Researchers investigated the relationship between learning styles, study habits, and performance of students during two terms of woody landscape plant materials courses. Students were surveyed to determine their learning style at the beginning of the course and then biweekly to assess study methods. Contreras et al. (p. 130) observed no relationships among student learning styles, preferred study method, and performance as measured by final course grade. While no statistical relationships were observed, there was anecdotal evidence that students who studied by preparing their own notecards scored better in these courses.

## Muscle Activation of Upper Limb and Hand Muscles during Horticultural Activities

Muscle activation for common horticultural activity motions using primarily upper limbs and hand muscles was measured by electromyography (EMG). Six upper limb muscles (upper trapezius, triceps-long head, biceps brachialis, flexor carpi ulnaris, flexor carpi radialis, and brachioradialis) and two hand

muscles (thear eminence and hypothenar eminence) on the dominant hand were used together during most of 15 horticultural activities. **Park et al. (p. 51)** found that upper trapezius, thear eminence, and hypothenar eminence had higher muscle activity than the other muscles. Triceps-long head displayed very low EMG values compared to the other muscles.

## **Supplemental Lighting Promotes Affordable Off-season Greenhouse Tomato Production**

**Gómez et al. (p. 93)** report intracanopy supplemental lighting of a winter-to-summer high-wire greenhouse tomato crop to stimulate stem node number by 30%, time to first fruit harvest by 3 weeks, total fruit number by 40% to 45%, and total fruit fresh weight by 48% to 56% compared to unsupplemented controls. Although plant and fruit-yield responses were equivalent for identical photon fluxes and daily light integrals of horizontal supplemental lighting from cool light-emitting diodes (LEDs) within and along rows compared to vertical lighting from hot, high-pressure sodium (HPS) lamps mounted high overhead, LED lighting required only 25% as much electrical energy as HPS lighting.

## **Weed Control in Organic Vineyards**

The efficacy of two mechanical weed control methods (plow and a cultivator), steam, and an organic herbicide were compared in organic raisin and wine grape vineyards (**Shrestha et al., p. 99**). Additional treatments (hoeing in a raisin grape vineyards; hoeing, steam, and herbicide in a wine grape vineyard) were applied 1 month later. Mechanical treatments, particularly plowing, provided the greatest level of weed control. Steam and herbicide only suppressed weeds for a few weeks, and were more costly to apply than the mechanical treatments. None of the treatments affected vine growth, grape yield, or quality.

## **Cork Granulates as a Top Coat Substrate for Seed Germination**

Despite the benefits reported for using vermiculite as a top coating in seed germination, there are relatively high

costs and reported environmental and health concerns. **Bozzolo and Evans (p. 114)** compared the efficacy of vermiculite and granulated cork as a top coating for seed germination and seedling production. No deleterious effects related to days to germination, number of seed germinating, or seedling dry shoot and root weight were observed using cork granulate as a top coating. In some species, decreased days to germination and increased number of seed germinating were observed when cork granulate was used as the top coating.

## **More Understanding/Teaching about Landscape Diversity Needed**

Problems from low genetic diversity (the Irish potato famine) and biodiversity (dutch elm disease) have been documented for more than a century. Emerald ash borer has renewed concerns over these issues, yet little has been done to increase landscape diversity. Cloning of preferred varieties is making plants more uniform genetically, thus increasing the risk of problems. **Lohr (p. 126)** reports on a survey of wholesale nurseries in Washington State that found that most respondents were aware of the issues, but lacked in-depth understanding. A review of the current horticultural curricula revealed a need for more coverage of the topic.

## **Native versus Invasive Shrubs in Parking Lot Landscapes**

Six novel Connecticut-native shrubs were evaluated for adaptability to challenging parking lot landscape conditions in comparison to the invasive species, japanese barberry and winged euonymus. American filbert, buttonbush, northern bush honeysuckle, sweet fern, and sweet gale performed as well as the invasive species. Steeplebush did not perform as well due to powdery mildew and less than 100% survival. **Lubell (p. 119)** has shown that five native shrubs can be used as alternatives to invasive japanese barberry and winged euonymus in challenging locations. Observations suggest that native plant performance could be enhanced by clonal propagation and availability of higher-quality container plants.