high for its ornamental features, such as pyramid shape, brilliant red fruit, and angular and glabrous young stems. To introduce this wild plant for cultivation, softwood cuttings were collected in Mar. 2008 and treated with KIBA and KNAA at 1000, 3000, or 8000 ppm. Compared with control (no hormones), rooting hormones significantly induced root formation. The highest rooting percentage, 62.5%, was obtained under the KIBA at 1000 ppm. As rooting hormone concentration increased, the rooting percentage of *Ilex suaveolens* treated with KIBA decreased from 62.5% to 18.8%, while that with KNAA increased from 50% to 56.3%. In terms of root quality, cuttings treated with KNAA produced better roots. The biggest root ball volume, 168.4 cm^3, was observed on cuttings treated with KNAA at 8000 ppm. Cuttings treated with KIBA had root-ball volumes of 38.8.2-77.4 cm^3, while those with KNAA were over 93.7 cm^3. For the propagation of *Ilex suaveolens*, softwood cuttings treated with KNAA at 8000 ppm were recommended.

Cold Hardiness of *Ilex glabra* Cultivars from Field Trial and Laboratory Test

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Ilex glabra (L.) A.Gray (inkberry), a native evergreen shrub with dark green foliage and compact habit, has gained popularity in the northern landscapes of the United States. To determine the cold hardiness of inkberry cultivars and provide cold-hardiness data for growers as references for production and marketing, a field trial of 13 inkberry cultivars was established on 30 June 2008. A laboratory test of 11 inkberry cultivars was also conducted on 15 Jan. 2009. Plant survival was 93% in May 2009. *Ilex glabra* f. *leucocarpa*, 'Nigra', and 'Viridis' were the least cold-hardy cultivars; while inkberry wild species and its cultivars including 'Chamzin', 'Compacta', 'Densa', 'Nova Scotia', 'Pretty Boy' , 'Pretty Girl', and 'Shamrock' were the most cold-hardy cultivars. Based on laboratory test of inkberry cultivars, the temperature that results in 50% relative electrical conductivity (REC_{50}) of 'Nigra' was -18 °C; while that of 'Viridis', 'Pretty Boy', and *Ilex glabra* f. *leucocarpa* ranged from -25 °C to -30 °C; and 'Pretty Girl', 'Shamrock', 'Densa', 'Nova Scotia', and 'Chamzin' over -31 °C. The cold hardiness rating from field trial was significantly correlated with the REC_{50} value from laboratory test. Our results suggested that both data from field trial and laboratory test were reliable for the measurement of inkberry cold hardiness. Results from laboratory test could be used to predict the cold hardiness of inkberry cultivars. The factors, including plant cultivar, plant size, temperate, snow pack, mechanical injury, deacclimation, winter desiccation, and photoinhibition) should be in consideration.

Oral Session I: Wednesday, 6 Jan. 2010

Jersey Fresh Survey Results for Direct Marketing of Produce in Middlesex County, NJ, 2009

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Surveys on consumer preferences for local agricultural commodities, sold as direct marketed ''Jersey Fresh'' products, were conducted at the Middlesex County Fair and EARTH Center Open House in Aug. 2008 and 2009. Surveys provided information on consumer knowledge and preferences on produce purchases. A *t*-test was done on two of the survey questions. The statistical analysis of the surveys indicated that a significant amount of participants believe that direct farm market produce is of higher quality than large box store produce. The responses from 2008 and 2009 were statistically the same. The statistical analysis also revealed that a significant amount of participants believe organic produce is healthier than conventional produce. Responses from the two years was statistically different, in 2009 fewer reported that they believed organic produce was healthier. Consumers were also asked to provide information on what type of products they would like to see at farm stands and how farmers can effectively advertise the availability of their produce. A few questions covered individual purchasing preferences including: type of produce, locality and convenience. The convenience of produce availability and knowledge of market locations are the most notable factors. An effort was made to advertise the health benefits of consuming fruits and vegetables and promote ''Jersey Fresh'' with the aid of brochures. Further effort was made to inform residents of local farm markets and stands throughout Middlesex County. Participants were provided with samples of local ''Jersey Fresh'' products including sweet corn, tomatoes, peaches, and watermelon.

Growth and Physiological Responses of *Camellia oleifera* Abel Cultivars to Controlled Drought

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The establishment of newly planted teaoil seedlings is sensitive to the environmental stress. To better understand effect of drought, morphological and ecophysiological responses of *Camellia oleifera* Abel 'Winter Snowman' and 'Lu Shan Snow' under controlled irrigation levels at 0.11 0.22, 0.33, or 0.45 $m^3 \cdot m^{-3}$ volumetric water content (VWC) were investigated from July to Dec. 2009. Irrigation level at 0.11 was too low to provide enough water for plant growth and mortality was 75% and 100% for 'Winter Snowman' and 'Lu Shan Snow', respectively. For the other treatments, 'Winter Snowman' was more drought tolerant than 'Lu Shan Snow'. Chlorophyll fluorescence value (Fv/Fm), plant height, the number of branches and leaves of 'Lu Shan Snow' grown at 0.33 or 0.45 $m^3 \cdot m^{-3}$ VWC were significantly higher than that of 0.22 $m^3 \cdot m^{-3}$ VWC and the highest values were 0.72, 17.50 cm, 2.63 and 27.63, respectively. For 'Winter Snowman', the above parameters increased with increasing VWC and the highest values were 0.72, 31.50 cm, 4.38 and 60.38, respectively. Regardless of treatments, the plant height and number of leaves of 'Winter Snowman' were significantly greater than that of 'Lu Shan Snow'. Fv/Fm value, plant height, the number of branches and leaves had significant positive linear correlations with irrigation levels. Allometric analysis suggested that plants tended to grow more root tissue when VWC at lower levels and the root/shoot ratios were 0.82, 0.68, 0.58, 0.62, and 0.53 for VWC at 0.11, 0.22, 0.33, 0.45, and control. Relative leaf water content (RWC) and leaf size of both cultivars had no significance among all the treatments. We suggest that an optimum range of VWC for growing teaoil should be above 0.33 $m^3 \cdot m^{-3}$.

The Rutgers Master Gardener Program: 25 Years of Outreach and Education

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Since 1984, nearly 6,000 New Jersey residents have been trained, certified, and volunteered as Rutgers Master Gardeners. The program has grown substantially over the past 25 years, with approximately 3,000 active Rutgers Master Gardener volunteers in 18 of 21 county programs creating, delivering and enhancing many community-based programs related to gardening, horticulture, and environmental well-being. County programs annually train approximately 360 residents seeking to attain Rutgers Master Gardener certification. Native landscapes, community gardening for low-income audiences or densely populated areas, the Garden Helpline, horticultural therapy and support projects, speaker bureaus, schoolyard gardens and habitats, and public health and safety projects are just a few examples of outreach efforts supported through this trained volunteer corps. This program, which has greatly expanded the mission and efforts of Rutgers Cooperative Extension, is second only to the 4-H Youth Development program in visibility and public relations for both the University and county offices. Over the past