

CCEA Newsletter

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CCEA is a research organization dedicated to the improvement and vitality of the Controlled Environment Agriculture Industry. CCEA is funded by Industrial and Grower Partners who contribute a yearly partnership fee. Satellite partnership is available to growers for a modest fee. Information on CCEA is available from: William J. Roberts Director, Bioresource Eng'g Department, Cook College, PO Box 231, New Brunswick, NJ 08903. 908 932 9534 Voice 908 932 7931 Fax E-mail roberts@bioresource.rutgers.edu Website: <http://www-cook.rutgers.edu/~cceal/>



Vision Statement
CCEA, The Center for Controlled Environment Agriculture of NJAES of Rutgers University, a partnership among growers, industry and researchers, will devote itself to research and transferring information required for an economically viable and environmentally aware controlled environment agriculture industry. We will particularly strive to identify future trends, critical issues, appropriate emerging technologies and provide leadership for opportunities which challenge world-wide controlled environment agriculture in the 21st century.

CCEA Co-sponsors Greenhouse Design Shortcourse

The Research and Demonstration Greenhouse at the Burlington Resource Recovery facility continues to successfully produce tomatoes using the single truss tomato production system. The photo shows a typical pack of high quality number 1 tomatoes.

Dave Specca, Rutgers Resident Manager and Director of the greenhouse indicated that he cannot supply enough of these tomatoes to the supermarket chain to whom they are now selling them. **Dave** hosted a recent tour of the annual Greenhouse



Design and Controlled Environment Shortcourse coordinated by Bill Roberts, your Editor. 36 people attended the course this year and were treated to talks by retired Extension Specialist **John Bartok** from the University of Connecticut and CCEA Scientific Advisory Panel member, **Ralph Freeman**. **John Hoogeboom**, consultant from North Carolina also spoke. The group toured Industrial Advisory Board member, Bill Swanekamp's **Kube Pak Corp.** and enjoyed the tour of 14 acres of plants at various stages of development. The precision seeding machine was of great interest to the group.

Carl Blasig's immaculate operation in Allentown New Jersey was the final stop on the tour. There the group observed the operation of a Flier robotic transplanter even though the day's production had already been completed. Transplanting is a major labor requirement and there are at least six manufacturers with machines on the market ready to meet the challenge.

Your editor presented 5 topics to the group throughout the two-day course including; glazing options, basics of heating, ventilation principles, floor heating design and space utilization. **George Wulster** rounded out the program with an excellent treatise on soil mixes, watering and fertilization.

USDA CENSUS Floriculture Crops 1996 Summary

The wholesale value of Floriculture crops reached \$3.42 billion in 1996, up 3% from 1995. Bedding plants continue to account for much of the increase. Even cut flowers recorded an increase in sales, the first in many years.

California continues to lead the US with crops valued at \$724 million, a 5% increase over 1995. The top five states in addition to California are Florida, Texas, Michigan and Ohio. These 5 states accounted for \$1.9 billion an incredible 56% of the total value of the US. **New Jersey** produced \$94 million with **New York** \$108 million and **Pennsylvania** \$118 Million.

The greenhouse growing area decreased 5% to 10,640 acres which is 55% of the total area of 19,352 acres which includes shade and temporary cover of 8700

- ◆ Glass 1595 acres 15%
- ◆ Rigid plastics 2341 acres 22%
- ◆ Polyethylene film 6703 acres 63%

acres. Areas of glazings are as follows:

The number of growers nationwide is 9765, down about 393 growers from 1995. There are 4614 growers with more than \$100,000 in sales.

The work force hired for floriculture operations increased in 1996. Of the total operators, 84% used some hired workers with the average number of workers during peak periods being 13.8. bringing the total number of workers to about 135,000.

More information on the 1996 floriculture Crops Summary report can be found at the website www.USDA.gov/nass

CCEA Annual Meeting Update

Dave Specca and **Tom Manning**

reported on the Burlington project. Currently marketing the tomatoes to King's Supermarket where they retail them at \$3.50 per pound (see photo on page 1). Serious root problems evident at our meeting a year ago have been controlled and the current production is at the level anticipated. **Tom Manning** reported that data is being taken on the ventilation performance of the glass and double poly sections with interesting preliminary results. There was considerable discussion on the projects and reports.

Peter Ling reported on the computer vision work of analyzing the top canopy of lettuce to determine nutrient stress and differences in performance before the human eye can detect the problem.

Brian Sauser, executive administrator of the NJ-NSCORT project emphasized the education and outreach function of the Specialized Center of Research and Training, the part of the NSCORT project aimed at carrying the results of the research and its excitement to students.

Dr. Rod Sharp spoke on the Millennium targets for Rutgers Research. He gave his usual exciting and stimulating presentation. Several other topics were covered and are reported in the minutes of the meeting

February 18 - 21, 1998

27th National Agricultural Plastics

Congress

Holiday Inn Palo Verde

Tucson, Arizona

The program includes two days of paper presentations, option of two all day tours on Saturday and a post Congress tour to Mexico!!.

Merle Jensen is Host. For info call him

520 621 5242

or

Pat Heuser @ 814 238 7045

Welcome CCEA'S Newest Partner

Mr. M.P. MacKenzie Argus Control Systems
1281 Johnston Road White Rock BC Canada
V4B3Y9