

CCEA Newsletter

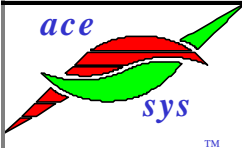
Volume 8 # 4

October 1999

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:
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www.cook.rutgers.edu/~ccea/



Photo taken by Roberts Nov17, 1999



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.

Greenhouse Update

The CCEA research greenhouse pictured above is receiving final touches from Eugene Reiss, recent Horticultural Engineering BS graduate who has joined CCEA's team. Eugene is replacing the gable ends, which were formerly glazed with polyethylene film, with polycarbonate panels donated by Van Wingerden Greenhouse Co., a friend of CCEA.

The Argus computer system has been installed and is operating the greenhouse. Argus, a partner with CCEA, assisted in the research project by giving a significant educational discount for their equipment.

Once the ends have been completed and a new electrical service installed, only the heating system needs to be installed before the greenhouse will be ready for research with actual crops in place. Previous data on temperature control has been acquired without the benefits of transpiration normally associated with greenhouse production.

All on the team are excited about the prospects and potential for this new greenhouse research facility. We will keep you posted.

PLASTICULTURE 2000
The American Society of Plasticulture proudly presents the 28th National Agricultural Plastics Congress and the 15th International Congress for Plastics in Agriculture to be held from September 23-27, 2000 at the Hershey Lodge and Convention Center in Hershey PA.

The Congress will feature a trade show and plenary sessions with keynote speakers with four major themes. These include season extension technology, greenhouse technology, drip irrigation technology and packaging technology. Each session will feature a keynote presentation followed by four speakers. Roundtable discussions sessions with these speakers will also be featured along with an industry trade show. The show will showcase the industry's latest technology and developments from around the world featuring a wide range of products which service the plasticulture industry.

Concurrent sessions will feature greenhouse production, use of agricultural film for mulch in field production, drip irrigation and row covers and high tunnel technology.

Another day will feature concurrent research presentations and a final day will feature four concurrent industry tours. These include a fruit and vegetable tour, greenhouse tour, packaging tour and ornamentals tour featuring nursery production operations.

A special feature of the Congress will be a pre-congress tour. A complete account of this tour is on the next page.

More information will become available closer to the time of the meeting. Check the website at:

<http://www.plasticulture.org>.

The American Society of Plasticulture who is hosting this Congress can be reached at

526 Brittany Drive
State College, PA. 16803-1420
814 238 7045
814 238 7051 Fax
E-mail peh4@psu.edu

CCEA Partner Opens New Greenhouse Range in Vineland, New Jersey

Jack Van de Wetering of Ivy Acres, a partner with CCEA for many years has just opened a 4-acre state of the art greenhouse facility near Route 55, Vineland, NJ. The new greenhouse features the open roof design which opens by articulating at one gutter and ridge, unlike the CCEA research greenhouse pictured on the first page which articulates at both gutters and opens at the ridge.

The new facility has been in the planning stage about 2 years. Jack, who started Ivy Acres on Long Island in 1973, wanted a satellite facility near the Philadelphia market. Vineland was chosen because of its climate and strong agricultural base. The community also contributed toward the project by participating with a loan by the Urban Enterprise Zone program.

The new facility also features a water recycling system which captures rainwater to fill the two 55,000 gallon tanks used to irrigate the crop throughout the year.

Poinsettias being produced now for the Christmas season will be marketed through Home Depot and Loews outlets which Ivy Acres has been supplying for many years. Perennials and bedding plants will be produced during the spring with the focus on mums during the summer.

The new facility will grow to eight acres next year when another 4-acre block is added at the site. It is anticipated that 15 to 20 new jobs will be created by the facility and perhaps an equal number during the very busy months of the year.

Peter Van de Wetering, a CCEA partner and brother to Jack has a large plug growing operation on Long Island.

CCEA wishes Jack Van de Wetering and Ivy Acres the greatest possible success with his state-of-the-art, open roof greenhouse venture. Your editor hopes to visit the site in the near future and perhaps include pictures of it in the next CCEA newsletter.
Bill Roberts

**The Norm Smith Memorial New Jersey
Pre-Congress Tour of Plasticulture
Systems and Grower Operations
September 20 - 23, 2000**

**Go to <http://www.cook.rutgers.edu/~cce>
for full information and registration.**

You are invited to participate in an exciting professional tour of Plasticulture technologies in New Jersey. The tour will precede the combined ASP and CIPA International Plastics Congress that will be held in Hershey, Pennsylvania. All participants will meet at a hotel near Newark International Airport [EWK]. We will depart at 8:00 AM for a 4-day bus tour of New Jersey Plasticulture beginning on September 20, 2000.

New Jersey is a highly diverse and technically advanced agricultural crop producing state. It is the location of many commercial applications for plastics in agriculture and the industry use continues to grow. Over the past 35 years, many Plasticulture innovations have been developed and have matured in New Jersey. Pioneers like Norm Smith, Bill Roberts, and other Rutgers faculty members have led the way for these developments.

You will meet the experienced operators and growers of production agriculture farms and facilities. We will visit farms that successfully utilize drip irrigation, plastic film mulch and controlled environment greenhouse technologies. The tour stops will range from retail farm markets to a wholesale auction facility, from a 5 hectare commercial potted plant greenhouse to intensive plant production in low-tunnels, and from a demonstration tomato production facility at the Rutgers Eco-Complex, to the experimental test plots of the Rutgers Agricultural Research and Extension Center [RAREC] at Bridgeton. A banquet dinner is included. The experiences and information of this tour will

be complemented by the camaraderie and professional contacts that are typically established during such bus tour events!

To conclude the tour we will visit historic Philadelphia. We will experience the Independence National Historic Park, where the U.S. colonial, revolutionary, and federal-period history is preserved. Philadelphia is the birthplace and the first capital of the U.S.A., the city of Benjamin Franklin, the Liberty Bell, and the Continental Congress. The Park includes an array of walking tours of the downtown historic area. For more information contact:

www.nps.gov/inde

After the tour you will be transported to the Hershey Convention Center on Saturday afternoon September 23. You will arrive at the Congress in time for the reception to open the meetings. Arrangements must be made separately for space transport after the Congress from Hershey to Newark or Philadelphia airports. Post-Congress transportation is not included within the Pre-Tour package. The New Jersey pre-congress tour requires separate registration and fee payment from that of the ASP/CIPA Congress.

Complete registration instructions will be mailed with the Congress Call for Papers. Pre-registration and/or a letter of intent to participate is due by April 1, 2000. Final registration and room fees must be paid in US dollars [check, money order, purchase order] no later than June 15, 2000. The tour registration cost will be approximately \$240 per person for the 4-day event, excluding meals and motel room costs. We will complete motel room reservations [approximately \$75.00 per night 4 nights] after receiving full payment in advance.

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Dr. Arend-Jan Both Joins CCEA

Dr A.J. Both joins the faculty of Cook College as Extension Specialist in Controlled Environment Engineering. Dr. Tom Orton, Chairman of the Extension Specialist Department at Cook College recently announced that Dr. Arend-Jan Both has accepted an offer to join the Cook College faculty as of January 3, 2000. A.J. will hold primary and secondary appointments , respectively, in the Department of Extension Specialists and Bioresource Engineering. The focus of A. J.'s program of research and extension will be on agricultural structures and controlled environment factors of phytomation systems.

Dr. Orton went on to say that we look forward to A.J.'s leadership in the development of new technologies to make controlled environment agriculture in New Jersey more profitable and at the same time sustainable.

AJ comes to Rutgers from Cornell University where he is currently Research Associate and Project Co-ordinator for the construction and operation of a commercially scaled hydroponic lettuce production greenhouse facility.

He received his Ph.D. in Agricultural and Biological Engineering from Cornell University in 1995. He is a native of the Netherlands and received a BS and MS degrees from the Agricultural University in Wageningen.

One of A.J.'s first assignments will be to teach a session in the Greenhouse Design and Environmental Control short course conducted by your editor and being held on campus January 10-11, 2000. A one-half day tour to a one-acre greenhouse at a resource recovery facility, Carl Blasiq's and Kube Pak Corporation is part of the course.

For registration information call Ruth @732 932 9534 or contact us via e-mail at roberts@bioresource.rutgers.edu.

Internal and External Curtain Systems NGMA Publication

NGMA, The National Greenhouse Manufacturers Association has recently released a document dealing with Considerations for Internal and External Greenhouse Curtain Systems. The main purpose of the brochure is to familiarize growers with curtain system technology. The publication is not designed to endorse any brand or company product and NGMA does not publish standards of performance.

The publication gives some history detailing some of the reasons for the thermal screens or blankets. In 1973 the price of oil per barrel was US \$2.50. By the end of 1974 the price had been raised by OPEC to US \$11.25 per barrel. During these times the cost of all forms of energy used for heating and controlling the environment in greenhouse dramatically increased.

Research done by your editor and colleagues during this time indicated that thermal screens could save a grower at least 30% of his winter heating costs.

Growers had a dramatic need to adopt these thermal screen or blanket systems to maintain a viable business in the face of rapidly rising energy costs.

These thermal screens not only provided remarkable energy saving features in the winter but also improved summer cooling by providing summer shading. Both external and internal systems can be used for summer shading.

NGMA indicates that 34% of all growers polled reported that they have curtain systems. An additional 31% indicated that they planned to retrofit their present greenhouses with thermal curtain systems. Another 38% of the respondents indicated that they planned to include a curtain system in any new future construction.

The publication is available from;
NGMA
20 West Dry Creek Circle
Littleton, CO 8012