

Caula A. Beyl

Director of Institutional Planning, Research, and Evaluation
Professor of Horticulture/Stress Physiology

Alabama A&M University
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EDUCATION

- 1979 **Doctor of Philosophy** - Stress Physiology, Purdue University, West Lafayette, IN
Dissertation Title: *Levels of Endogenous Growth-Regulating Substances in Tissues of Mechanically-Dwarfed Sunflower Plants.*
Dissertation advisor: Cary Mitchell
- 1977 **Master of Science** - Horticulture, Purdue University, West Lafayette, IN 47907
Thesis Title: *Characterization of Mechanical Stress Dwarfing in Chrysanthemum.*
Thesis advisor: Cary Mitchell
- 1973 **Bachelor of Science** - Biology (Botany and Zoology), Florida Atlantic University, Boca Raton, FL
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PROFESSIONAL EXPERIENCE

- 2002- present **Director**, Office of Institutional Planning, Research, and Evaluation
P.O. Box 272, Alabama A&M University, Normal, AL 35762
Responsibilities include long range planning, and evaluation of its implementation, institutional research on enrollment and retention trends, institutional research on effectiveness, university assessment, state and governmental statutory reporting, leadership in SACS reaffirmation audit and QEP development activities, establishment of a data warehouse, and evaluation via ad hoc and recurring surveys.
- 1998- 2002 **Director**, Plant Science Center, Department of Plant and Soil Science, P. O. Box 1208, Alabama A&M University, Normal, AL 35762
Responsibilities included program development, curriculum revision, proportioning teaching responsibilities, coordination of grants within the center, student recruitment and advisement, and supervision/evaluation of Plant Science Center faculty.
- 1992- present **Professor** - Horticulture and Stress Physiology
Department of Plant and Soil Science,
Alabama A&M University, Normal, AL 35762
Current research efforts focus on propagation and root morphology/architecture of transgenic aspen, *Agrobacterium rhizogenes* transformation of *Ziziphus* species, use of edible white rot mushrooms for degradation of cellulose and lignin in space-based cropping systems. Past research has included spectroreflectometry to detect nutrient stresses; systemic acquired resistance in response to fireblight in *Pyrus* and root rot in cocoyam; transformation and regeneration of *Populus deltoides*; involvement of drought and light stress in dogwood anthracnose susceptibility; use of remote sensing techniques to assess dogwood anthracnose; use of image analysis to measure root morphology and architecture in response to rooting, competition, compaction, and container volume; adaptation of exotic fruit crops such as peewee kiwi, jujube, and Asian pear; effects of root constraint on hormonal content of exudate of peaches; growth regulator modification of stress tolerance including cold tolerance of *Actinidia* species and acclimatization of *Prunus serotina* following tissue culture.

- 1987-1992 **Associate Professor** - Horticulture
Department of Plant and Soil Science,
Alabama A&M University, Normal, AL 35762
Research involved physiological modeling of lettuce growth as an alternative for physico-chemical systems in the space station, cultural adaptation of exotic crops particularly Asian pear and cold-hardy kiwi species, growth regulator modification of drought and cold stress tolerance, effects of water stress on cytokinin content of exudate of different species of tomato, conventional and tissue culture propagation, and in vitro development of fruits for microgravity environments, and interaction of genotype and propagation method on root morphogenesis in *Prunus serotina*.
- 1981-1987 **Assistant Professor** - Horticulture
Department of Natural Resources,
Alabama A&M University, Normal, AL 35762
High-density fruit production systems including hedgerow and meadow orchard approaches, cultural adaptation of exotic crops, stress tolerance particularly to drought and cold, and propagation systems both conventional and tissue culture.
- 1980-1981 **Postdoctoral Researcher** - Plant Tissue Culture
Department of Natural Resources,
Alabama A&M University, Normal, AL 35762
Characterization of cell suspension cultures of triticale, wheat, and rye conducted jointly with Dr. G. C. Sharma under a grant sponsored by NASA. Evaluation of picloram as a potential hormone for embryo induction in *Gasteria* and *Haworthia*.

SERVICE TO THE UNIVERSITY AND PROFESSION

- 2006 Alabama Quality Award Examiner
- 2006 Member of the committee to develop a uniform syllabus for AAMU
- 2006 Developed a presentation on Alabama A&M University's progress in achieving the state's goals for higher education delivered to ACHE by Dr. Robert Jennings on March 3, 2006 in Montgomery, Alabama
- 2006 Peer reviewer for proposals submitted to USDA/SBIR program
- 2005-6 Alabama A&M University SACS Liaison
- 2005 Peer reviewer for proposals submitted to USDA's Higher Education Multicultural Scholars program
- 2004 Appointed to the Advisory Council for the Alabama Commission on Statewide Planning and Accountability
- 2003-4 SACS Reaffirmation of Accreditation Leadership Team
- 2003-4 NCAA Self-Study Leadership Team
- 2002 Appointed to the state's Higher Education Information Advisory Group
- 2002 Co-organizer of Frameworks for Learning Leadership Conference IV, September 18-21, 2002 in Columbiana, AL. Taught segments on change as a tool, effective oral communication, diversity – not a problem but a plus, and using body language.
- 2002 Chair of Audit Team 2 for SACS Reaffirmation, Planning and Evaluation Process and Institutional Effectiveness Thrusts
- 2002 Chair of university's Institutional Effectiveness Committee
- 2001 Chair of University's Institutional Purpose Committee for SACS. Reaffirmation of Accreditation Committee
- 2001 Co-organizer of Leadership Learning Conference III, April 3-7, 2001 in Columbiana, AL. Taught segments on change management, communication, dealing with diversity, negotiation, and reading body language.
- 2001 Speaker, Youth Leadership Conference entitled, "You may not be talking, but your body is screaming at me", UAH, June 2001

- 2001-5 Senior Editor, Plant Growth Regulation Society of America Quarterly. Also, chair of graduate student travel and presentation awards committees.
- 2000-2002 Appointed Associate Editor of the Journal of the American Society for Horticultural Science in the area of Environmental Stress Physiology
- 2000 Instructor and co-organizer of Leadership Learning Conference, March 29- April 1, 2000, Columbiana, AL.
- 2000 Presented an intensive training session entitled "Analyzing and Measuring the Landscape Site" for the Huntsville Madison County Botanical Garden.
- 2000 Participant in a panel discussion on Most Important Advances in Plant Science, Urban-Rural Interface Conference, April 13, 2000, AAMU, Normal, AL
- 1998-2000 Associate Editor for the Plant Growth Regulation Society of America Quarterly
- 1998 Host and organizer of a workshop entitled "Classroom Observation for Teaching Improvement, April 24, 1998.
- 1998 Chair, Strategic Planning Committee for the School of Agriculture.
- 1998 Invited workshop on the "Value of Good Scientific Writing", Alabama Dietetic Association, March 13, 1998.
- 1997 Co-Chair of Change Management Workshop for Deans and Chairpersons held at AA&MU, July 17-18, 1997.
- 1997 Member of the University Faculty Development Committee.
- 1996-1998 Secretary for the Plant Growth Regulator Society of America.
- 1996 Peer reviewer for HortScience, Plant Cell Tissue and Organ Culture, Crop Science, Plant Cell Reports, Journal of Plant Growth Regulation, and Agrochemistry and Pharmacy.
- 1996 Reviewer for proposals in the Auburn University Competitive Grants Program for 1997.
- 1996-1998 Chairperson of FIRST (Faculty Incentives and Rewards for Superior Teaching) being developed for faculty in the School of Agriculture. Also, organized and conducted a workshop on "Recognizing and Rewarding Excellence in Teaching" held at Alabama A&M University, May 13, 1996.
- 1996 Member of the screening committee for the Director of Institutional Research, Planning and Evaluation.
- 1996 Extensively and completely reformatted the Graduate Thesis Guidelines for the School of Graduate Studies.
- 1996 Co-Organizer and host for the Dogwood Anthracnose Workshop held April 1-3, 1996 in Guntersville, AL.
- 1995-6 Outside reviewer for Promotion for University of Tennessee and University of Georgia and member of Review Panel for USFS employee, Athens, GA.
- 1995 Reviewer for NSF Competitive Grants Program, May, 1995.
- 1995 Publicity Chair and the Chairman of the Research Publications Award Committee and the Student Awards Committee for the Plant Growth Regulator Society of America.
- 1995 Invited presentation on the use of *Agrobacterium rhizogenes* to stimulate root formation, TSU Forums for the Nursery Industry (Propagation), McMinnville, TN, June 7, 1995.
- 1995 Chairperson, Committee to evaluate the implementation of a Distance Learning Program at Alabama A&M University.
- 1994 Reviewer for NRI Competitive Grants Program, January, 1994.
- 1994 Executive Chair for CSREES Review of the Department of Plant and Soil Science.

- 1993 Responsible for initial revision of the Graduate Thesis Guidelines for the School of Graduate Studies.
- 1992 Chair of University's Institutional Purpose Committee for SACS Reaffirmation of Accreditation.
- 1992-1996 Member of University's Continuing Education Committee.
- 1991 Chair of ACHE program review for Horticulture.
- 1988 Executive Chair of Ph.D. Proposal Development Committee to obtain approval for the first doctoral program in Plant Science among the HBCUs.
- 1982-1988 Chairman, Campus Decorating Committee.
- 1986 Designed the landscape plan for the Hillcrest, the University President's Campus Home.
- 1980-1998 Master Gardener Coordinator for the Department.
- 1981-present Member or Chair of various committees within the department including search, reappointment, promotion and tenure, awards, farm research, biotechnology strengthening, computer usage, science exploration day, and recruitment committees.

INSTITUTIONAL PLANNING AND ASSESSMENT CONSULTING

- Nov 2006 Non-verbal Communication Effectiveness for Extension, Alabama Farmer's Cooperation, Decatur, Alabama, November 15, 2006
- Sep 2006 Developing Learning Outcomes for the Course, Program, and Institution. Two day workshop for all faculty held at Southern University at Baton Rouge, Louisiana.
- Aug 2006 The SACS Process and QEP: Not Just Surviving, but Thriving, Bethune-Cookman College
- Apr 2006 SACS On-site Team Leader for Evaluation of the Quality Enhancement Plan, University of Central Florida
- Sep 2005 Consultation on focus and framework of the QEP document, Bennett College for Women, Greensboro, NC
- Aug 2005 Presentations on Documenting Institutional Effectiveness, Faculty Role in the SACS Process, Staff Role in the SACS Process, Lessons Learned During Reaffirmation, Summation of the Process at Bennett College for Women, Greensboro, NC
- Apr 2005 Presentations on Developing the Quality Enhancement Plan, Documenting Learning Outcomes, and Linking Planning and Budgeting, Southern University at Baton Rouge
- Dec 2004 Presentation on Learning Outcomes, Southern Education Foundation, Atlanta, GA

FUNDED RESEARCH PROJECTS

Year	Role	Title	Source	Amount
2006-7	PI	Characterization of root systems and stress proteins of aspen transformed for enhanced woody productivity/quality	CPBR	\$20,000
2004-07	Co-PI	Augmentation of Landscape Design Curriculum through the Incorporation of New Technology Paradigms	USDA	\$161,061
2003-7	PI	Use of Edible Mushrooms to Degrade Lignin and Cellulose (Purdue, Howard, AAMU NSCORT on Minimizing Equivalent Mass for a Regenerative Life-Support System	NASA	\$502,600
2001-3	PI	Characterization of Transgenic Aspen for Wood Productivity/Quality	CPBR	\$20,000
2001-4	Co-PI	Frameworks for Learning: Leading and Teaching Effectively Ever-Changing Contexts (Challenge Grant)	USDA/HE	\$47,726
2001-04	Co-PI	Training Underrepresented Plant Biologists in Emerging Technologies	DoED/MSIP	\$295,639

2001-4	Co-PI	Sustainable Poultry Litter Management: Short-Rotation Hardwoods Integrated with Hyperspectral Remote Sensing and GIS	USDA/ CSREES	\$269,146
2001-5	Co-PI	Screening of Shiitake Mushroom Strains for High-Grade Antibiotic Properties Contained in the Mycelial Leachate	USDA/ CSREES	\$434,745
2000-2	Co-PI	HORTiculture in the EC and US	FIPSE	\$18,839
1998-03	Co-PI	Biological Control of Bacterial Wilt Pathogens Using Mycelial Leachate, Developing High-Temperature Tolerant Strains, and DNA Fingerprinting of Shiitake Mushroom	USDA/ CSREES	\$566,870
1999-04	PI	Modification of Growth and Other Selected Characteristics of Exotic Fruit Crops via Transformation with <i>Agrobacterium rhizogenes</i>	USDA/ CSREES	\$578,405
1999-02	Co-PI	To strengthen Graduate Curricula in Seed Science	USDA/ CSREES	\$275,329
1997-99	PI	Adaptation of Leaf Spectroreflectometry and Neural Network Image Analysis Approaches to Detect and Diagnose Nutrient Stresses in Space-based Cropping Systems	NASA Ames Research Center	\$199,002
1998-00	PI	Neural Network Analysis of Leaf Multispectral Reflectance for Detection and Discrimination of Nutrient Deficiencies	NASA Ames Research Center	\$338,558
1998-00	Co-PI	Partners for Social Change: Developing leadership in agricultural students	USDA Challenge Grant	\$29,728
1997-99	PI	Evaluation of hydrophobic particle films for pest control the southeast.	Englehard	\$20,000
1997-00	CoPI	Control of Nutrient and Pesticide Residues in Landscape by Phytoremediation	AAES	\$491,150
1996-98	Co-PI	Restructuring the Faculty Reward System at SOFSEC Institutions.	SOFSEC	\$45,000
1996-98	Co-PI	Development of Efficient Micropropagation Systems Via Somatic Embryogenesis and Gene Transfer Mechanisms for Southern Pines and Poplars	USDA/FS COE	\$313,500
1996-98	Co-PI	Soak Medium and Environmental Modification to Maximize Shiitake Mushroom Production.	AAES	\$123,116
1996-98	PI	A Collaborative Effort to Change the Reward Structure for Teaching,	USDA Kellogg	\$39,000
1994-99	Co-PI	Interdisciplinary Research in Plant Genome and Totipotence: An Opportunity for Excellence at a Minority Institution	DOE/NSF/ USDA	\$80,000
1994-00	PI	Sod Management for Peach, Raspberry, and Asian Pear Production	USDA/ ARS	\$10,000
1993-95	Co-PI	Pollution Control in Aqueous Solution by Hydroponic Cultivation of Plants	WES/ DOD	\$72,000
1993-95	Co-PI	Infusion of Sustainable Concepts in Agricultural	USDA	\$258,594

		Curricula		
1993-98	PI	Selected Alternative Fruit Crops for Alabama – Increasing Adaptability via Cultural and Research Practices	USDA/ CSREES	\$490,000
1993-95	Co-PI	Vegetation Community Mapping for the Sipsey Wilderness Using Ground Observation and Multispectral Remote Sensing	USFS	\$186,000
1993-95	PI	Monitoring Spread of Dogwood Anthracnose as a Function of Site Aspect and Elevation using Multispectral Photography and Image Digitization/Analysis	USFS	\$46,800
1992-94	PI	Scientist Visitation Program to Enhance Minority Participation in Science.	USFS	\$48,000
1990	PI	Development of a Plant Growth Database, Physiological Model Design for Lettuce Growth, and its Verification/Validation	Boeing	\$57,375
1990	Co-PI	Battelle Pacific Northwest Laboratory University Consortium for Cooperative Education and Training	DOE/ Battelle	\$50,000
1990	Co-PI	Summer Undergraduate Affirmative Action Research Program (SUAARP)	USDA/ USFS	\$4,088
1990-92	Co-PI	Socio-economic and agronomic effects of climate change on small farms in the southeast	EPA	\$33,000
1990-92	Co-PI	Acquisition of Plant Biotechnology Instrumentation	NSF Spec. Proj. Prog.	\$525,000
1989-95	PI	Relationship of Genetic and Environmental Effects on Root Morphology of Selected Trees for Urban Forestry Purposes	USFS	\$66,398
1988-92	Co-PI	A Proposal to Demonstrate Production of Salad Crops in the Space Station Mockup Facility with Particular Attention to Space, Energy, and Labor Constraints	NASA	\$69,000
1987-93	PI	Alternative Fruit Crops for Alabama - Adaptability and Commercial Production Research	USDA/ CSREES	\$425,000
1987-88	PI	Millet and Cowpea Germplasm Screening for Drought Tolerance	NCRP/ USAID	\$20,000
1986-88	PI	Investigation of Tissue Culture Techniques for Fruit Production in a Microgravity Environment	Battelle Pacific NW Labs	\$265,000
1986-88	Co-PI	Application of Biotechnology to the Nursery and Forest Industries of Alabama	AL Res Institute	\$75,000
1985-6	Co-PI	Preplant Treatments to Enhance Germination Precocity of Vegetables Particularly Sweet Corn	USDA/ CSRS	\$75,000
1982-88	PI	High-Density Fruit Production for Small Farms in the Southeast	USDA/ SEA/CR	\$275,000

GRADUATE THESES - MAJOR ADVISOR

- Jemilia Ross-Polius Temperature and humidity influences on growth and fruiting of white rot fungi. M.S. Anticipated completion, Spring 2007
- Lawana Adcock Alteration of root morphology and rooting characteristics of transgenic aspen. Ph.D. Anticipated completion, Spring 2007.
- Mike Reeves Integration of IPM techniques for control of blueberry weevil in north Alabama, M. S. non-thesis option, Spring, 2007.
- Anwar Alsanabani Transformation of *Ziziphus spina-christi* with *Agrobacterium rhizogenes*. Completed, Spring 2006.
- Rhonda Britton Multiple seeding ratios of tall turf type fescue in Kentucky and Hybrid bluegrasses with and without net for sod production. M. S. Fall 2006.
- Pushpinder Brar Induction of regenerative callus in peach. M. S. Fall 2004.
- Gwendolyn Valentine Development of a resource for management of tropical crops. M.S. non-thesis option. Fall, 2003.
- Quinton Cooper Development of a recruitment resource for careers in the natural and environmental sciences on CD, M. S. non-thesis option, Spring, 2003.
- Rudy Pacumbaba Adaptation of Hyperspectral Reflectance and Neural Networks for the Determination of Nutrient Stress in Lettuce, Ph.D. Spring, 2002
- Christopher Cooper Use of spectroreflectometry as a tool for detection and quantification of nutrient stresses in tomatoes. Ph.D, Spring, 2002.
- Tomas Ayala-Silva Use of spectroreflectometry as a tool for detection and quantification of nutrient stresses in wheat. Ph.D. December, 2001.
- Greg Dortch Clonal propagation of pawpaw using *Agrobacterium rhizogenes*. M.S., Summer, 2002
- Leopold Nyochembeng Root rot in cocoyam - systemic acquired resistance mechanism? Ph.D., Spring, 2001.
- Arvazena Clardy Effect of triazoles and nutrient levels on Zinnia and Marigold for phytoremediation uses. Ph.D., Spring, 1999.
- Chelsea Mosko A survey of literature on systemic acquired resistance. M.S. non-thesis option. Summer, 1998.
- Lynwood Blackmon Root zone competition between different sod and selected fruit and ornamental species M.S., Fall, 2002.
- Tabarius Gay Physiological performance of roots of ornamentals rooted via IBA or *Agrobacterium rhizogenes*. M. S., Summer, 1998.
- Nelson Wynn Development of guidelines for use of distance media by extension personnel. M. S. non-thesis option. Spring, 2001.
- Ramana Gosukonda Development of transformation and regeneration systems for use in biopolymer production by Poplar species. Ph.D., Summer, 1998.
- Themika Sims GIS Mapping with Database Linkage for Street Trees in the city of Sheffield. M.S. non-thesis option. Spring, 1999.
- Ada Harvey A survey of horticultural resources on the internet. M.S. non-thesis option, Summer, 1996.
- Christopher Cooper *Agrobacterium rhizogenes* induced rooting - timing, host specificity, wounding and inoculation interval, and wounding techniques. M.S., Summer, 1996.
- Melanie McEwen Growth and development of *Prunus serotina* roots and shoots in response to light intensity and triazole treatments. M.S. Spring, 1996.

Tara Hayes	Assessment of the spread and severity of dogwood anthracnose in native dogwood stands of northeast Alabama using remote sensing techniques. M.S. Spring, 1995.
Muhammad Hatta	Use of <i>Agrobacterium rhizogenes</i> to stimulate root formation in <i>Ziziphus jujuba</i> . M. S. in Fall, 1994.
Rudy Pacumbaba	Relationship between physiological stress and susceptibility of <i>Cornus florida</i> to dogwood anthracnose. M.S. in Summer, 1994.
Denise Conley	Options for horticultural extension. M.S. in Summer, 1994.
Leonardo Alvarez	Changes in endogenous plant hormones in exudate of root systems of peach and maple under root restriction. M. S. Fall, 1993.
Raymond Bosk	Yield comparison of radish and lettuce grown in nutrient solution from separate and shared reservoirs using the nutrient film technique hydroponic system. M. S. Spring, 1993.
Venu Oddiraju	Development of a technique for digitization and image analysis and its verification as a tool for remote measurement of tree roots. M.S. Summer, 1992.
Marybeth Eliasson	In vitro acclimatization of genotypes of <i>Prunus serotina</i> using triazole growth retardant pretreatments. M.S. Summer, 1992.
Wen-hui Zhang	Cultural and growth regulator treatments to enhance cold hardiness of <i>Actinidia</i> species. M. S. Fall, 1989.
Indiren Pillay	Early onset changes in endogenous cytokinins in roots of drought-stressed resistant and susceptible tomato species. M. S. July, 1987.
Arjyendu Nayak	Callus induction and in vitro shoot multiplication of four species of <i>Actinidia</i> . M. S. July, 1987.
John Avery	Propagation of own-rooted peach trees for high-density orchards. M.S. May, 1986.
Patsy Jackson	Optimization of culture conditions for in vitro propagation of kiwifruit. M.S. July, 1984.

TEACHING EXPERIENCE

Taught/developed the following graduate, undergraduate, professional, & community courses:

- Stress Physiology of Crops (SPS 625)
 - Teaching Techniques for Horticulture (SPS 500)
 - Fruit Production (SPS 428)
 - Plant Propagation (SPS 421/521)
 - Scientific Writing (SPS 502)
 - Landscape Plant Materials and their Utilization (SPS 323)
 - Landscape Design and Construction (SPS 422/522)
 - Plant Growth and Development (SPS 561)
 - Tropical Food Crops Production (SPS 423)
 - Undergraduate and Graduate Seminars (SPS 491/591)
 - Commercial Nursery Management (SPS 401)
 - Introductory Plant Science and Laboratory (SPS 101)
 - Tissue Culture Workshop for Nurserymen - Sterilization Techniques
 - Plant Tissue Culture Techniques (SPS 533)
 - Agricultural Leadership (AGB 418/518)
 - Master Gardener Program (yearly from 1981-present)
(Propagation, Fruits and Nuts, and Landscaping sessions)
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MEMBERSHIP IN PROFESSIONAL SOCIETIES

- Society for College and University Planning
 - National Association of HBCU Title III Administrators
 - National Education Association
 - Association for Institutional Research
 - Southern Association for Institutional Research
 - Alabama Association for Institutional Research
 - Plant Growth Regulation Society of America
(2001 Editor, 1998-2000 Associate Editor, and Secretary 1996-1998)
 - American Society for Horticultural Science
(Associate Editor for the Journal - Environmental Stress)
 - Alabama Fruit Growers Association
 - Huntsville Botanical Garden Society
 - American Pomology Society
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AWARDS, HONORS, and ACHIEVEMENTS

- 2005 Researcher of the Month, Alabama A&M University, May 2005.
- 2004 Accepted the Outstanding Planning Documents Award, Southern Association of Institutional Research, on behalf of AAMU
- 2003 Recipient of Distinguished Alumna Award from Purdue University's Horticulture Program
- 2001 Recipient of Certificate of Appreciation from the Alabama A&M University Faculty Senate for Outstanding Service
- 1998 Recipient of the Alabama A&M University Outstanding Teacher Award
- 1998 Abbott Award for Outstanding Research Paper published in the Plant Growth Regulation Society Quarterly in 1997
- 1998 School of Agriculture Outstanding Teacher Award
- 1998 Member of American MENSA
- 1993 School of Agriculture Outstanding Researcher Award
- 1991 School of Agriculture Outstanding Teacher Award
- 1990 Alabama Fruit Growers Association Agricultural Researcher Award
- 1990 Recognition for 10 years of educational service, Master Gardeners
- 1987 Alabama Fruit Growers Association Conference Speaker Award
- 1976 David Ross Competitive Research Fellowship, Purdue University
- 1975 Gamma Sigma Delta, Honor Society of Agriculture
- 1975 Graduate Student Council for Agriculture
- 1973 GRE, Verbal 660, Quantitative 620, Biology Advanced Test 780
- 1972 Boca Raton Garden Club Scholarship
- 1970 Phi Theta Kappa, National Junior College Honor Society
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ADVANCED TRAINING AND WORKSHOPS COMPLETED

- 2006 Completed training for Examiner of the Alabama Quality Award program based on Baldrige Quality Awards, May 2-4, 2006
- 2006 Completed Grants 101 Workshop, Auburn University, Auburn, Alabama
- 1995-1996 Completed Phase I of the ESCOP/ACOP Leadership Training Workshop in September 16-22, 1995, Indianapolis, IN, and later phase II activities on teaching rewards.
- 1994 Completed a JMP SAS Training Workshop, March 9-10, 1994, Cary, NC.
- 1994 Completed a two day intensive training workshop on Confocal Scanning Laser Microscopy, June 16-17, Normal, AL.
- 1994 Completed a three day Intensive Workshop on Histotechniques held at Alabama

- A&M University, Normal, AL, January 10-12.
- 1992 Completed 10 week training session on Scanning Electron Microscopy Techniques, Alabama A&M University, Normal, AL.
- 1983-1984 Completed 1 1/2 years French language training for faculty.
- 1986 Passed Intensive French Language Training, achieved FSI Level 2.
- 1983 Completed Landscape Design Short Course I, University of Georgia, Athens, GA.
- 1983-1984 Completed Landscape Design Short Courses II, III, and IV, Ohio State University, Wooster, OH.
- 1984 Certified by the State of Alabama for Landscape Design and Setting of Landscape Plants.
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PUBLIC SERVICE

- 1990-2005 Horticultural Judge, Lincoln County Fair, Fayetteville, TN.
- 2000-2001 Assisted with landscape designs for the Meadow Hills Initiative Project and with Habitat for Humanity houses.
- 2000 Lecturer for Boy Scout Troop 429, Fayetteville, TN on Communication Skills and Education/Careers.
- 1985-2001 Advisor and/or Board member, Huntsville Botanical Garden.
Also served as:
Member of the Committee for Investigation of Space/High Tech Theme,
Member of the proposal review team for the Center for Biospheric, Education and Research (CBER) funding committee,
Member, 'Expert Help Team' for the Annual Botanical Garden Plant Sale.
- 1983-1989 Board member of the Huntsville Youth Orchestra.
- 1984-1987 Board member of the Huntsville Tree Commission.
- 1983-1988 Lecture Chairman, Huntsville Lawn & Garden Show.
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PROCEEDINGS AND ABSTRACTS/PRESENTATIONS (Institutional Planning)

14. Beyl, Caula A. 2006. Fine Tuning Assessment Using Baldrige Criteria. Roundtable presented at the Southern Association for Institutional Researchers Conference, October 14-17, 2006 in Arlington, VA.
13. Beyl, Caula A. 2006. Enhancing Institutional Effectiveness with Title III Support. National Association of HBCU Title III Administrators conference, June 27-30, 2006 in Atlanta, GA. *Invited presentation.*
12. Beyl, Caula A., Sherrell Price, Gete Bekele, and Jennifer Trimble. 2006. Unraveling the Riddle of Retention. 2nd Annual Conference – Retention is Everyone's Business: Empowering Students through the Faculty, Staff, and Community, April 7, 2006, Huntsville, AL. *Invited presentation.*
11. Beyl, Caula A. 2005. Documenting QEP Progress: Development of an On-Line Reporting System. SAIR, October 22-25, 2005, Charleston, SC.
10. Bekele, Gete, Sherrell Price, Jennifer Trimble, and Caula Beyl. 2005. LASSI: Measuring the Impact of Learning and Study Style on Students' College Performance. SAIR, October 22-25, 2005, Charleston, SC.
9. Beyl, Caula A., Shirley Houzer, and Virginia Caples. 2005 A Holistic Approach to SACS Reaffirmation and Institutional Enhancement, SACS December, 2005, Atlanta, GA.
8. Beyl, Caula. A. 2005. Preparing for SACS from a Graduate School Perspective. Alabama Council of Graduate Deans, April 21-22, 2005, Gulf Shores, AL. *Invited presentation.*

7. Sharma, Subodh and Caula A. Beyl. 2005. QMS: A Query Management System for an IR Office. Alabama Association for Institutional Research, April 2005, Fairhope, AL.
6. Beyl, Caula A. 2005. Where the Rubber Meets the Road: Letting Assessment Drive Retention. Conference on Changing the Campus Culture to Embrace Retention Initiatives, April 8, 2005, Huntsville, AL. *Invited presentation.*
5. Beyl, Caula A. 2005. Embracing the Challenges of Accreditation: Planning and Implementing. 79th Annual NACDRAO Conference, March 9-12, 2005, Huntsville, AL. *Invited presentation.*
4. Beyl, Caula A. 2004. Student Learning Outcomes: Benefit or Burden? Southern Education Foundation, December 8, 2004, Atlanta, GA. *Invited presentation.*
3. Beyl, Caula A., Virginia Caples, Shirley Houzer. 2004. Evolution of a Quality Enhancement Plan: Engaging the Whole University. SACS, December 4-7, 2004, Atlanta, GA.
2. Beyl, Caula. 2004. New Planning and Budgeting System. SAIR, October 16-19, 2004, Biloxi, MS.
1. Beyl, Caula. 2003. Outcomes Assessment – Agricultural Extension Programs. Agricultural Extension Update Conference, March 10, 2003, Huntsville, AL. *Invited presentation.*

REFEREED PUBLICATIONS (Plant Science Research)

34. Ayala-Silva, Tomas, Caula A. Beyl and Greg Dortch. 2006. *Agrobacterium rhizogenes* Mediated-transformation of *Asimina triloba* L. Cuttings. Pakistan Journal of Biology (in press).
33. Ayala-Silva, Tomas, Caula A. Beyl and Robert R. Heath. 2006. Classification of Hyperspectral Data and Neural Networks to Differentiate Between Typical Leaves of Wheat and Those Deficient in Nitrogen, Phosphorus, Potassium, and Calcium. Pakistan Journal of Biology (in press).
32. Nyochembeng, L. M., Caula A. Beyl, and R. P. Pacumbaba. 2005. Factors essential for optimizing solid waste degradation and recycling using edible white rot fungi. SAE Transactions 2005-01-3085.
31. Ayala-Silva, T. and Caula Beyl. 2004. Changes in Spectral Reflectance of Wheat Leaves in Response to Specific Macronutrient Deficiency. Advances in Space Research 35 (2):305-317. Cited by ScienceDirect for Top 25 Hottest Articles.
30. Sabota, Cathy, Caula Beyl, and Gokul Ghale. 2004. Does Amendment of Soak Solution with Sucrose and Urea Increase Production of Shiitake Mushrooms on Sawdust Blocks? HortTechnology 14 (3):393-397..
29. Nyochembeng, L. M., Pacumbaba, R. P., and Beyl, Caula A. 2002. Calcium enhanced zoospore production of *Pythium myriotylum* in vitro. Jour. Phytophathol. 150:396-398.
28. Malik, R. K., T. H. Green, G. F. Brown, C. A. Beyl, K. R. Sistani, and D. Mays. 2001. Biomass Production of Short-Rotation Bioenergy Hardwood Plantations Affected by Cover Crops. Biomass and Bioenergy 21:22-33.
27. Pacumbaba, R. P. Caula A. Beyl, and R. O. Pacumbaba, Jr. 1999. Shiitake Mycelial Leachate Suppresses Growth of Some Bacterial Species and Symptoms of Bacterial Wilt of Tomato and Lima Bean in Vitro. Plant Disease 83(1):20-23.
26. Gosukonda, R. M., Caula Beyl, Allan Zipf, and Govind C. Sharma. 1998. In Vitro Callus Initiation and Multiple Shoot Production of *Populus deltoides*. Plant Growth Regulation Quarterly 26(3):79-93.
25. Zhang, Wenhui and Caula A. Beyl. 1997. Paclobutrazol Affects Cold Hardiness and Abscisic Acid Concentrations in Stems of Six *Actinidia* Species. Plant Growth Regulation Society of America Quarterly 25 (1):8-22.

24. Hatta, Muhammad, Caula A. Beyl, Stephen Garton, and Alex Diner. 1996. Induction of roots on jujube softwood cuttings using *Agrobacterium rhizogenes*. Journal of Horticultural Science 71(6):881-886.
23. Odiraju, Venu G., Caula A. Beyl, and Philip A. Barker. 1995. Root Growth of Seedlings and Microcuttings of Western Black Cherry Grown in Compacted Soil. HortScience 31(3):453-457.
22. Beyl, Caula, Lianjun Zhang, and Gokul Ghale. 1995. Characteristics of Hardwood Cuttings Influence Rooting of *Actinidia arguta* (Siebold & Zucc.) Planch. HortScience 30:973--976.
21. Sabota, Cathy, Caula A. Beyl, and G. Ghale. 1995. Development of an Integrated Location and Information Database for Teaching Plant Identification and Use. HortTechnology 5:178-182.
20. Odiraju, V. G., C. A. Beyl, P. A. Barker, and G. W. Stutte. 1994. Container Size Alters Root Growth of Three Phenotypes of Western Black Cherry Measured Using Image Analysis. HortScience 29:910-913.
19. Eliasson, M. K., C. A. Beyl, and P. A. Barker. 1994. In Vitro Responses and Acclimatization of *Prunus serotina* with Paclobutrazol. Journal of Plant Growth Regulation 13:137-142.
18. Tafazoli, E. and C. A. Beyl. 1993. Changes in Endogenous Abscisic Acid and Cold Hardiness in *Actinidia* Treated with Triazole Growth Retardants. Journal of Plant Growth Regulation 12:79-83.
17. Tafazoli, E. and C. A. Beyl. 1992. Foliarly Applied Abscisic Acid and its Effect on Cold Hardiness and Carbohydrates in *Actinidia arguta*. Iran Agricultural Research 11:77-88.
16. Beyl, C. A. 1992. Rachel Carson, Silent Spring, and the Environmental Movement. HortTechnology 2(2):272-275.
15. Avery, J. D. and C. A. Beyl. 1991. Propagation of Peach Cuttings Using Foamcubes. HortScience 26:1152-4.
14. Sapra, V. T., E. Savage, A. O. Anaele, and C. A. Beyl. 1991. Varietal Differences of Wheat and Triticale to Water Stress. J. Agronomy & Crop Science 167:23-28.
13. Pillay, I. and C. Beyl. 1990. Early Responses of Resistant and Susceptible Tomato Plants Subjected to Drought Stress. Journal of Plant Growth Regulation 9:213-219.
12. Kpoghomou, B. K., V. T. Sapra, and C. A. Beyl. 1990. Sensitivity to Drought Stress of Three Soybean Cultivars During Different Growth Stages. J. Agronomy & Crop Science 164:104-109.
11. Beyl, C. 1990. Low Cost, Computer-Aided Landscape Design Using the MacIntosh Computer. HortScience 25(3):353-356.
10. Kpoghomou, B. K., V. T. Sapra, and C. A. Beyl. 1987. Screening Soybean Cultivars for Drought Tolerance in Germination and Seedling Stages. J. Agronomy & Crop Science 164:153-159.
9. Wang, Wen-Chung, C. A. Beyl, and G. C. Sharma. 1988. Effect of culture media and auxin source on Ward wheat cell suspension cultures containing clumps and single cells. Cereal Res. Communication 16:1-2
8. Sabota, C., C. Beyl, and J. Biedermann. 1987. Acceleration of Sweet Corn Germination at Low Temperatures with Terra-Sorb or Water Presoaks. HortScience 22:431-434.
7. Avery, J. D. and C. A. Beyl. 1986. Caliper of semihardwood cutting influences rooting of *Actinidia deliciosa*. The Plant Propagator 32:5-7.
6. Wang, W. C., C. Beyl, and G. C. Sharma. 1983. A comparison of Ward wheat suspension culture containing clumps and single cells. Plant Science Letters 31:147-156.

5. Beyl, C. A. and G. C. Sharma. 1983. Picloram induced somatic embryogenesis in *Gasteria* and *Haworthia*. *Plant Cell, Tissue, and Organ Culture* 2:123-132.
4. Beyl, C. A. and C. A. Mitchell. 1983. Alteration of growth, exudation rate, and endogenous hormone profiles in mechanically-dwarfed sunflower. *Jour. Amer. Soc. Hort. Science* 108:257-262.
3. Beyl, C. A. and C. A. Mitchell. 1982. *In vitro* protection of IAA during thin layer chromatography. *HortScience* 17:187-8.
2. Beyl, C. A. and C. A. Mitchell. 1977. Characterization of mechanical stress dwarfing in chrysanthemum. *J. Amer. Soc. Hort. Sci.* 102:591-94.
1. Beyl, C. A. and C. A. Mitchell. 1977. Automated mechanical stress application for height control of greenhouse chrysanthemum. *HortScience* 12:575-77.

BOOKS AND BOOK CHAPTERS

- Beyl, Caula A. 2006 Chapters: Introduction; Juvenility, Leaf and Root Cuttings; Scarification of Seeds; Media and Tissue Culture. IN: *Plant Propagation Concepts and Laboratory Exercises*. J. E. Preece, C. A. Beyl, and R. N. Trigiano (eds.), CRC Press, Boca Raton, FL.
- Beyl, Caula A. 2004. Getting Started with Tissue Culture – Media, Preparation, Sterile Technique, and Laboratory Equipment, p. 19-38. In: R. N. Trigiano and D. J. Gray (eds.). *Plant Development and Biotechnology*, 1st edition, CRC Press, Boca Raton, FL.
- Beyl, Caula A. 2000. Getting Started with Tissue Culture – Media, Preparation, Sterile Technique, and Laboratory Equipment, p. 21-38. In: R. N. Trigiano and D. J. Gray (eds.). *Plant Tissue Culture Concepts and Laboratory Exercises*. 2nd edition, CRC Press, Boca Raton, FL.

PROCEEDINGS AND ABSTRACTS/PRESENTATIONS (Plant Science)

97. Britton, Rhonda, Rudy O. Pacumbaba, Jr., Caula Beyl, and Cathy Sabota. 2006. Multiple seeding ratios of turf-type fescue with Kentucky and hybrid bluegrass for the elimination of sod net in turf production. Poster presentation at 51st Annual Southern Nursery Association Research Conference, August 9-10, 2006.
96. Alsanabani, Anwar. 2006. Agrobacterium rhizogenes-mediated transformation of *Ziziphus spina-christi*: Establishment of hairy roots for potential metabolite production. 1st Mediterranean Congress on Biotechnology, March 25-29, 2006, Yasmine-Hammamet, Tunisia.
95. Nyochembeng, L. M., Caula A. Beyl, and R. P. Pacumbaba. 2005. Edible fungal growth and fruiting on composted containerized inedible crop biomass. ASHS Annual Conference, Las Vegas, NV, July, 2005. *Abstract HortScience* 40(4):1006.
94. Nyochembeng, L. M., Caula A. Beyl, and R. P. Pacumbaba. 2005. Use of edible white rot fungi to enhance cellulose, hemicellulose, and lignin degradation of crop residues. Oral presentation, CFESH, Tuskegee University, March 30, 2005.
93. Nyochembeng, L. M. and Caula A. Beyl. 2005. Using edible fungi to break down inedible crop residues on longterm space missions. Oral presentation. University and Industry Consortium (UIC) Spring Conference, Huntsville, AL, April 13-14.
92. Nyochembeng, L.M. and C.A. Beyl. 2004. Growth response of edible fungi on processed crop biomass and food waste amended rice straw. Oral Presentation. NASA ALS/NSCORT Summer Symposium, Purdue University.
91. Manohar-Maharaj, K., L.M. Nyochembeng., R.P. Pacumbaba, and C.A. Beyl. 2004. Growth of Shiitake and oyster mushrooms on processed wheat straw modified with

- varying concentrations of urea. Oral Presentation. NASA ALS/NSCORT Summer Symposium, Purdue University.
90. Nyochembeng, L.M. and C.A Beyl. 2004. Enhancing edible white rot fungal degradation and recycling of solid wastes by incorporation of urea and STAR effluent. Poster Presentation. NASA ALS/NSCORT EAC Symposium, Howard University.
 89. Nyochembeng, L.M. and Caula A. Beyl. 2004. Growth response of edible fungi on processed crop biomass and sludge-amended rice straw. Oral Presentation. NASA ALS/NSCORT Summer Research Symposium, Purdue University, August 2-3.
 88. Nyochembeng, L.M., R.P. Pacumbaba., C.A. Beyl, and G.C. Sharma. 2003. Growth of edible white rot fungal strains on culture media amended with various N sources or food waste. Poster Presentation. NASA ALS/NSCORT External Advisory Committee Meeting, Purdue University, November 19-20, 2003
 87. Pacumbaba, R. P., Caula A. Beyl, and R. O. Pacumbaba, Jr. 2003 Pentathiadecane isolated and identified from the mycelial leachate of shiitake mushroom is a good alternative choice for the control of bacterial wilt diseases. *Phytopathology* 93:S68.
 86. Ayala-Silva, T. and C. A. Beyl. 2002 Use of Neural Networks to Discriminate Between Control Leaves of Wheat and Those Deficient in Nitrogen, Phosphorus, Potassium, and Calcium using Spectral Data. World Automation Conference 2002, Orlando, FL, June 9-13, 2002.
 85. Nyochembeng, L. M., Caula A. Beyl, R. P. Pacumbaba. 2002. Differential expression of peroxidase activity in roots and leaves of cocoyam plants inoculated with *Pythium myriotylum*. *PGRSA Quarterly* 28:43.
 84. Pacumbaba, R. P., Beyl, Caula A., Pacumbaba, R. O., Jr., and Wang, Y. 2002. Leachates from the mycelia of maitake, oyster, and reishi mushrooms inhibit growth of bacteria in the laboratory. American Phytopathological Society Southern Division 79th Annual Meeting, February 2-6, 2002, Orlando, Florida, (abstract). *Phytopathology* 92:S151.
 83. Greg Dortch, Caula Beyl, and Tomas Ayala-Silva. 2001. Induction of Roots on Seedling Pawpaw Using *Agrobacterium rhizogenes*. Second International Paw Paw Conference, September 21-22, Frankfort, Kentucky.
 82. Cecil Pounders, R. K. Malik, Caula Beyl and Charles Gilliam. 2001. Ground Cover Production Using Low Nutrient Water. In: Proceedings of the 2001 Southern Nurserymen's Association Research Conference, Forty-sixth Annual Report 2001, pp. 600-601.
 81. Malik, R. K., T. H. Green, G. F. Brown, C. A. Beyl, D. A. Mays and V. R. Tolbert. 2000. Long term effects of cover crops on sweetgum biomass production. Oral presentation, ASA-CSSA-SSSA Annual Meeting, November 5-9, 2000 in Minneapolis, Minnesota.
 80. Malik, R. K., T. H. Green, G. F. Brown, and C. A. Beyl. 2000. Can cover crops be used in short-rotation, intensive-culture hardwood plantations to control erosion? Poster presented at the Association of Research Directors 12th Biennial Research Symposium, April 19-21, 2000 in Washington D.C.
 79. Caula A. Beyl, Rudulfo O. Pacumbaba, Jr., Christopher Cooper, and Tomas Ayala-Silva. 2000. Discrimination of Species and Age of Leaf by Spectroreflectivity and Neural Network Analysis. Proceedings of the World Automation Conference (WAC 2000), June, Maui, Hawaii.
 78. Pacumbaba, R. P., C. A. Beyl, and R. O. Pacumbaba, Jr. 2000. Activity of mycelial leachate of four exotic mushrooms on bacterial pathogens. *ARD*, 12th Biennial Research Symposium, p. 88.
 77. Pacumbaba, R. P., C. A. Beyl, and R. O. Pacumbaba, Jr. 2000. Natural products of edible exotic mushrooms suppress growth of bacteria in the laboratory. *Phytopathology* 90:S58.

76. Pacumbaba, R. P., C. A. Beyl, and R. O. Pacumbaba, Jr. 2000. Natural products of edible exotic mushrooms suppress growth of bacteria in the laboratory. 19th Annual Symposium of the Philippine-American Academy of Science and Engineering. July 2000. Makati, Philippines.
75. Nyochembeng, L. M., C. A. Beyl, and R. P. Pacumbaba. 2000. Differential expression of peroxidase activity in roots and leaves of cocoyam plants inoculated with *Pythium myriotylum*. PGRSA Quarterly 28:43.
74. Malik, R. K., T. H. Green, G. F. Brown, C. A. Beyl, D. Mays, and V. R. Tolbert. 2000. Long Term Effects of Cover Crops on Sweetgum Biomass Production.
73. Pacumbaba, R. P., C. A. Beyl, and R. O. Pacumbaba, Jr. 1999. Reaction of Bacterial Pathogens and Bacterial Wilts of Tomato and Lima Bean to Mycelial Leachate of Shiitake Mushroom. Biological and Cultural Tests for Control of Plant Diseases 14:110.
72. Pacumbaba, R. P., Caula A. Beyl, and R. O. Pacumbaba, Jr. 1999. Activity of shiitake mycelial leachate against several bacterial pathogens. Proceedings of the Second National Shiitake Mushroom Symposium. October 5-8, 1997, Huntsville, Alabama.
71. Pacumbaba, R. P., Caula A. Beyl, and R. O. Pacumbaba, Jr. 1999. Shiitake mycelial leachate suppresses growth of some bacterial species and symptoms of bacterial wilt of tomato and lima beans in vitro. Plant Disease 83:20-23.
70. Gosukonda, Ramana, Caula Beyl, Alan Zipf, and Govind Sharma. 1998. In Vitro Shoot Regeneration and Viability of Calli as a Function of Repeated Subculture in *Populus deltoides* Clone ST 75. Oral presentation at the 25th Annual Meeting of the Plant Growth Regulation Society of America, July 7-10, 1998, Chicago, IL. Recipient of First Place Student Oral Presentation Award.
69. Gay, T. and C. Beyl. 1998. MacRhizo analysis of adventitious root systems of Ginkgo induced using IBA and/or *Agrobacterium rhizogenes*. The Second Annual NASA University Research Centers Technical Conference, February 22-29, 1998. Huntsville, AL.
68. Hayes, Tara, Caula Beyl, and Nolan Hess. 1998. Use of the Shadow Detection Method to Assess the Health of Dogwood Trees in a Landscape Setting. Proceedings of the USDA Forest Service Seventh Biennial Remote Sensing Applications Conference, Nassau Bay, TX, April 6-9, 1998.
67. Gosukonda, Ramana, Caula Beyl, Alan Zipf, and Govind Sharma. 1997. Callus Initiation and Shoot Production of *Populus deltoides*. Poster presented at the 24th Annual Meeting of the Plant Growth Regulation Society of America, August 8-12, 1997, Atlanta, GA. Recipient of First Place Student Poster Award.
66. Cooper, Christopher and Caula Beyl. 1997. Cultivar Specificity, Timing, and Wounding Affect *Agrobacterium rhizogenes* Inoculation Success of Jujube. Oral presentation at the 24th Annual Meeting of the Plant Growth Regulation Society of America, August 8-12, 1997, Atlanta, GA.
65. Pacumbaba Jr., Rudulfo and Caula Beyl. 1997. Influence of Environment on Incidence and Severity of Dogwood Anthracnose. Oral presented at the 24th Annual Meeting of the Plant Growth Regulation Society of America, August 8-12, 1997, Atlanta, GA.
64. Beyl, Caula. 1996. Seminar Courses – Content to satisfy the needs of future horticultural professionals. HortScience 31:649 (poster presented at the 93rd Annual Meeting of the American Society for Horticultural Science, October 6-10, 1996, Lexington, KY).
63. Pacumbaba, R. O. and C. A. Beyl. 1996. Mortality of first-year plantings of selected Asian pears in northern Alabama. HortScience 31:700 (poster presented at the 93rd Annual Meeting of the American Society for Horticultural Science, October 6-10, 1996, Lexington, KY).

62. Ghale, G., V. T. Sapra, C. A. Beyl, and C. B. Chawan. 1996. Chemical and physical evaluation of tofu from vegetable soybean cultivars. HortScience 31:701 (abstract from oral presentation at the 93rd Annual Meeting of the American Society for Horticultural Science, October 6-10, 1996, Lexington, KY).
61. Cooper, C. and C. A. Beyl. 1996. Cultivar specificity of jujube using *Agrobacterium rhizogenes*. HortScience 31:701 (abstract from oral presentation at the 93rd Annual Meeting of the American Society for Horticultural Science, October 6-10, 1996, Lexington, KY).
60. Pope, T. and C. A. Beyl. 1996. Evaluation of eight species for suitability as seasonal cut foliage. HortScience 31:699 (poster presented at the 93rd Annual Meeting of the American Society for Horticultural Science, October 6-10, 1996, Lexington, KY).
59. Hatta, Muhammad, Caula A. Beyl, and Stephen Garton 1995. In Vitro Formation of Derooted Jujube Seedlings Induced by *Agrobacterium rhizogenes*. Poster presented at the 92nd Annual Meeting of the American Society for Horticultural Science, July 30-August 2, 1994, Montreal, Canada.
58. Hatta, Muhammad, Caula A. Beyl, and Stephen Garton. 1995. Induction of Roots on Jujube Softwood Cuttings Using *Agrobacterium rhizogenes*. Poster presented at the 92nd Annual Meeting of the American Society for Horticultural Science, July 30-August 2, 1994, Montreal, Canada.
57. Hayes, Tara H. and Caula A. Beyl. 1995. Remote Sensing Techniques Coupled with Leaf Spectroscopy to Evaluate the Severity of Dogwood Anthracnose. Poster presented at the 92nd Annual Meeting of the American Society for Horticultural Science, July 30-August 2, 1994, Montreal, Canada.
56. Pacumbaba, Rodulfo O. and Caula A. Beyl. 1995. CD-Rom Image Analysis Used in Determining Disease Severity in Dogwoods Under Physiological Stress. Poster presented at the 92nd Annual Meeting of the American Society for Horticultural Science, July 30-August 2, 1994, Montreal, Canada.
55. Sabota, Catherine M., Kenneth W. Creel, and Caula A. Beyl. 1995. Scoring and Girdling Pretreatment of Sweetgum, Chinkapin Oak, and Hackberry Trees for Shiitake Mushroom Production. Poster presented at the 92nd Annual Meeting of the American Society for Horticultural Science, July 30-August 2, 1994, Montreal, Canada.
54. Pope, Torin O. and Caula A. Beyl. 1995. *Agrobacterium rhizogenes* Influences In Vitro Morphogenesis in Stem Segments of Woody Plants. Poster presented at the 92nd Annual Meeting of the American Society for Horticultural Science, July 30-August 2, 1994, Montreal, Canada.
53. Beyl, Caula A. 1995. *Agrobacterium rhizogenes* - A Potential New Tool for Stimulation of Root Formation in Cuttings. Proceedings and invited presentation at the Forums for the Nursery Industry thru Tennessee State University (Propagation), McMinnville, TN, June 7, 1995.
52. Hatta, M. and Caula A. Beyl. 1994. *Agrobacterium rhizogenes* used to induce rooting in jujube. Poster presented at the 15th Annual Meeting of the Alabama Fruit Growers, Gulf Shores, AL, November, 1994.
51. Pacumbaba, Rodulfo and C. A. Beyl. 1994. Relationship between physiological stress and susceptibility of *Cornus florida*. Eighth Regional Dogwood Anthracnose Conference, October 21-22, Crossnore, North Carolina.
50. Hayes, Tara and C. A. Beyl. 1994. The Use of Remote Sensing Techniques Coupled with Leaf Spectroscopy as a Means to Evaluate the Severity of Dogwood Anthracnose. Eighth Regional Dogwood Anthracnose Conference, October 21-22, Crossnore, North Carolina.

49. Hayes, Tara and Caula Beyl. 1994. Dogwood Anthracnose: Multispectral and Multitemporal Remote Sensing Assessment. South-Wide Forest Disease Workshop, Asheville, NC, June.
48. Alvarez, Leonardo R. and Caula A. Beyl. 1994. Water and Hormonal Involvement in Growth and Development of Peach Seedlings Under Variable Amounts of Root Restriction. Poster presented at the 91st meeting of the American Society for Horticultural Science, Corvallis, Oregon, August 7-11.
47. Beyl, Caula A., C. Sabota, and G. Ghale. 1994. Development of an Integrated Location and Information Database for Teaching Campus Plant Materials. Poster presented at the 91st meeting of the American Society for Horticultural Science, Corvallis, Oregon, August 7-11.
46. Caula A. Beyl and Gokul Ghale. 1993. Does Hardwood Cutting and Number of Buds Affect Rooting Success of *Actinidia arguta*? Poster presented at 90th Annual Meeting of the American Society of Horticultural Science, Nashville, TN, July 24-29.
45. Leonardo R. Alvarez and Caula A. Beyl. 1993. Morphological Effects of Variable Levels of Root Restriction on 'Loring' and 'Redhaven' Peaches in Different Environments. Poster presented at the 90th Annual Meeting of the American Society of Horticultural Science, Nashville, TN, July 24-29.
44. Caula A. Beyl and Kenneth W. Creel. 1993. Fruit Production Potential of Several *Actinidia* Species under North Alabama Conditions. Poster presented at the 90th Annual Meeting of the American Society of Horticultural Science, Nashville, TN, July 24-29.
43. Caula A. Beyl and Kenneth W. Creel. 1993. Optimizing Chance for Success with Asian Pears. Proceedings of the 14th Annual Meeting of the Alabama Fruit and Vegetable Growers Association, Huntsville, AL, November 10-12, 1993.
42. Venu G. Oddiraju and Caula A. Beyl. 1993. Root Growth of Seedlings and Microcuttings of *Prunus serotina* var. *virens* as a Function of Compaction. Abstract presented at the 90th Annual Meeting of the American Society of Horticultural Science, Nashville, TN, July 24-29.
41. Venu G. Oddiraju and Caula A. Beyl. 1993. Comparison of Roots of Three Micropropagated Clones of *Prunus serotina* var. *virens* Growth in Two Sizes of Containers Using Image Analysis. Abstract presented at the 90th Annual Meeting of the American Society of Horticultural Science, Nashville, TN, July 24-29.
40. Eliasson, Marybeth K. and Caula A. Beyl. 1993. In Vitro Rooting and Acclimatization of *Prunus serotina* using Paclobutrazol. Poster presented at the 90th Annual Meeting of the American Society of Horticultural Science, Nashville, TN, July 24-29.
39. Hayes, T. and C. Beyl. 1993. Multispectral/Multitemporal Remote Sensing Techniques to Evaluate the Severity of Dogwood Anthracnose in the Native Stands of Northeast Alabama. Seventh Regional Dogwood Workshop, Knoxville, TN, May 5-7.
38. Pacumbaba, R. O. and C. Beyl. 1993. Growth Characteristics of *Discula destructiva* sp. Nov. on Different Media and Carbohydrate Sources. Seventh Regional Dogwood Workshop, Knoxville, TN, May 5-7.
37. Eliasson, Marybeth K. and Caula A. Beyl. 1993. Triazoles in the Rooting Medium Affect Rooting and Extent of Root Development in *Prunus serotina*. Adventitious Rooting Conference, April, 1993, Houston, TX (abstract).
36. Beyl, C. A. 1993. Asian Pears - Juicy Exotics from the Orient. Fine Gardening Magazine, December, p. 44-46.
35. Pacumbaba, R. O. and C. A. Beyl. 1993. Growth Characteristics of *Discula destructiva* Redlin sp. Nov. on different media and carbohydrate sources. Ninetieth Annual Meeting

- of the Southern Association of Agricultural Scientists, Tulsa, OK, January 30-February 3, (abstract).
34. Beyl, C. 1992. Research at Alabama A&M University: How Cold Hardy are the 'Cold Hardy Kiwi'. *Kiwifruit Enthusiasts Journal* 6:54-56.
 33. Beyl, C. 1992. Challenges to Successful Asian Pear Production in the Southeast. Proceedings of the 13th Annual Meeting of the Alabama Fruit and Vegetable Growers Association, Mobile, AL, November 11-13, 1992.
 32. Tafazoli, E. and C. A. Beyl. 1992. Triazole growth regulator's effects on freezing resistance and carbohydrates of *Actinidia arguta*. Proceedings of the 19th Annual Meeting of the Plant Growth Regulator Society of America, San Francisco, CA, Jul 17-22, p. 243-253.
 31. Caylor, A. W., W. A. Dozier, Jr., C. A. Beyl, M. H. Hollingsworth, J. A. Pitts, K. C. Short, and N. R. McDaniel. 1992. Performance of Asian Pears in North, Central, and South Alabama. Proceedings of the 12th Annual Meeting and Shortcourse of the Alabama Fruit Grower's Association.
 30. Beyl, C. A. and P. Barker. 1991. Student Involvement in Studies on Root Structure of Trees for Urban Forestry Purposes. Symposium on Minority Participation in Forestry and Forestry-Related Sciences, November 6-9, Huntsville, AL, (poster).
 29. Eliasson, M. and C. A. Beyl. 1991. In Vitro Rooting and Acclimatization of *Prunus serotina* with Paclobutrazol. NSF Plant Science Workshop on Manipulation of Plant Responses to Environmental Stress, Sept 16-17, 1991, Tuskegee, AL, (abstract).
 28. Oddiraju, V. and C. A. Beyl. 1991. Estimation of Root Length Using a Simple Image Analyzer. NSF Plant Science Workshop on Manipulation of Plant Responses to Environmental Stress, September 16-17, 1991, Tuskegee, AL, (abstract).
 27. Eliasson, M. and C. A. Beyl. 1991. Thidiazuron: In Vitro Shoot Proliferation of *Prunus serotina*. Proceedings of the 18th Annual Meeting of the Plant Growth Regulator Society of America, July 28-August 1, 1991, Boston, MA.
 26. Beyl, C. A. 1991. How cold hardy are the cold hardy kiwi? Proceedings of the 11th Annual Alabama Fruit Grower's Association.
 25. Beyl, C. A. 1991. Time of Bloom - Another threat to successful Asian pear production in the southeast? Proceedings of the 11th Annual Alabama Fruit Grower's Association.
 24. Brooks, C. A., G. C. Sharma, and C. A. Beyl. 1990. Evaluation of Growing Media and Radish and Carrot Cultivars for Use in a Semi-Automated System of Salad Crop Production in a Microgravity Environment. ASGSB Annual Meeting, November 2-5, 1990, Louisville, KY. (abstract).
 23. Zhang, Wenhui and Caula Beyl. 1989. Cold Hardiness of Six Species of *Actinidia* in Response to Paclobutrazol Treatment, Eighth Biennial Research Symposium, October 7-11, 1989, Washington, DC., (abstract).
 22. Brooks, C. and C. Beyl. 1988. Development of Tissue Culture Techniques for Production of Fresh Fruit in Space, Symposium on Biotechnology, November 17-18, 1988, Huntsville, AL (abstract).
 21. Beyl, C. A. 1988. Fire blight incidence in Asian Pears: 1988 season. Proceedings of the 1988 Southeastern Professional Fruit Workers Conference, October 19-20, Athens, Georgia.
 20. Beyl, C. A. 1988. Fire blight susceptibility in a young Asian pear planting. New Crops Symposium, October 23-26, Indianapolis, IN, (abstract).
 19. Beyl, C. A. 1988. Fire Blight Update for 1988 in a Young Asian Pear Planting. Proceedings of the 9th Annual Meeting and Shortcourse of the Alabama Fruit Grower's Association, November 9-11, Auburn, AL.

18. Brooks, C. and C. Beyl. 1987. In Vitro Fruit Production for Use in a Microgravity Environment. Seventh Biennial Research Symposium, Washington, D. C., October 4-7.
17. Nayak, A. K. and C. A. Beyl. 1986. Callus induction and in vitro shoot multiplication of four species of *Actinidia*. 47th Annual Meeting of Southern Region of American Society for Horticultural Science, Nashville, TN, Feb 1-3.
16. Savage, E. O., V. T. Sapra, and C. A. Beyl. 1986. Screening of Wheat and Triticale Cultivars for Moisture Stress. Southern Branch Meeting of American Society of Agronomy, Nashville, TN, Feb 1-4.
15. Kpoghomou, G., V. T. Sapra, and C. A. Beyl. 1986. The effect of drought stress at different growth stages on agronomic performance of soybean. Annual Meeting of the American Society of Agronomy, New Orleans, LA, Nov 30-Dec 4.
14. Beyl, C. A. 1986. Update on Asian Pear Evaluation in Alabama. Proceedings of the 7th Annual Meeting and Shortcourse of the Alabama Fruit Grower's Association.
13. Kpoghomou, G., V. T. Sapra, and C. Beyl. 1986. Screening soybean cultivars for stress tolerance at different growth stages. Southern Branch of ASA, Orlando, FL.
12. Avery, J. D. and C. A. Beyl. 1985. Rootcubes for own-rooted peach propagation. 82nd Annual Meeting of the American Society for Horticultural Science, Blacksburg, VA.
11. Biedermann, J. and C. A. Beyl. 1985. *In vitro* performance of kiwi cultivars Chico-male and Hayward-female on two media. 82nd Annual Meeting of the American Society for Horticultural Science, Blacksburg, VA.
10. Sabota, C., C. Beyl, and J. Biedermann. 1985. Terra-sorb GB accelerated germination of sweet corn at low temperatures. 82nd Annual Meeting of the American Society for Horticultural Science, Blacksburg, VA.
9. Beyl, C. A. 1985. Asian Pears --A New Crop for the Southeast? Proceedings of the 6th Annual Meeting and Shortcourse of the Alabama Fruit Grower's Association, November 6-8.
8. Beyl, C. A. 1984. The Search for Hardiness in Kiwifruit. *Actinidia Enthusiast Newsletter* 1:4-5.
7. Jackson, P. R., J. Ford-Logan, and C. A. Beyl. 1984. In vitro root, shoot, and callus formation in cultures of *Actinidia chinensis*. 44th Annual Meeting Southern Association of Horticultural Science, Nashville, TN.
6. Sharma, G. C., W. C. Wang, and C. A. Beyl. 1982. Effects of salt and auxin source on Ward wheat cell suspension. Beltsville Symposium VII. Genetic Engineering: Applications to Agriculture, Beltsville, MD.
5. Sharma, G. C., W. C. Wang, and C. A. Beyl. 1982. Effects of salt and auxin source on Ward wheat cell suspension. Fourth Biennial Research Symposium, Orlando, FL.
4. Beyl, C. A., W. C. Wang, G. C. Sharma, and C. Pounders. 1981. Tissue culture of *Gasteria* and *Haworthia*. 78th Annual Meeting of the Amer. Soc. Hort. Science, Atlanta, GA.
3. Wang, W. C., C. A. Beyl, and G. C. Sharma. 1981. Characterization of wheat suspension culture. 57th Annual Meeting of the Amer. Soc. of Plant Physiol. Laval University, Quebec City, Canada.
2. Beyl, C. A. and C. A. Mitchell. 1979. Levels of endogenous growth-regulating substances in tissues of mechanically-dwarfed sunflower plants. 55th Annual Meeting of the American Society of Plant Physiologists. The Ohio State University, Columbus, OH.
1. Beyl, C. A. and C. A. Mitchell. 1976. Automated mechanical stress effects on growth and development of chrysanthemum. 73rd Annual Meeting of the American Society for Horticultural Science

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