

UNIVERSITY OF GEORGIA CENTER FOR SOYBEAN IMPROVEMENT

Overall mission: The principal mission of the Center for Soybean Improvement (CSI) is to promote collaboration among scientists and facilitate interdisciplinary research that will result in the development of superior yielding, drought tolerant, and multiple pest resistant cultivars and improved management systems. Research also addresses the development of cultivars with unique combinations of value-added traits, as well as new technology to improve the efficiency of cultivar development. Thrusts include the development of crop, weed, fertility, disease, nematode, and insect management systems. These systems, along with effective technology transfer and implementation, help enhance Georgia and Southeastern agriculture by providing the maximum profit from soybean production, reducing the risk of environmental damage from soybean production, and improving the product safety and quality of feed and food products produced from soybean.

Strategy to accomplish the CSI mission: The CSI exists to enhance cooperation among UGA soybean scientists, our soybean producer and industry clientele, soybean scientists from other universities, and industry soybean scientists. Through this cooperation and coordination, CSI members achieve a greater understanding of clientele needs, develop more innovative and focused research and technology transfer programs, and obtain greater extramural funding for their programs. The major strategy used by CSI to facilitate the development of multi-disciplinary research and educational approaches to address these needs is to bring the required scientific expertise together, provide an informal forum for team development, and keep the team informed of the latest research findings and funding opportunities.

Another noteworthy result of CSI cooperation is the development of the Dimilin/boron treatment. The initial research showing the benefit of a late-season boron application to soybean was achieved by CSI member Gascho. At the same time, CSI member McPherson found that a late-season application of the insecticide Dimilin would provide protection against development of destructive populations of velvetbean caterpillar. Gascho and McPherson in cooperation with previous CSI members, Hudson and Woodruff, developed a system of a one-time application for Dimilin/boron. Hudson, Woodruff, and Raymer were successful in achieving acceptance of this system by a high percentage of Georgia soybean growers, and the Dimilin/boron treatment is recommended in surrounding states with similar soil types. In regard to technology transfer, a number of comments were made by our evaluators:

- Mr. James Lee Adams, “Not only has CSI encouraged the interaction of the staff of the University of Georgia, but by bringing together researchers from other universities, from commercial companies, and farmers themselves this interaction has spread far from the confines of the University campus. This contribution, too, is immeasurable.”
- Dr. David Weaver (Professor at Auburn University), “This is the only meeting I attend where producers, research scientists, and extension workers actually meet together to exchange problems, ideas, and solutions. If the CSI did nothing else, this alone would make the organization worthwhile.”

· Dr. Tommy Carter, Jr. (USDA-ARS Raleigh, NC), “The programs are well attended by a range of agriculturalists from the top farmer to the scientists to the administrator. This mix of people provides a rare forum where the impact of science on agriculture is the main focus.”

The CSI mission remains basically unchanged from 1992. The current strategy to accomplish the CSI mission has shifted from an internal (UGA) and regional approach to a more regional and national approach (see attached summary of 1995 internal CSI review and diagram of our strategy that emerged from the 1998 internal CSI review). This strategy shift is a trend in many areas of fundamental and applied research and was clearly accelerated by the annual CSI Workshop and by funding from USB. The availability of USB funding and the ability of the CSI Workshop to bring together leading scientists from around the nation has clearly facilitated CSI members’ participation in a significant number of multi-university, multi-agency collaborative projects. I would characterize the present CSI status as healthy, but the strategy to accomplish our mission is still in a state of flux and in need of some minor refinement. My assessment is supported by Dr. Grover Shannon’s statements - “The Center for Soybean Improvement (CSI) is admired enormously worldwide as a center of excellence for soybean research. Success has been achieved because of the coordination, unity and teamwork of your scientists to work for the common good of all. The CSI research team is a well-oiled machine. The spirit of cooperation among scientists within the CSI as well as collaboration with other institutions has made CSI the model for others to follow.”