

2005 Wheat & Feed Grain Project Summary

TITLE: Continued Support of Long-term, Field Research

PROJECT LEADERS: C. C. Mitchell, D.P. Delaney, K.S. Balkcom

The “Old Rotation” (c. 1896) and the “Cullars Rotation” (c. 1911) continued the trend of higher and more consistent yields of all crops that began around 1997 when the experiments were changed from conventional tillage to high-residue conservation tillage with subsoiling. In spite of a dry year in most of Alabama, the crops on these two historical experiments at Auburn produced record non-irrigated cotton yields (2050 lb. lint per acre) and very high yields of other crops: soybean = 66 bu/acre irrigated; corn = 164 bu/acre irrigated; wheat = 67 bu/acre. Since irrigation began in 2003, there has been an average corn yield increase of 25% from irrigation. There has been no cotton yield increase due to irrigation. Irrigation increased average soybean yields by 24%. The Cullars Rotation continues to get much more public exposure because of its location adjacent to the Jules Collins Smith Museum of Fine Art in Auburn. A new historical marker was dedicated for the Cullars Rotation in a ceremony held on 3 November 2006.