Application of biochar to soils is hypothesized to increase crop yield. Crop productivity impacts of biochar application in Southeastern cropping systems consisting of peanut, corn, and cotton produced under varying rates of irrigation have not been addressed. The objective of this research was to incorporate biochar at two different rates into a long-term irrigation and cropping systems study to compare yield and quality response of peanut, cotton, and corn. Biochar was incorporated into soil once at the beginning of the 4-yr project at rates of 22.4 and 44.8 Mg ha$^{-1}$. Peanut, corn, and cotton were produced under three sprinkler irrigation levels (100, 66, and 33%), surface drip irrigation (100%), and a non-irrigated control. Crop input management followed best management practices and irrigation was scheduled by Irrigator Pro for Peanuts, Corn, and Cotton for sprinkler irrigation plots the 100% level with the 66% and 33% rates applied at the same timings. Significant year, irrigation, and year x irrigation effects for corn, cotton, and peanut yield resulted (P<0.001). However no differences resulted for the biochar interactions for corn (p=0.930) or cotton (p=0.678). Peanut showed a significant response to biochar comparing the 44.8 Mg ha$^{-1}$ rate to the untreated control in non-irrigated production at the P=0.05 level and in the 33% irrigated treatment at the P=0.10 level. No negative yield effect resulted with biochar rates which opens opportunities for biochar application Southeastern cropping systems for purposes related to carbon sequestration without compromising producers and related agricultural sectors.