

Georgia Cover Crop (Code 340) Standard

APPENDIX V – Requirements for Cover Crops Purposes

Table 1. General requirements for planting cover crops may be used to identify and compare purposes. Not to be used to identify all requirements in the standard. Document specific requirements in the jobsheet. December 31, 2015

Purpose	Requirements	Other Information
Reduce erosion	Determine surface and/or canopy cover and low soil erosion in RUSLE2 software	Document critical seasonal results compared to benchmark. Multiple species mixes may not be in the database.
Promote soil health and organic matter	Substantial biomass required and a mixture of species suggested, but not required	Use actual dry biomass lbs./ac. to calculate SCI = or > 0
Scavenge nutrients, especially nitrogen (N) ¹	No nitrogen (N) added is true scavenging. Biomass produced depends upon N status and the species of cover	Large amounts of biomass are not likely unless a species other than a legume follows a cash crop that received a high rate of N. Determine the amount of N provided to the cash crop by the cover crop using UGA’s Nitrogen Cover Crop Availability Calculator http://aesl.ces.uga.edu/mineralization/ . Use the results as the basis for adjusting the N applied to the subsequent crop as shown in results of the analysis

¹ Species for this purpose include rye, sorghum-sudangrass, forage radish, barley, oats, rapeseed, black oat and arrowleaf, berseem and crimson clovers

Purpose	Requirements	Other Information
Control weeds, especially when a fall cereal cover is terminated and matted	Large biomass required. Frequently, cereal rye is the species of choice in conservation tillage systems	UGA specialists recommend a biomass mat of 6,500-10,000 lbs./ac. to control weeds in the subsequent cash crop. Follow other UGA recommendations for weed control, especially if the desired biomass isn't obtained. Producers should consider implementing IPM (Code 590).
Conserve moisture when terminated and matted	Substantial biomass required	No requirement in the national standard and data not available to determine actual amount of cover needed. However, the purpose should be achieved if weeds are controlled with cover. Maintain minimum of 2,000 lbs./ac or 60% of field surface through the year when a cover crop is used to manage residue (Code 329) in a conservation tillage system. A practical goal is to produce a 3 inch biomass mat and maintain surface cover until canopy closure in row crops or until most vegetables are harvested.
Minimize compaction	Reduced compaction is not the same issue as biomass production. May be compatible with scavenging nutrients and soil health/organic matter, but not with other purposes above	See Deep Tillage (Code 324) for using a penetrometer or sturdy wire to examine field. Plant forage radish, rapeseed or turnips or implement mechanical subsoil procedure.