

# LAND APPLICATION OF CO-MIXED BIOMASS AND COAL FLY ASH ON SOIL PH, SOIL STRENGTH AND SOIL MOISTURE RETENTION, PRELIMINARY RESULTS

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**Abstract.** Coal combustion remains the major source of energy production in the state of Georgia even though Georgia exports wood pellets for co-firing in European power plants. There is an opportunity for power generation companies in the state of Georgia to utilize more biomass for power production. Currently, 43% of coal fly ash is being re-used whereas the majority of ash produced from combustion is treated and stored in landfills. The objectives of this study are to incubate a Tifton soil with varying co-mixed fly ash ratios (wood:coal) for 7, 14 and 60 days and measure the effect on soil pH, soil strength and soil moisture retention. Results from such measurements could encourage increased biomass combustion by providing power generation companies with an alternative for ash disposal and providing agriculturalists with a product that can be used to neutralize soil acidity and enhance physical soil properties.