Progress Report for Maryland Soybean Board project “Fertilizing cover crops- do y have to put some in to get more out?”

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The main goal of this project is to assess the value of applying nitrogen to cover crops, especially on sandy soils, early in fall to kick-start their growth and ability to take up nitrogen from deep in the soil. As such, the activity in the field on this year's project won't start until September when plots will be established with), 15 and 30 lb N/acre applied as a solution to young cover crop stands. During this summer we have been planning for the fall research and are planning to collaborate with farmers on the Eastern Shore to test fertilizer application to cover crops in their fields. We also finished analyzing samples collected in Fall of 2021 from the first year of the study using the microplots and liquid fertilizer application. All of the dry matter analysis has been done and the samples have been analyzed by LECO for total nitrogen and carbon.

So far, it does not appear that the 2O pounds per acre of nitrogen applied in the fall to the cover made much difference in the N concentration on the cover crop tissues collected in late November, the dry matter produced, or the total N accumulated by the cover crop. The difference cover crop (and weed) tissues did prove t have distinctly different N contents and C/N ratios.