

Hay Study Results:

Objective

Evaluate the impact that Agritec International's general hay production recommendations have on soil profile characteristics, hay nutrient profile, and biomass produced

Environmental conditions:

After the application, the experimental site was classified as experiencing abnormally dry conditions with extremely high temperatures.



10.20.10 +; 4 gallons per acre

10.20.10 + was applied at a rate of 4 gallons per acre. A decrease was observed in nitrogen/lbs. per acre. This decrease was not a significant change; however, we should investigate this. In both 10.20.10+ treatments, nitrogen/lbs. per acre decreased. Calcium increased while the potassium concentration decreased. Soil pH remained similar across the 30-day experimental period (slight decrease). None of the changes observed with this treatment with respect to soil samples were significant. More details will be discussed in the hay nutrient profile and biomass production section.

Collection Time	N/ Lbs. Per Acre	Calcium	Potassium	Soil pH
Initial	73	634	102	5.7
Day 30 Samples	38	574	94	5.6

Nitromaxx +; 4 Gallons Per acre

Thirty days after application, nitrogen/ lbs per acre increased from 21.5 to 25.475. Soil pH remained at 5.8. Soil calcium concentration decreased from 784.5 to 747; potassium concentration tended to increase in all samples from 58.5 to 87.5.

Collection Time	N/ Lbs. Per Acre	Calcium	Potassium	Soil pH
Initial	22	785	59	5.8
Day 30 Samples	26	747	88	5.8

Nitromaxx +; 6 gallons per acre

Thirty days post application, **a significant increase** in pounds of nitrogen was observed; 10 to 34.25 pounds per acre. CEC, calcium, and organic matter concentration values increased for all replications; however, these increases were not significant but should be noted. Potassium concentration **tended** to increase for all replications.

Collection Time	N/ Lbs. Per Acre	Calcium	Potassium	Soil pH
Initial	10	753	51	5.9
Day 30 Samples	34	939	67	6.1

10.20.10 +; 6 gallons per acre

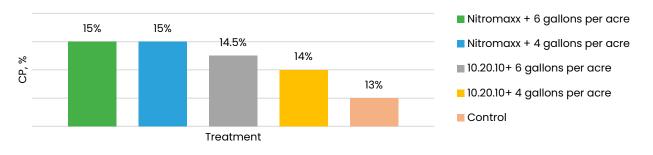
Thirty days post-application, CEC values increased significantly across the replications from 3.300 to 3.675. Nitrogen/ Lbs. per acre tended to decrease across the replications from 56.25 lbs. per acre to 16.75 lbs. per acre. Calcium concentration and soil pH tended to increase over the 30-day period. This treatment contained the most statistically robust results.

Collection Time	N/ Lbs. Per Acre	Calcium	Potassium	Soil pH	C.E.C.
Initial	56	3	301	5.1	3.3
Day 30 Samples	17	7	411	5.5	3.7

Nutrient Profile

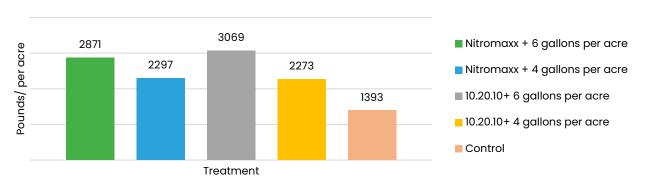
Crude Protein

Crude Protein values of hay harvested from field treated with AgriTec International general recommendations



Biomass produced

Bio Mass Produced from Field Treated with AgriTec International General Recommendations



Produce more hay utilizing AgriTec products at a lower cost. The 10-20-10+ (6 gallons per acre) treatment produced 3.5, 5x4 rolls per acre in less-than-ideal conditions.