Crabgrass – Weed or Forage?

Crabgrass is a summer annual that is gaining traction as another forage in producer's toolbox. It can be a high, quality forage if managed correctly, responds well to nitrogen, and can be utilized in both grazing and haying situations. Studies conducted at the KSRE Columbus Experiment Station have given insight on how to manage this forage.

For the trials at Columbus this were three different fertility treatments and two different management treatments. Below are the treatments used in the trial.

Treatment 1 – control (free growth no nitrogen)

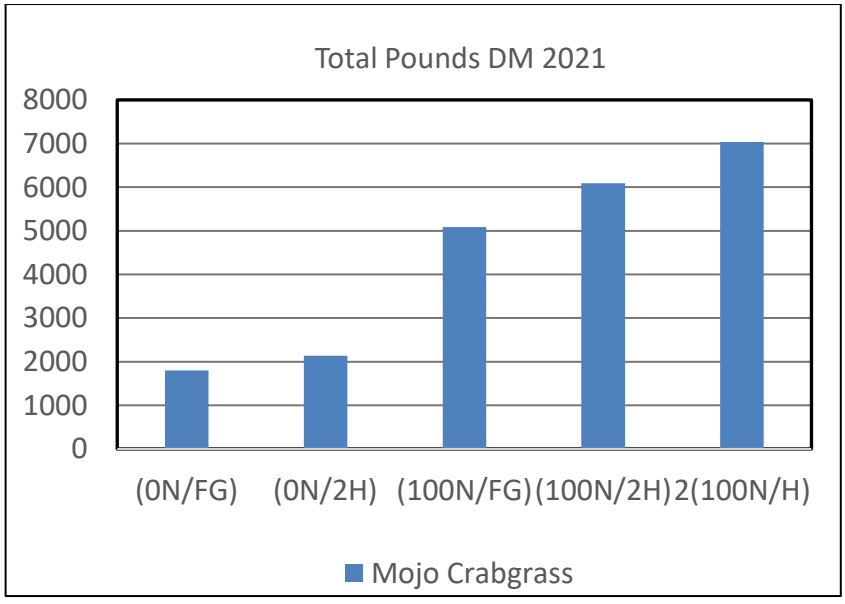
Treatment 2 –100 units of N applied at the beginning of the season only (free growth).

Treatment 3 – 100 units of N applied at the beginning of the season only. Sampling and mow every 30 – 45 days.

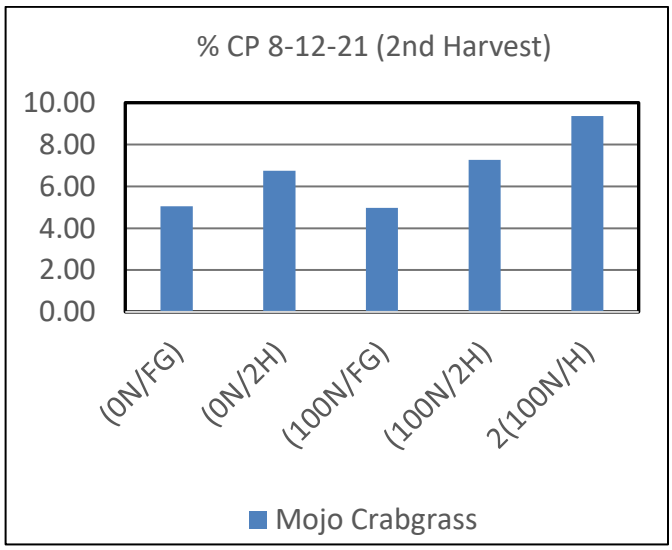
Treatment 4 – 100 units of N at the beginning of the season. Sampling and mow every 30 – 45 days. Apply an additional 100 units of N after every harvest.

Harvest dates were : July 7, 2021 and August 12, 2021.

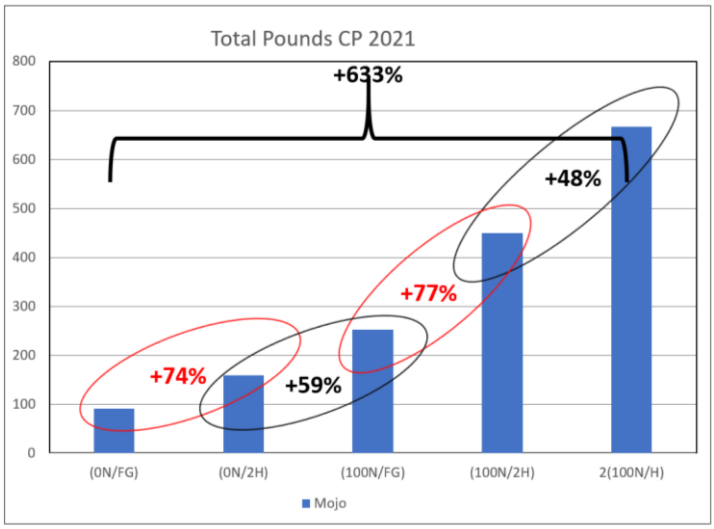
The first observation is that crabgrass responded well to nitrogen. The response in 2021 was well documented in the different treatments. The treatments with no nitrogen produced around a ton of forage while the treatments receiving 100 units or more of nitrogen produced two and half to three and a half tons of forage.



The interesting fact this study provided is what happens to the plant when it is harvested. When the plant was harvested, it returned the plant back to a vegetative state making the plant less fibrous and more tender and nutritious. In two treatments where nitrogen was added at the beginning of the growing season, one was allowed to grow without being harvested the other was harvested. The treatment with free growth (FG), as the plant reached maturity the protein value of the plant plummeted to the point, it had nearly the same protein value of the control. Conversely, the treatment that received no nitrogen, but was harvested earlier in the season, had roughly a 2% higher crude protein value than the control and the free growth treatment with nitrogen, showing that once our warm season forages reach maturity we need to harvest the forage to reset the plant and increase the nutritional value of the plant.



Looking at total pounds of protein produced through August 12, the effects of nitrogen and management are clearly seen. As shown in the graph below, adding nitrogen increases protein production, but combine it with forage management (i.e. harvest), total pounds of protein produced per acre increased drastically. More protein produced, results in higher animal performance and increased weight gains.



Crabgrass has several applications. It can be used as a cover when renovating cool season grasses. Can be used for erosion control especially since it grows in below par soils. Crabgrass can be added to wheat for summer grazing or haying or used as a single use forage for grazing or haying. Additionally, since crabgrass primarily grows May thru September, once it is established, wheat, oats, rye, or cool season grasses can be drilled into the field during the fall to extend the grazing season or establish a pasture that has both warm and cool season forages.

Crabgrass does have a few disadvantages. Weed control can be difficult if foxtail or barnyard grass establish themselves. It does not dry down quickly when used for hay and must start from seed every year, so how a person manages the pasture in the fall can effect plant population the following year.

For more information about crabgrass trials or using crabgrass in your operation, please contact the Cherokee County Extension Office at 620-429-3849.