Redmond Minerals Replicated Corn Silage Trial

For the past 60 years, **thousands** of customers and **millions** of animals have used Redmond Agriculture's program and never looked back. Switching to Redmond is a small shift that makes a **huge difference**.

First Year Trial Design

AGRES of Wisconsin, LLC

This trial was set up to determine the effect of Redmond Salt, Redmond Conditioner, and Redmond SR 65 on corn silage compared to the standard N-P-K program. Humates were also included to determine their influence on Redmond SR 65.

Production Results

All treatments received manure at 11.5 tons/acre. All treatments were done in 4 replicates

YEAR 1 CORN SILAGE

TREATMENT	TDN	RFV	STARCH	YIELD
1. Manure Only	72.2	173	33	19.6
2. 100 lb Redmond Salt + 81-9-19	71.8	161	32.4	23.2
3. 3. 200 lb Redmond Conditioner + 81-9-19	71.1	152	29.2	21.9
4. 300 lb SR 65 + 81-9-19	73.5	180	36.7	22.6
5. 81-9-19	70.2	143	29.1	23.8
6. 300 lb SR 65 + 51# N	75.8	220	44.7	22.3
7. 300 lb SR 65 + 51# N + 10# Humates	72.4	167	35.8	22.2

Second Year Trial Design

This treatment was designed to measure the effects of Redmond treatments without any other fertilizer or manure against the control program of regular fertilizer as determined by the soil test.

YEAR 2 CORN SILAGE

TREATMENT	TDN	STARCH	YIELD
Control (150-0-140)	73.5	34.3	20.5
100 lb Redmond SR 65	71.4	30.6	20.1
300 lb Redmond SR 65	71.0	31.4	22.1
100 lb Redmond SR 35	72.9	38.4	20.6
300 lb Redmond SR 35	72.9	35.8	21.3
½ rate Control + 50 lb SR 65	71.5	28.0	21.3
½ rate Control + 50 lb SR 35	70.9	28.4	21.2
100 lb SR 65 + 100 lb CaNO3	72.9	33.4	21.3
100 lb SR 65 + 50 lb CaNO3	71.9	33.3	21.1

Soil Tests were taken prior to any Redmond treatment on year one, and again at the conclusion of the growing season of year two. Results in the following table show increases in the amount of organic matter, cation exchange capacity, mineralizable nitrogen, and carbon biomass.

Soil sample results showed improvements in Mineralizable Nitrogen and Biomass Carbon on areas treated with Redmond products.

CORN SILAGE	MINERALIZABLE N *(lbs/Ac/Year)*	BIOMASS CARBON *(ppm)*
Redmond Salt	20.8	830
Control (NPK)	12.1	484

Conclusion

Results from the first year show that manure help produce higher quality corn silage. It also showed that the combination of Redmond Salt and Redmond Conditioner (SR blends) produce higher quality feed than either component alone, and the SR blend producer higher quality feed than manure alone. A boost with a reduced rate of nitrogen and even some phosphorus and potassium seem to help. Though the control program had the highest yield, it was below all other treatments for feed quality.

In the results of year two, it is important to note that no nitrogen was applied with the Redmond treatments, which is not normal when growing corn silage. In spite of that, the Redmond treatments still had higher starch content and yield than the control. Control did have the highest TDN values. Reducing the Redmond treatments down to 50 lbs/acre appears to be too low to have the desired effect. After two consecutive years of Redmond treatments on the soil, it appears that the feed quality of the corn silage is clearly higher, and yield is at least as good or better.