

BEYOND 21ST CENTURY AGRICULTURE

5 Top Factors to Producing a Top Crop in 2021



Farmers, Do you Protect your Crops Performance ?

There are 5 Top Factors to Producing a Top Crop in 2021.

1. Soil Condition are Planting
2. Seed Placement
3. Seed Quality
4. Right Product Right Acre
5. Post Planting Management

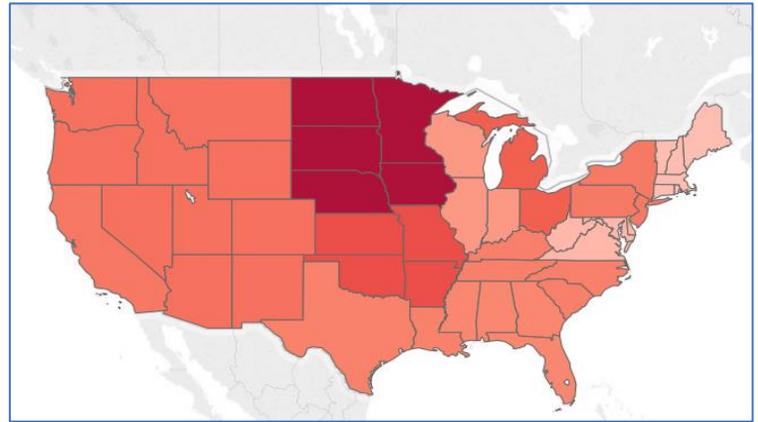
Pan Ag would love to sit down with each of you to discuss how improvement in each of these areas can lead to a Top YIELD in 2021

100% of your crop is determined at planting and stars with planning.



Copper Deficiency in Cattle in North Dakota ?

Mineral Deficiency in Common Cows



Jeff Hall believes most cow/calf operations have animals that are mineral deficient—especially when it comes to copper. It's a conclusion he's reached after thousands of blood and liver biopsy tests in herds across the country. And, it's convinced him there's a big potential upside in herd productivity that can be tied to better supplement management.

Hall, professor of veterinary services and toxicology at Utah State University, calls mineral deficiency at commercial cattle operations "very common," adding in some parts of the country, it's not uncommon to see 70% or more of animals tested deficient in copper. Selenium deficiency is also widespread, he adds. Hall challenges producers to know how much supplement their cows are eating. "If you're not using a weatherized product, weigh back what you throw away, so you know how much is being wasted," he encourages.

Water Supply

There are a lot of ways to waste mineral. No. 1 is not having a good supply of clean water for the herd. Cattle won't eat mineral. And, uneaten mineral is well a waste.

Taste Test

After water availability, lack of palatability in a mineral is probably the next biggest reason for waste. Sometimes, it takes trial and error to see which products are best consumed, as it can vary by herd and location. Minerals can have a metallic, bitter taste. Depending on soil profile and forage nutrition, what's tasty to cattle in one region won't be somewhere else.

Cattle *really*, only crave ***phosphorus and salt***, but in cases where soils are high in salt, cows won't go after those high-sodium products. And, in some areas low in phosphorus, cattle will eat a lot of mineral—to the point of overconsumption. It's key to work with a nutritionist who knows the region to get the best mix,"