



April 6, 2011

## Zinc

# AGRONOMY TOPIC OF THE WEEK

This week's agronomy topic of the week will be about Zinc and the different types of zinc that are out there. There are many types of zinc on the market and not all of them are created equal. This article will cover the quality of zinc and the different chelates available.

We will start out with Zinc 10% which is the most common zinc that we put with starter fertilizer. The Zinc 10% that Central Valley uses is called Zinc 10% Citri-Che. This Zinc uses a full EDTA chelate and also a Citric Chelate. Chelates are important for fertilizers because they make the Zinc available to the plant so it doesn't get lost in the soil, an unchelated zinc would just disappear in the soil and not be available for plant uptake and the purpose for zinc in the starter is for uptake in the plant. So, without a chelate Zinc is essentially lost to the soil. Now the Zinc 10% that we use has 2 chelates in it. An EDTA chelate is the strongest chelate that anyone has. It makes the Zinc fully available to the plant and will not get lost in the soil. The second chelate that is in our Zinc 10% is a citric chelate. This chelate is not as strong as an EDTA chelate but provides enough chelation to make it available to the plant. Zinc 10% Citri-Che which we use is 40% EDTA chelated and 60% Citric Chelation. It is fully chelated and available to the plant. This is a safe option for uses with polyphosphate fertilizers such as 10-34-0.

The other product that we sell with liquid fertilizers is Zinc 9% which is a fully EDTA chelated Zinc. This is the strongest chelated Zinc on the market. This product does cost more and does a great job. However since we don't necessarily need a fully EDTA chelated zinc with polyphosphate fertilizers we use Zinc 10%. We use Zinc 9% with Orthophosphate fertilizers such as Nachurs or Nutra Flo fertilizers.

We also have dry Zinc which is Zinc Sulfate 35%. We use this obviously with dry starter fertilizer.

There are many Zinc products on the market and none of them are created equal. Lots of Zinc is partially chelated and not fully chelated. The chelation of these products is key. Without Chelation there will be product lost to the soil and not available to the plant. If you use Zinc you should find out which Zinc product you are using and make sure that it is chelated. Even products that are partially chelated are not always the best. Let's say that Zinc is 30% chelated and the other 70% is not, this poses a problem because 30% will be available but the rest will not be available to the plant. If you do not know the chelation of the zinc you are using or which kind you are using you should contact your Central Valley Agronomist and we would be happy to find out for you and tell you what product you have.

Zinc is a great product for us and does its job when helping with seedling vigor and plant health so let's make sure we're getting the right product out there on every acre.