# Non-toxic Bioherbicide Supports Regenerative Farming

Benefits of using Contact Organics Weed Terminator 20 & Boost

#### Is there added/residual value to Weed Terminator 20 & Boost?

The answer is a bit lengthy but it will help you understand the bigger picture of how the Contact Organics Weed Terminator 20 (CO WT 20) & Contact Organics Boost (CO Boost) affects the soil.

My first involvement with Contact Organics was in October 2015. My first question about the Weed Terminator products, was: how do the products affect the soil?

The initial answer from the then appointed person that I was speaking with was quite simply we don't know yet. This was a proper answer to the question as the gentleman was an accountant and had no experience with soil related issues.

Thanks to my having a working relationship with Dr. Robert Kremer who is a professor of Soil Microbiology at the School of Natural Resources, Division of Plant Sciences, University of Missouri & was also at the time working as a USDA ARS (Ag Research Scientist), Contact Organics was able to have Dr. Kremer conduct a 2 year study (2017 & 2018) on how Weed Terminator (WT) 20 & Boost affects the microorganisms in the soil. The summary of this information which will be published in the scientific literature in the future, it can be found at this link

The quick summary of this study showed, the CO WT 20 & CO Boost reduced the population of disease causing organisms in the soil while increasing the population of beneficial organisms compared to the most widely used nonselective herbicide in the world.

So, is there more to this story?

In the summer of 2020, a trial was conducted on my property using CO WT 20 & CO Boost, to manage the growth directly around trees. 3 applications of CO WT 20 & CO Boost mix (application rate: 1-1-20, 1-1-20 & 1-1-30) provided total control of the growth around the trees for the summer.



I am NOT a fan of bare soil therefore my concern was what would happen in the spring of 2021.

After receiving .40" of rain earthworm holes were observed adjacent to the grass all the way around the tree as is demonstrated by the closeup picture on the right.



Earthworm activity is universally recognized as a sign of "HEALTHY SOIL"

#### How valuable is earthworm activity in our soils?

Earthworms also known as Lumbricus Terrestis eat 1/3 of their body weight in residue every day of the year that they are active. Benefits to residue that an earthworm consumes and digests:

5 times higher in N

7 times higher in P

11 times higher in K

Is pH neutral

Kills opportunistic organisms passing through its digestive system

### What is the value of a high earthworm population?

2000 earthworms = 125 lbs. of castings per year

25 worms/cu ft. = 1,000,000 worms/acre = 62,500 lbs. castings/acre/year

15 worms/cu ft. = 645,000 worms/acre = 41,400 lbs. castings/acre/year

Healthy populations move 20 tons of soil/acre/year

## Is this an added value to the money invested in CO WT 20 & CO Boost when used in a regenerative farming environment?

What about the desired species in the field?

CO WT 20 & CO Boost are nonselective but unless you apply the spray mixture thoroughly enough to terminate the perennial species in a field you will not adversely affect to the desired forage(s) as is demonstrated in this picture taken 7 days after application where tropical soda apple (an extremely invasive and problematic species) was spot sprayed in a field in SW Georgia.



Evidence shows, the weed is dead and desired forages growing to provide nutrition to the livestock.

A bioherbicide like CO WT 20 used with CO Boost is higher priced to apply than a typical synthetic herbicide but what is the true cost for a cheaper herbicide and what is the benefit of CO WT 20 & CO Boost?

CO WT 20 & CO Boost is more cost effective than hand weeding in most cases, without the unwanted disturbance and subsequent harm to the soil. CO WT 20 & CO Boost also holds a price & performance advantage over other nontoxic herbicide products on the market.

Healthy Soil, Healthy Plants, Healthy Animals, Healthy People!



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