

KOOTENAY & BOUNDARY FARM ADVISORS (KBFA)

Diggin' Deeper into Soil Health 2018

September 11, Beaverdell

Event Overview

Nicole Master of Integrity Soils gave a one-day workshop on soil health that focused on improving the biological and fungal communities in soil to increase soil resiliency and health. Participants dug soil pits, learned about indicators of soils health and discussed ways to improve their own soils.

Resources

Posted on www.kbfa.ca/events:

- 1. Powerpoint presentation by Nicole Masters
- 2. Lactic Acid Bacteria Recipe
- 3. Soil properties 101
- 4. Reading list for ranchers transitioning to a regenerative land system



Select Key Messages

Soil bacteria and fungi are key components to your soil health system:

- Soil bacteria AND fungi are required for optimum soil function.
- A biologically healthy soil can improve water infiltration, water holding capacity and plant nutrient availability.
- Fungi are often lacking in agricultural systems but are crucial to accessing locked up nutrients such as phosphorus and can alleviate symptoms such as soil compaction.

Biological stimulators can be applied to the soil, compost and foliage to enhance soil biological processes that will result in improved soil health and plant nutrient availability.

- Humic acid can increase soil biological function and is in some products such as Fish hydrolysate (complex array of fatty acids, amino acids, and trace minerals); easy to source products such milk and molasses; and Humate (very old organic matter that is similar to coal and loaded with organic compounds, Humic Acid and Fulvic Acid).
- Other products can stimulate fungal communities such as the Johnson-Su Bioractor that enriches beneficial soil fungi.

Indicators of soil health

- Degrees Brix is a sugar content measurement which is measured with a hand-held instrument. It can be used regularly in the field to guage the nutritional content of your crops.
- Trace elements can make a difference such as boron, gypsum, and salt. Looks for sings of depletion in your crop and for dominant weeds for indicators of nutrient deficiencies.
- Digging soil pits and doing quick on-site assessments can help evaluate soil-health progression over time.



Photos from the field day











Did you implement something that you learned?

Let us know. Email coordinator@kbfa. Call or text 778-771-5851