

Denny Wildman

From: Denny Wildman
Sent: Friday, October 06, 2017 7:06 PM
To: Denny Wildman
Subject: ROOTS, SHOOTS & FRUIT: # 9-A "The Earth ... and WORMS"

No: 9-A October, 2017

[View this email in your browser](#)

▶ **Roots, Shoots, and Fruit**

Agronomic Tips from Denny Wildman



The Earth – and "WORMS"

As agronomists, we often talk about crop yield. It's an indicator of our success and we're glad to learn that across the country, crop yields are trending up.

Have you considered that increased yield is **not about** making the plant produce more – but **more about** preserving more of the yield the plant already has built into its DNA? You may have heard this called "**genetic potential**".

So what can we do to retain more of the plants ability to produce closer to its potential ?

- **Apply more and more fertilizer?** Sorry, this has been tried – and the conclusion is that elements can only go so far.
- **Eliminate adverse weather?** We can wish.

Of the many variables that affect plant performance, we focus on what we can control:

- We develop solid fertility programs based on comprehensive soil testing.
- We coach growers on selecting the best seed and the



Just like a canary in a coal mine is an indicator of air quality, I firmly believe that the presence of worms is a direct indicator of soil that is healthy, biologically active, and provider of a nutrient rich environment for the roots of a plant.

Now we're getting to the base line of plant performance, the **ROOTS**. We talk about root tips, white roots and recently we learned about the sticky stuff (mucilage) forming on the roots. It's here, in the rhizosphere, where the action happens – where nutrient exchange happens. And the healthier this region is the more nutrients are available to the plant.



So what's the indicator of healthy soil that is biologically active? Remember the coal mine canary as an indicator of air quality. By the same token, an increase in **WORMS** indicates an increase in biological activity in the soil. There's a whole lot going on with **WORMS** in the soil. Read more about it here in this very [informative article from Penn State.](#)

So how do we transition the earth to attract more worms. I could talk about the incredible results I've seen in the field the last 2 years from applying **SP-1**, a biological product from Agri-Energy, but we'll get into that in the next issue.

Meanwhile, I'll close out here with a couple questions to get your mind working.

- Why do ponds form in the field where they did not years ago?
- Why do we need to run tile lines in our fields closer and closer?
- What can we recommend to our growers to improve soil structure and reduce soil erosion?
- How can top organic growers that build biological activity in their soils and use lower inputs have crop yields that are comparable to conventional growers?

And one more FACT that sets up the BIG QUESTION !

Cover crops bring value to the farmer but do little to increase biological activity long-term.

BIG QUESTION:

What can be done to increase "and sustain" the increase of biological activity in our soils?



Denny Wildman

330.507.1838

Denny@AdvancedAgEast.com

Copyright © 2017 Advanced AG East, All rights reserved.

Our mailing address is:

Advanced AG East

10161 S.t Route 193

Farmdale, OH 44417

Want to change how you receive these emails?

You can [update your preferences](#) or [unsubscribe from this list](#).