2019 Corn Seed Treatments



Renwood Farms applies seed treatments to corn seed for growers regardless of where the seed was purchased. There are <u>four main treatments</u> available.

1. <u>Invigor-8-Zinc</u> improves seed germination, seedling vigor and root development to provide a <u>uniform</u> and vigorous emergence. **Invigor-8-Zinc** is a combination of nutrients plus a patented plant growth regulator to get corn seedlings off to a powerful start.

Invigor-8-Zinc does all the things expected from a pop-up fertilizer without the handling, salt damage and equipment hassles. As with all pop-up fertilizers, it works best when used with a 2X2 corn starter fertilizer.

Treatment	# Fields	Acres	Yield Bu. /A
Invigor-8-Zinc	37	664	211
None	85	1202	195

The table above shows the yield-monitor results from 664 acres treated with *Invigor-8-Zinc* compared to 1,202 acres without *Invigor-8* in Central VA. *Invigor-8-Zinc* seed treatment increased yields by 16 bu. /acre in 2013. The top picture on the right shows the even corn emergence with *Invigor-8-Zinc* seed treatment.

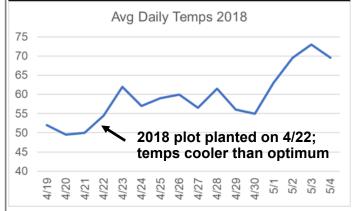
In 2018, test comparisons were established in Caroline Co., VA. Corn was planted on April 22 on a Suffolk soil type. There were two different corn hybrids used.

Brand	Hybrid	Seed Treat- ment	%M	Dry Yield bu./A
Hubner	H4663RC2P	Invigor-8- Zn	22.4	236.9
Hubner	H4663RC2P	none	20.5	230.6
Diff			-1.9	6.3
Hubner	H4563RC2P	Invigor-8- Zn	23.0	240.9
Hubner	H4563RC2P	none	22.2	227.6
Diff			-0.8	13.3

H4744 (113 day) is considered a "non-vigor" hybrid while the H4663 (113 day) is considered a "vigor" hybrid. April 22 was the first day after a cold period. Soils were still chilly (43F air temp that morning) but temperatures were increasing (see graph).







Invigor-8 improved yields between 6.3 and 13.3 bu./acre depending on the hybrid.

In 2013, NC State compared corn seed treated with **Invigor-8-Zinc** (\$10/A) to 3 GPA of 3-18-18 (\$24/A) as an in-furrow pop-up. Both treatments were used with a 2X2 starter fertilizer. Both treatments increased yields between 8 and 9 bu./acre.

The pop-up did perform a little more consistently with a positive response about 60% of the time compared to 50% for the seed treatment. For both treatments, "race-horse" hybrids performed better than "work-horse" hybrids. Corn planted into cool soils responded better than corn planted into warm soils for both treatments.



2019 CORN SEED TREATMENTS

For questions or orders, please contact: Jeff Hula (production and shipping)

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Contact us with your questions!

Ask for the best seed treatments for your farm.

Corn Seed Treatments (continued)

- 2. <u>Poncho 250 to 1250</u>: for growers who seek extra protection from billbugs, wireworms, flea beetles, *green stinkbugs* and seed corn maggots. Protect your corn stand: for every 1,000 plants lost (one plant per 17.5' in 30" row), yields are lowered by 7 bu. /acre.
- 3. <u>Corn Pro Advanced</u> is formulated to give corn seedlings extra disease protection by increasing fungicide rates. It also includes *zinc*. The low rates of fungicides that are applied as a standard treatment on corn seed have not been as effective on coastal plain soils, especially as planting dates start earlier than ever. Zinc applied with the seed is an extremely effective way to provide zinc to corn. In 1972, Virginia Tech (*Agronomy Journal*, Vol. 65: 1973) increased corn yields 53 bu. /acre on a Westmoreland soil by placing zinc directly on the seed. The plots compared as little as .3 lbs./ acre of zinc to broadcasting 24 lbs. /acre of actual zinc. This demonstrates that most corn is not getting enough zinc even with starter and sidedress applications.
- **4.** Poncho 750 /VOTiVO® offers growers the opportunity to add nematode and increased insect protection to their corn crop. According to the "Survey of Nematode Populations and Prevalence in Virginia Corn and Soybean Fields" (Balderson, et. al. 2008), "nematode populations high enough to adversely affect yields and warrant control measures were found in nearly 35% of the corn fields. Another 37% of corn fields were identified with borderline-damaging [nematode] populations."

In 2011, in Essex Co., corn treated with Poncho/Votivo increased corn yields by 11 bu. /acre in a field with a known lance and root knot nematode history. In a King and Queen field, root knot populations have dropped from over 8,000/ 500 cc to less than 1,000 juveniles in three crops treated with Poncho/Votivo.

How to get your corn seed treated: Call Jeff to coordinate delivery of your seed to Renwood Farms. There is a minimum of 1,000 lbs. of seed or 20 units of the same hybrid receiving each





treatment. Treatments can be stacked.

Get the most out of your crops by protecting the yield potential with Renwood Farms' corn seed treatments.

Call us with your field and cropping history so we can provide specific recommendations for your fields.