2012 Soybean Update

Renwood Farms Certified!

Recently, Renwood Farms was certified to be able to offer *Poncho/VOTiVO* seed treatment for corn and soybeans. *Poncho/VOTiVO* offers growers the opportunity to add nematode and insect protection to their corn and soybean crops. Please turn to Page 4 to learn more about *Poncho/VOTiVO* and where it fits in our crop production systems.

Renwood Farms is excited to announce our new seed treater, shown in these photos, is up and running.

This new seed treater enables Renwood Farms to prescribe the exact amount of seed protection materials **for each seed!** Older seed treaters can only apply one rate per 100 lbs. of seed. This means that smaller seed does not get as much treatment as larger seed and in today's world, soybean seed size can range from 2,200 seeds per pound all the way to 6,000 seeds per pound for specialty soybeans. One hundred pounds of soybean seed can range from 220,000 up to 600,000.

Almost all of the new seed treatment chemistry recommends a *specific rate per seed*. Renwood Farms can now complete prescription-rate amounts on *each and every seed*. With today's advanced chemistry, active ingredients are added to seed as low as .0081 milligrams per seed. By having your seed treated with Renwood Farms new seed treater, you are assured of having each and every seed being protected to the fullest measure.

In 2012, Renwood Farms began *treating corn seed* for growers interested in adding Avipel bird repellant, increasing insecticide or fungicides, adding pop-up fertilizers to the seed and/or *Poncho/VOTiVO*.

In soybeans, Renwood Farms <u>now treats all brands</u> of seed for growers in addition to the USG produced, conditioned and sold by Renwood Farms.

For 2012, Renwood Farms is introducing *RenPro Southern*, a new seed treatment especially developed for the lighter southern soils with unique soil diseases. *Poncho/VOTiVO* can be added to this seed treatment for seed that will be planted in nematode infested fields.





Page 2

Selecting Varieties for Disease Defense

There are several diseases of soybeans that impact the Mid-Atlantic-Southeast area. Several can be controlled or at least the damage minimized with fungicides but some disease can only be really stopped with variety resistance. There are four notable disease that variety selection impacts:

- Stem Canker
- Cercospora Leaf Blight and Purple Stain
- Charcoal rot
- Frogeye Leaf Spot

<u>Stem canker</u> can infect soybeans any time from midseason to maturity. Yield losses can be from 25% to 100% in susceptible varieties when environmental conditions are favorable for the disease. *In 2011, there were several fields in VA and NC with stem canker.*

The infection occurs during the early flowering stage. Reddish brown lesions form at the base of the petiole. These lesions enlarge and spread until the stem is girdled and the plant above the canker is damaged. Plants with leaves still attached at maturity is an indicator. At harvest, plants have a poorly set "top-crop" and the stem has a crook-type curling.

When split, infected stems show a chocolate brown pith. Stem canker usually covers large field areas when weather conditions are ideal for infection.

This disease has been found mainly on heavier soil types, in fields along rivers and/or under irrigation (needs moisture). It is usually found on soybeans planted through early June but can occur anytime. Fungicides applied at flowering will minimize the damage but variety resistance is very helpful.

<u>Cercospora Leaf Blight (CLB) and Purple Seed</u>
<u>Stain (CPS)</u> is getting to be a significant problem in bean production. Unlike stem canker, this is clearly *a double-crop soybean disease*. There are two different types of damage even though caused by the same pathogen.

When a variety has "resistance" to Cercospora, it has resistance to the purple seed stain damage but there are *no known varieties that have resistance to the leaf blight stage*.









Selecting Varieties for Disease Defense

According to one Southern pathologist, CLB is more severe on grey pod beans than the tawny (red or brown) pod beans as the tawny pods have thicker pod walls which somehow reduces the impact of this infection.

Infections appear in Sept/Oct. Applications of a fungicide in late Aug. /early Sept. will reduce the impact of the CLB stage but may not last long enough for the CPS stage. This is where selecting a variety with resistance comes in to play.

There is some controversy about using a strobi or triazole fungicide is best for CLB. Our recommendation is to use a mix .

Frogeye Leaf Spot (FLS) will lower yields 20%. It can be controlled with fungicides but resistance to strobi's arose in 2011 in the Mid-South. The other problem with using fungicides is that the timing is off from when we normally would be going over the field so a separate trip is usually required.

Renwood Farms screens every variety before releasing for sale. Varieties pulled in from Mid-West seed companies seem to be most susceptible to FLS.

<u>Charcoal Rot (CR)</u> is associated with sandy, light soils with moisture stress and high heat. There are very few soybean varieties with resistance to CR and they are all fairly new.

One key to stopping CR is to reduce seeding populations. Selecting the latest possible maturity soybean for your area is another key step to reduce damage from CR.

For 2012, Renwood Farms has two MG 4 soybeans with Charcoal Rot resistance: USG 74E88 and USG 74A79R, a RR2 variety.

Summary

Variety selection for disease resistance is a critical component of successful soybean production. Renwood Farms offers 15 USG varieties that have been carefully selected for our market area that offer solutions to soybean production problems. Call us so we can help pick the variety that best fits your farm and fields.









2012 SOYBEAN UPDATE

Renwood Farms Seed

Paul Bodenstine, agronomist: (804) 314-7463

Jeff Hula, Customer Service and Sales: (804) 829-2450

For more information about Renwood Farms Seed, check our web page at: http://renwoodseed.com

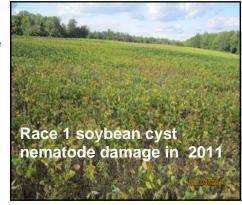
Soybean Nematodes And VOTiVO® Seed Treatment

According to the <u>Survey of Nematode Populations and Prevalence in Virginia Corn and Soybean Fields</u> (Balderson, et. al. 2008), "nematode populations high enough to adversely affect yields and warrant control measures were found in **over 47% of the soybean fields** and in nearly 35% of the corn fields. **Another 24% of the soybean** and 37% of corn fields were identified with borderline-damaging (nematode) populations".

So 71% of the soybean acres in Virginia are losing yields due to nematodes. Chemical options have disappeared. When

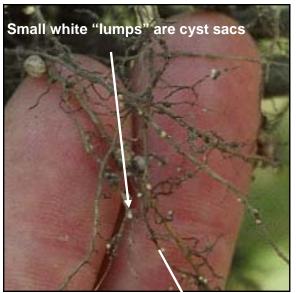
planting Soybean Cyst Nematode resistant beans, we do not know which Race of nematode we are fighting. These are serious yield-limiting problems.

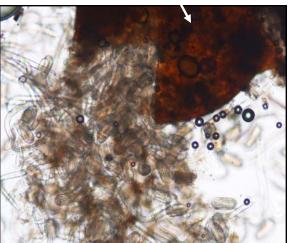
For 2012, Renwood Farms Seed is really excited to offer *Poncho/VOTiVO* as a soybean seed treatment package should you wish to try this in your fields.



Poncho/VOTiVO has a unique mode of action and is not a chemical. It can be ordered with **RenPro** or **RenPro Plus**. For growers who have already their ordered their 2012 seed, Renwood Farms now offers custom seed treating.

For 2012, Renwood Farms is the only commercial processor in Virginia certified to add *Poncho/VOTiVO* to soybean seed. With 2012 soybeans approaching \$14, there has never been a better time to stop yield losses from nematodes.





Female cyst sac opening to release juveniles and eggs