

WHEAT VARIETY NEWS FOR 2021



Including wheat in your crop rotation increases the yields of crops that follow wheat, lowers overall farm fixed costs, provides a winter cover crop to improve soil health, promotes soil microbial activity, recovers leached nutrients, enhances weed control and generates cash flow in July when it is most welcomed.

Contracts for July 2021 soft red winter wheat have been trading over \$5.50/ bu. and Nov. 2021 beans are trading around \$9.00/ bu. This is a terrific opportunity for producers to increase wheat and double-cropped acres.

The past four years have seen weather problems lower crop yields. The impact of these problems can be reduced by following these guidelines for variety selection:

- Growers have to decide now which fields will be harvested first.
- Heading date and maturity are NOT THE SAME.
- Heading date indicates which varieties get PLANTED first to avoid spring freezes
- Maturity indicates which variety gets HARVESTED first. Once wheat is mature, nothing good happens until it is harvested.

With fewer barley acres, growers are planting early-maturing wheat varieties to get soybeans planted earlier after harvest. Too many varieties now have early maturity dates which makes it a problem since not all wheat can be harvested early.

Some fields need to be planted in LATE MATURING varieties to avoid harvest damage (low test weight and/or falling numbers) from rain or dews.

Fall Guide to High-Yield Wheat

Here are the keys when planning high-yield wheat:

- Plant high quality, disease-free USG varieties from Renwood Farms: seed source does make a difference
- Apply **Vizor Plus** or **Vizor 5Z** seed treatment to avoid root rots and control fall insects both above and below ground

- Select varieties with different heading dates to avoid spring freeze and different maturity dates to schedule timely harvest
- Select varieties that contain the Fhb1 scab gene for resistance. Most of these varieties are weak on glume blotch so a flag-leaf fungicide will still be needed but the flag-leaf fungicide has a wider application window and is less expensive than scab fungicides.
- Burndown at least three weeks prior to planting in no-till fields.
- Don't rush to get all fields planted in 14 days. Changing weather patterns suggest that our falls are staying warmer longer.
- Fertilize with nitrogen, sulfur, boron, molybdenum, copper and/or zinc (all now available from Renwood Farms) regardless of the previous crop yields: add phosphate and potash if previous crop removed these nutrients.

USG Varieties

USG 3790: TOP YIELDER in VA in 2020 and VT OVT two-year average. The first late-heading and late maturity wheat since **Roane** and **Shirley**. Excellent test weight with resistance to soil virus, septoria and mildew. Medium short straw to prevent lodging. Plant early to perform.

USG 3571 (NEW): To replace 3536. Very high yields in production fields; a bearded variety with excellent test weight. Above average disease package: moderately resistant to soil-borne viruses (good for heavier soils). Moderately tolerant to scab. Taller wheat where straw production is important.

USG 3472 (NEW): To replace 3404; this is a powerful wheat with high yields, very good test weight and an outstanding disease package. Contains the Fhb1 scab gene for resistance. Very attractive wheat variety.

WHEAT FALL 2020

Wheat Success with Fall Planning

USG 3329: Top yields in Delaware, Maryland, Virginia and North Carolina OVT Trials. Great test weight with Fhb1 scab gene for resistance. It produces very high yields. This bearded variety has above average stripe rust resistance. This is the most versatile and widely adapted USG wheat variety available.

USG 3316: NCSU state contest winner. Contains the Fhb1 scab gene for resistance: highly resistant to leaf septoria, moderately resistant to soil-borne viruses (good for heavier soils). Excellent tillering for geese-damage control.

USG 3230: This is an early heading variety to be planted late: fast emergence and aggressive early growth: resistant to soil virus found in heavier soils. Good resistance to wheat rusts and mildew. Excellent test weight: this variety must be managed for scab

USG 3228: Very high yields in all locations North of the James River (PA, MD, DE and VA). An early maturing variety that contains the Fhb1 scab gene for resistance, superior disease package with a very showy, smooth head. This is an early-maturing variety, so this variety needs to be **harvested early**. Plant thicker to produce higher yields.

USG 3118: Excellent test weight in this last-plant, first-harvest variety. Highest yields in 2019 and 2020 NCSU OVT trials. This is a short-stature variety with a tip beard, very aggressive tillering characteristic; very good resistance to stripe and leaf rust and powdery mildew. Average tolerance to scab. Good winter hardiness.

More details on all varieties on page 4.

Renwood Farms Seed Treatments

Vizor™	Unique multiple fungicide treatment with higher rates for longer, stronger protection
Vizor Plus™	Vizor with insect control for aphids and Hessian fly
Vizor ZN™	Vizor with zinc
Vizor 5Z™	Vizor Plus with zinc

Vizor™ wheat seed treatment is designed to stop the diseases associated with both warm and cool soil temperatures. Seed treatments other than **Vizor™** are usually added to protect in cold soils only.

In addition to stopping diseases early, **Vizor™** provides 200 days of protection compared to only 35 days for other seed treatments.

Reminder: when there are dry spells in August, the Hessian fly goes dormant and “Hessian Fly-free Dates” may or may not be relevant. Damage from fall aphids and/or Hessian fly is a disaster for profitable wheat production.

Vizor Plus™ and Vizor 5Z™ provides Gaucho 600 at 1.5 ozs. /100 lbs. to provide protection from aphids, Hessian fly and soil insects all fall. Adding a seed insecticide at the proper rate added 4.3 bu. /acre in NCSU trials. **DO NOT USE AT RATES LOWER THAN 1.5 OZS./100 LBS.**

Group 1 earliest planting	Group 2 & 3 middle planting	Group 4 last planting
USG 3790	USG 3329	USG 3230
USG 3571	USG 3316	USG 3228
USG 3472		USG 3118

Planting the right variety in the right planting window is critical to limit spring freeze damage. The table at left shows which variety is recommended for the different planting windows.

Planting Group 4 varieties too early enhances chances for spring freeze damage. Planting Group 1 varieties too late means not enough time for fall tillering.

WHEAT FALL 2020

Vizor™ Cereal Seed Treatments

Renwood Farms can include **zinc** on seed. Zinc is needed as a plant nutrient but also stimulates soil microbes to release more nutrients to the plant. **Adding zinc to wheat seed treatment has increased plant manganese levels** in field conditions. Zinc seed treatments can prevent sharp eyespot fungal infections where litter or sludge has been used.

Zinc seed treatment has increased wheat yields by 12 bu./acre or more in Mississippi, North Carolina and Virginia.

Warmer fall weather means longer aphid and Hessian fly pressure. This photo shows untreated wheat planted in November infected with Barley Yellow Dwarf Virus (BYDV) vectored by aphids last fall.



Growers often purchase seed treatment insecticides to prevent BYDV but most suppliers use the lowest labeled rate allowed which lowers performance.

Vizor™ seed treatments are the most effective way to protect against root rots and insect pests.

Vizor 5Z™ adds a critical nutrient package to not only protect but also feed plants to deliver higher yields.

Plant Nutrition

Nitrogen and sulfur will be needed prior to planting for fall 2020. Nitrogen rates will range from 25-40 lbs./acre depending on no-till (higher rates) or conventional tillage. Most fields will require 8-10 lbs./acre of sulfur.

Zinc, copper, boron and molybdenum are all required by wheat plants. Soil tests will indicate zinc and copper requirements.



Vizor 5Z on right compared to Vibrance Extreme on left in 2016: NCSU found an 8 bu./acre improvement in yields with Vizor Plus over Vibrance Extreme in three-year trial.

Increasing plant copper levels this fall will help wheat tolerate colder temperatures in the spring. Any wheat planted on Altavista soil types will respond to fall copper applications. Soils testing 1.2 ppm or lower will respond to copper applications.

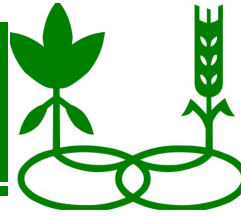
Soils testing below 2 ppm of zinc will respond to zinc applications. Soils testing very high in phosphorous will respond to zinc applications.

Apply .25 lbs./acre of boron and 4 ozs./acre of 16% molybdenum (now available from Renwood Farms) with fall burndown/ early post-emergence since these nutrients leach and must be spoon-fed throughout the season.

Phosphates and potash will be needed if high yields from the previous crop removed these nutrients. If dry weather has reduced yields, rates can be reduced but generally it works best to follow your Nutrient Management Plan.

At Renwood Farms, we strive to produce disease-free seed and protect it with advanced seed treatments to ensure your success in every bag, on every acre, each and every year.

RENWOOD FARMS
17303 SANDY POINT RD.
CHARLES CITY, VA 23030



Jeff Hula (production and shipping)
Office: 804-829-2450 Cell: 804-385-6843

Paul Bodenshtine (agronomist): 804-314-7463

Fall 2020 Wheat Variety Characteristics (listed in order of planting)

Variety	Maturity	Height	Head Type	Test Weight	Mildew	Glume Blotch	Scab Tolerance	Soil Virus
3790	VL	S-M	A	2	2	2	3	1
3571 (NEW)	M	M-T	A	2	2	3	3	3
3472 (NEW)	M	M	A	3	3	3	2	2
3329	ME	M	A	3	2	3	2	2
3316	M	M	A	2	4	2	2	3
3230	E	S-M	A	2	1	NR	4	3
3228	E	S-M	S	3	3	2	1	2
3118	E	S	AL	2	2	5	5	3

Maturity: E = early harvest, M = medium harvest, L = late harvest

Height: S = short, M = medium, T = tall

Head Type: A = awned (full beard), AL = awnletted (tip beard), S = smooth (no beard)

Test Weight: 1 = best, 9 = worst

Mildew, Glume Blotch, Scab, Virus: 1 = best resistance 9 = least : NR = not rated

