

The AMPAC Impact

July 2008

A Quarterly News Publication



Keep your eyes open for a new variety of Annual Ryegrass available in the Fall of 2009 from Ampac Seed Company. We are pleased to announce that we have listened to your requests to provide a more cold tolerant annual ryegrass for our distributor partners and customers. The new variety is called "**BRUISER**" and is a late maturing, crown rust resistant diploid annual ryegrass that exhibits some gray leaf spot resistance as well as helminthosporium leaf spot resistance, and is tolerant to cold temperatures. **BRUISER** was developed primarily for its disease resistance, cold tolerance and forage yield.



BRUISER has been trialed successfully in Scottsbluff, Nebraska for Cold Tolerance and Yield. Studies showed that 79.4% of **Bruiser's** plants survived the cold winter of Scottsbluff, NE as compared to 77.4% of Marshall Ryegrass and 61.0% of Gulf. Yield studies showed that **Bruiser** had 2 harvests for 9347 pounds per acre, versus Marshall's 9376 pounds per acre and Gulf's 8467 pounds per acre.

Bruiser works excellent for pasture and haylage production but really stands out when used as a fall planted cover crop. As our society becomes more environmental conscious, concerns regarding soil and nutrient runoff are getting more attention. Not only are there environmental benefits but there are proven agronomic benefits of using annual ryegrass as a cover crop. Using annual ryegrass as a cover crop has shown to increase corn and soybean yields in the Midwest. See www.ryegrass.com/over_cornsoy.html#top for more information. **Bruiser** is not just

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another high yielding annual ryegrass that works great in pasture mixes or overseeding bermuda grass... with its cold tolerance it provides a unique trait that helps set it apart from the rest.

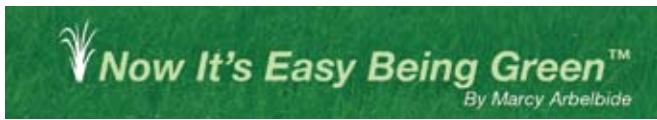
Key Traits:

- Excellent Cold Tolerance
- Late Maturity
- High Feed Quality
- Excellent Palatability/Digestibility
- Good Forage Yield
- Bred for Crown Rust Resistance

Annual Ryegrass has successfully been used alone, or in combination with clovers, Brassicas, or small grain. It has a high nutritive value and can be grazed, used for hay, or even silage production. Crude Protein levels typically average between 8 and 16% (depending on maturity) and the Relative Feed Values (RFV) average about 115. **Bruiser** Annual Ryegrass will help producers provide an excellent yielding, high quality feed.

For a current tech sheet on **Bruiser**, please visit www.ampacseed.com.





Green has been around since creation and we as a society recognize that we need to take steps to assure that Green will be around for future generations. Green has become the buzz word for environmental friendly practices and AMPAC fully supports keeping our environment healthy by products that make it easy being Green with our new GREEN FRIENDLY SEED program.



As an industry, we have always promoted the “green, green grass of home.” Some quick facts:

Cooling:

Front lawns of just 8 average houses have the cooling effect of about 70 tons of air conditioning compared to the average home size air unit which has only a 3-4 ton capacity.

Dust Trappers:

Turfgrass trap much of an estimated 12 million tons of dust and dirt released annually into the atmosphere.

Safety:

Playing fields covered with dense, healthy turf have proven safer than artificial surfaces or thin stands of grass.

Rainfall Absorption & Erosion Control:

With up to 90% of the weight of a grass plant in its roots, a good lawn provides a very efficient erosion prevention device with its rain absorption capabilities.

Water Purifying:

Turfgrasses help purify water. The root mass and soil microbes act as a filter to capture and break down many types of pollutants. Run off is alleviated or prevented.

Fresh Oxygen:

A turf area just 50 feet by 50 feet absorbs carbon dioxide, ozone, hydrogen fluoride and nitrates. This same area releases enough oxygen to meet the breathing needs of a family of four. The grass and trees along the U.S. Interstate Highway System release enough oxygen to support 22 million people.

For any of you reading this article who have children or grandchildren you will relate to my next statement as I now quote the famous Kermit the Frog – “It isn’t easy being green.” Well Kermit; with AMPAC’s new Green Friendly Seed program it is now much easier to be green.

Our Green line seed mixes are blended to maximize environmentally friendly requirements. Due to on-going research and technology Ampac is able to offer CFR (Color Fade Resistant), Drought Tolerance and when needed Salt tolerance, in addition to improved disease resistance; including Gray Leaf Spot in Perennial Ryegrass and Brown Patch in Turf Type Tall Fescue.

Watch for our Green Friendly Icon’s and know with confidence the seed you are buying has been tested and proven to be good for the environment.

Salt Tolerant



Must demonstrate high survival rates when subjected to high levels of total soluble salts (ECe = 6.0 – 9.0 mS/cm) in studies at University and other accredited Private Research Facilities.

CFR (Color Fade Resistant)



Must demonstrate color retention at minimum 25% green cover at 25 days when irrigation is withheld.

Drought Tolerant



Must demonstrate ability to resist wilting and show minimum 25% ground cover at 25 days when irrigation is withheld.

NOTE: CFR and Drought Tolerance go hand in hand. The more days of green cover (varieties that are last to go dormant due to lack of moisture) result in a faster green up when moisture is applied. This is due to those varieties being under stress for a much smaller period of time.

Our line up of Green Friendly Seed currently consist of:

Amazing GS Perennial Ryegrass

- #1 in 2004 NTEP (2007 Data)
- Gray Leaf Spot Resistant
- Endophyte enhanced

Phenom Perennial Ryegrass

- Gray Leaf Spot Resistant
- #1 in Drought Tolerance – 6.90 Average Turf Quality – coverage/color/density
(High 6.90/ Low 4.97 LSD 0.41 NexGen Turf Research 2007 data)
- Color Fade Resistance – 25% green cover after 48 days of irrigation being withheld.
(Nexgen Turf Research 2007 data / High 49 days/Low 37 days)

Winterstar Perennial Reygrass

- Salt Tolerant – 3.3 rating
(1= no damage 9 = highest salinity damage at Texas A&M, Pecos, TX, 2006-2007)
- Drought Tolerance – Wilting: 6.5 mean rating in 2006 NTEP/ 2007 data
(High mean 7.0 – 4.7 Low mean – LSD 1.1)
- Overall Disease Resistance
- Fast Establishment

Sidewinder Turf Type Tall Fescue

- Salt Tolerant – 25.4% survival rate in 9.7 mS/cm total soluble salts *(Radix Research Facility 2007)*
- Improved Spreading activity
- Color Fade Resistant – 25% green at 34 days after irrigation withheld
(NexGen Turf Research 2007 Data / High 37 days/ Low 16 days)

Gibraltar Creeping Red Fescue

- Excellent Brown Patch Resistance
- Drought Tolerant – High Endophyte
- Color Fade Resistant – 25% green at 34 days after irrigation withheld
(NexGen Turf Research 2007 Data/ High 39 days/Low 16 days)

With the above selection of varieties, AMPAC can provide the right Green Friendly Seed variety for you. And, “Yes, Kermit, now it is easy being Green™.”



Spring movement was slow, as the Midwest and East Coast had an extended winter, and people are hesitant to speculate on high priced inventory. The current slowdown in the economy/housing market has kept seed in the barn as well. The seed industry is in uncharted waters as costs continue to skyrocket and we compete for production acres. Overall the 2008 crop looks very good and weather permitting we'll

have a good harvest. Below is a brief turfgrass production update:

Fine Fescue

Acres are down 20% in Canada as wheat, oil seed crops, and corn are demanding higher prices. Oregon production will remain stable, but with the value of the US Dollar and European acres of grass seed down, it is expected that we will be supplying up to 50% of the needs in Europe this coming year.

Turf Type Perennial Ryegrass

There are an estimated 110,000-120,000 acres of perennial ryegrass that will be harvested this summer. This is down 35% from last year. Domestic movement of perennial ryegrass is down likely due to the housing market and weather. The bright spot is the international market. According to USDA exports (pounds) of perennial ryegrass were up 136% from July 2007 to January 2008 compared to the same time last year. We are on pace to set an export record. Low dollar value is one of the primary drivers. Projected inventory carry-over is high and this will help to offset the reduction in acres. Growers production cost continue to go up. For example their fall fertilizer application which cost \$415 per ton last year will cost over \$1000 this fall. Increased cost and low acres could push prices higher for the next few years

Turf Type Tall Fescue

We are expecting a record harvest of tall fescue in the Willamette Valley. Approximately a 10% increase over last year. Movement of Tall Fescue has been down for many of the same reason previously mentioned. With strong inventory carry-over and a record crop, we expect the market to soften. As I write this it is my understanding that the K-31 crop in the Midwest is larger then expected due to the wet weather. Growers were unable to make it into hay so instead they are taking it for seed.

Kentucky Bluegrass

Total production has been significantly reduced. Once again other commodities (wheat, potatoes, green beans, onions, etc...) are demanding higher prices. Production of common and proprietaries was estimated at 125 million pounds in 2001, approximately 75 million pounds in 2007, and only 40 million for the 2008 harvest. Even though the domestic market is slow we still expect prices to trend up due to the large reduction in acres.

Fewer acres of all of the above species will be planted this fall if wheat prices stay high through October. Even with the “high” perennial ryegrass prices there could be a 24% reduction in acres for the 2009 harvest. Normally this would signal an increase in

price but with the low demand its really hard to tell what will happen.



The forage market continues to grow every year. Thanks to the marketing efforts of companies and the increased cost of feed (corn, hay, etc...). Unlike the turf industry there is not a lot of inventory carry-over of forage products. This coupled with the fact that forage seed production acres are harder to find, point to a very strong forage market. Everyone wants leafy, lush, vegetative forages for there pasture or hay fields and this means less stems and therefore less seed for the seed farmer. With today's demand on acres the last thing our farmers want to raise is a crop that doesn't produce very much seed. Overall the crop looks very good and weather permitting, per acre yields should be up. Below is a brief forage production update:

Perennial Ryegrass

Acres are down and there will be very little imported from other countries like there has been in the past. This is due to the very weak dollar and limited global production. Usage has been very good resulting in limited inventory carry-over. We expect prices to continue to go higher.

Tall Fescue

We know that Fawn and K-31 acres have increased in Oregon over the past few years but the amount of proprietary forage tall fescue acres are unknown. But because of the strong demand on proprietary forage types we expect to see a price differentiation. End-users are becoming educated on the benefits of using improved varieties compared to Fawn, increasing the demand for these products.

Orchardgrass

Acres are up slightly compared to last year but grower prices are still at all time highs. Approximately 50-70/ cwt more then what they were last year at this time. In the past, we imported large quantities from European companies to help offset our Oregon grown supply. While there are some quantities being imported from New Zealand we don't expect very much from Europe this year. This makes us believe prices will stay firm. However, worries that we have "hit the top" in regards to the price may reduce the usage of orchardgrass. This combined with the talk of coating orchardgrass could increase our inventories.

Legumes

Acres around the world are down except for in Oregon. Red clover acres in Canada were reduced

in favor of other commodities. Acres in South America are now growing more corn and soybeans. Australia's 2008 harvest was poor resulting in less white clover being imported to the USA. Growers in Washington and Idaho are choosing to plant wheat or other more profitable crops instead of alfalfa. In Oregon we have seen an increase mainly in proprietary white clover acres. Companies are moving there production from California to Oregon in hopes to find "more economical production." What does all this mean? We expect legume prices to remain high as supply is limited and demand is up. High nitrogen costs which have prompted end-users to planted legumes for their nitrogen fixing characteristics combined with a growing forage market has increased demand.

Annual Ryegrass

Strong exports and a good forage market have kept carry-over inventories in check. We expect prices to remain firm and continue to go up as input cost have driven the "break-even" point up more then 8/cwt in the last 3 years. With the weak dollar the export market should remain very strong and usage in the Southeastern USA is expected to be very good due to the drought and lack of forage.

Misc. Forages

This would include crops like Dwarf Essex, Purple Tops, Peas, Vetch, etc... In the past these crops were used as a rotation crop to help certify or clean up fields. The usual comment growers would make regarding these crops was: "I don't care if I make money growing Purple Tops as long as I don't lose money." However, with the high price of wheat these growers now have a rotational crop that can also make them money (even though wheat is not the best rotation crop). This means there will be fewer miscellaneous forage acres harvested in 2008 and higher prices. With our weak dollar importing these crops will be expensive and unlikely. We have also seen an increase in the demand for these crops in both the Wildlife and Forage markets putting more pressure on supply.

Lastly

There it is. That's the world as we see it. The bottom line is there has been a paradigm shift in the cost of producing these products. With input costs high and pricing of other commodities remaining high, we should expect to see high seed prices. Even in the case of over produced and over supplied turf type tall fescue the price may soften but not to the same levels it would have 4 years ago. One thing is certain though and that is everything changes. As government policies and commodity prices change we can expect to see our seed prices and demands change too.



With the changing society that we live in, from the price of fuel to the poor housing market to higher production cost for our crops, we all are looking for ALTERNATIVES! Hopefully, I can touch on a few ideas covering all three of our lines of seed.

Let's start in our turfgrass segment and look at the typical high school athletic field. Most if not all of the fields are worn out between the hash marks. Take it from me; blowing a knee out on a hard pan soil field was NO fun! With limited real estate available to school districts, athletic fields are being used more and more for not only athletic practices (football, field hockey, soccer, etc) but band practice, other competitions and the list goes on. A solution to keeping grass between the hash marks and not using that over rated synthetic turf is to seed bermudagrass in mid Spring and use it as an annual crop in most areas. Once the bermudagrass establishes, it will offer excellent footing and an excellent sod to interseed perennial ryegrass in late summer or early fall. AMPAC Seed now has a new overseeding variety called **WinterStar**. **WinterStar** is bred for fast establishment with a dark colored blade. A mixture of **WinterStar**, **Amazing GS**, and **Phenom** perennial ryegrass will cover all of the bases. **Amazing GS** will provide excellent gray leaf spot resistance with a dark colored leaf. **Phenom** also has gray leaf spot resistance and does well during the drought and hold up very well under traffic.

On the forage side, as I travel between customer locations I pass numerous fields. There are a lot of corn fields here in the East that have poor stands. To help revitalize some of the fields if the practices allow, now is the perfect time to broadcast **Pasja** hybrid forage turnip into the existing corn. Or if pastures are open they can be sown with **Pasja** and **Fantastic** annual ryegrass in the spring or late summer, **Pasja** with the combination of **Fantastic** will provide excellent tonnage and high quality forage for multiple grazings.

The wildlife food plot segment continues to strengthen and more and more people are realizing that improved grazing varieties selected for their area are very beneficial over the "box store" offerings. AMPAC Seed only uses improved grazing varieties in the **Wildlife Perfect** mixtures. Our mixtures are adapted to your region and have been proven either in university trials or on the farm! Wildlife Perfect mixtures are packaged in very retail friendly bags and will provide you an

alternative to handling the same mixtures as the "big box stores" as well as a higher margin to help the bottom line!

If I have peaked your interest in any of the alternatives, please don't hesitate to get a hold of one of us to discuss the alternative further! Have a safe and enjoyable summer!