Wonder Grass

Carl S. Hoveland Crop & Soil Sciences Dept., Univ. of Georgia

arvelous new pasture grass that cattle love, produces 4 to 6 tons dry forage/acre during winter and spring with 20 to 30% crude protein and 70 to 80% digestibility, can be broadcast planted anywhere on the surface of bermuda or bahiagrass sod or prepared land, naturally reseeds, grows well on wet soil, tolerates close grazing."

How much are you willing to pay for seed of this new wonder grass and is seed available? The good news is that plenty of seed is available at a reasonable price! This "wonder grass" is annual ryegrass which is widely grown, especially in south Georgia. Since it has been used widely for pasture, we may forget about the wonderful attributes of annual ryegrass and that in many respects it is truly a "wonder grass." This year, because of high prices for rye and wheat seed, annual ryegrass may be particularly attractive for planting.

Annual ryegrass production

Annual ryegrass is a native of southern Europe and first began to be used in the southeastern USA during the 1930s and 1940s. Today, except for Oregon and northern California, all the annual ryegrass grown for pasture is found in the southeastern USA. Eastern Texas accounts for 32% of the acreage. Georgia grows over 200,000 acres or 8% of the annual ryegrass in the USA. Annual ryegrass is a winter annual which germinates from seed in autumn and then dies in late May or June. Perennial ryegrass is a different species that lives for many years in climates with cool moist summers and mild winters such as western Europe, the Pacific Northwest of the USA, and New Zealand. In our hot, humid summer climate this grass dies rather than going semi-dormant in summer like tall fescue. Thus, we use annual ryegrass in our region.

Annual ryegrass cultivars

There are many annual ryegrass cultivars (varieties) available. All of them are good forage producers and will generally perform well. In south Georgia, warm wet winters can result in severe infestations of crown rust on the leaves of annual ryegrass cultivars without good resistance. For this reason, the susceptible cultivars 'Marshall,' 'Grazer,' and 'Magnolia' may be severely damaged by crown rust in certain years in extreme southern Georgia. The widely planted 'Gulf' cultivar has good crown rust resistance.

Most annual ryegrass cultivars are susceptible to winterkilling or freeze damage during extreme cold periods in northern Georgia. Unless there has been two weeks of temperatures near freezing for two weeks prior to extreme cold, most annual ryegrass cultivars will be severely damaged or killed. 'Marshall' has excellent cold tolerance and is recommended for planting in northern Georgia. Other cultivars with good cold tolerance are 'Florida 80,' 'TAM-90,' and 'Southern Star.'

Seasonal production of annual ryegrass

Annual ryegrass planted on prepared land in September can be productive in autumn if it rains. In the Mississippi Delta, Louisiana, and the Gulf Coast of Texas, autumn rainfall is generally good and annual ryegrass comes into production early. However, in south Georgia rainfall in autumn is low and unreliable and annual ryegrass generally produces little or no autumn forage. When overseeded on bermudagrass bahiagrass, annual ryegrass generally does not become productive until February or early March, later than with rye or wheat. With adequate fertilization, good annual ryegrass production can be expected until May or early June. Overseeding warm season grass sods with annual ryegrass can extend the productive

season by 3 to 4 months with high quality grazing at relatively low cost.

Annual ryegrass growth is very limited below average daily temperatures of 50° F while maximum production occurs at daily temperatures of 65° F. Thus, the highest yields of annual ryegrass are obtained in extreme south Georgia where temperatures are most favorable for winter and early spring growth. Further north, yields can be expected to be lower. However, in northwest Georgia where 'Marshall' annual ryegrass is often overseeded in early, September on tall fescue or orchardgrass, some late autumn production can be expected with heavy late winter and spring growth to extend the season of the perennial grasses in this colder area.

Planting annual ryegrass

Most annual ryegrass is planted on perennial grass sods. Mow or graze the sod closely and plant during mid to late October when growth of the grass sod has ceased. A seeding rate of 25 lb/acre is desirable. Drilling or broadcasting the seed on a lightly disked sod will result in better stands and earlier production. Soil testing and application of fertilizer is important as perennial grass sods may be low in fertility at time of seeding annual ryegrass. Nitrogen application is critical to get stands off to a good start followed by additional applications during winter and spring. Annual ryegrass responds well to nitrogen with high production. Annual rvegrass is tolerant of moderate soil acidity but for best production, the soil pH should be 5.5 or above.

If planting annual ryegrass alone or with rye or wheat on prepared land, be sure that you want ryegrass there in the future as natural reseeding can be expected. If you plan to grow wheat for grain on the land, annual ryegrass can be a serious weed pest. However, where annual ryegrass is desired for grazing or hay, it is truly a "wonder grass" with many desirable qualities.