# **CHEAP SEED - HIGH COST**

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

t is a common practice of many cattle producers to buy the cheapest seed they can find to replant pastures. Once in awhile they get a real bargain and things go well but generally these bargain hunters, buying cheap seed pay a high price in terms of reduced forage yield, shorter stand life, and lower animal performance. Saving a few dollars per acre with cheap seed at planting time is not a good place to save money. Let's look at a few examples.

## Tall fescue

Endophyte-infected tall fescue is generally the cheapest seed of this grass available in the marketplace. Plant this and it will be a dependable grass that can be overgrazed and still hold up year after year in north and central Georgia. The risk with this grass is that toxicity problems will result in reduced cow conception rates and lower calf weaning weights a common problem. If you are willing to take this chance, then this is your cheapest seed to buy.

Some cattle producers have planted endophyte-free tall fescue varieties to overcome the toxicity problems but drought and overgrazing in summer, particularly with the AU Triumph variety. have resulted in stand losses and short life of the pasture. To avoid the problem, some have decided to plant endophyte-free Kentucky 31 tall fescue. Unfortunately, there are no dependable sources of endophyte-free seed of this variety. Since the fungus in the seed that causes the toxicity dies during seed storage for a year, it should be easy to buy infected seed and then store it for a year to produce endophyte-free Kentucky 31 seed. There are several reasons why this is not a good idea. First, under usual farm storage conditions, germination of grass seed held over for a year normally drops by 10% or more. Second, the seedling vigor of holdover seed will be less than that of new seed, resulting in crop slower establishment and possible winter stand loss. Third, the fungal endophyte level may not drop to zero. If a mixed batch of infected and non-infected seed is planted. over time the infected plants will outcompete the non-infected plants and eventually dominate the stand.

Last month, I described a new endophyte-free tall fescue variety, Jesup, that was selected in Georgia by Dr. Joe Bouton for better drought tolerance and grazing that is superior to other endophyte-free varieties. Unfortunately, some people are concerned that the seed are higher priced than endophyte-infected Kentucky 31 and wonder if it is worth the price. Why are the seed higher priced? Ordinary infected Kentucky 31 tall fescue seed are produced in Missouri on large fields that are grazed the rest of the year. Seed production costs are relatively low. In contrast, certified seed of Jesup are produced in Oregon where seed yields are higher but production costs are also higher. Purchasing certified seed guarantees the potential performance of that variety based upon years of evaluation and field testing. Non-certified seed does not make that guarantee. Growers producing certified seed must with specific comply regulations pertaining to field history and isolation to insure varietal purity (no mixing of Jesup with Kentucky 31 or any other variety). The field must not have been in tall fescue for a specified number of years prior to producing certified seed. It must be isolated sufficiently from adjacent seed fields to guarantee that outcrossing during pollination doesn't change the genetic composition of the variety. Fields are inspected each year by state certifying agencies and may be refused certification if weeds, poor growth, poor stand, disease, insect damage, or other conditions prevent accurate inspection or create doubt as to identity of the variety. This all costs money and increases the seed price but guarantees that you will be getting high-quality seed of the variety that you are purchasing.

Is it worth the extra money for certified Jesup as compared to some cheaper endophytefree variety? Suppose that the cheaper endophyte-free variety survives only three years because you overgrazed it during summer instead of resting it or reducing the stocking rate as recommended. It doesn't take a genius to figure out that even if the Jesup survived only five years (our stands at the Central Georgia Station are still in great shape after five years), the extra seed cost (\$0.30/pound x 25 pounds/acre of \$7.50/acre) would have been a bargain.

#### Clover

Red clover is increasing in popularity because of its greater drought and heat tolerance for late spring and summer production. In south Georgia, Cherokee has performed well as an annual long season clover. The greater disease and nematode resistance of this Floridadeveloped variety make it superior to other varieties or cheap "brown bag" red clover of unknown origin. Certified seed of Cherokee is worth the money. In north and central Georgia, the greater stand life (2 years or more) of Cinnamon, Redland III, and Acclaim red clover varieties make the seed of these varieties well worth the extra cost over that of unknown red clover varieties adapted to other areas of the USA but not in our area.

The best ladino clover varieties in our trials have been Osceola, Regal, and Will. Unfortunately, sometimes seed of varieties adapted to other regions or even other countries are sold cheaply because seed is in oversupply. Stand life is often shorter than for adapted varieties. Another case of bargains that are costly.

If you are looking for the most winterproductive crimson clover varieties, stick with planting Flame, AU Robin, or Tibbee. Dixie may be cheaper seed but will furnish less winter growth.

## Small grains

There are many well-adapted varieties of recommended varieties of rye, wheat, or oats for grazing. Information on variety trials are available from your county agent. How can you be certain of getting the variety you want? Again, certified seed insures that you will get high quality seed of the variety you want. Yes, the cost will be a bit more but worth it in terms of pasture with good disease resistance and productivity for grazing.

# Conclusion

Cheap seed may seem a bargain at planting time. Occasionally, it may truly be a bargain if you know the source of the seed, the germination, and weed seed content. Often, the best bargain is to pay a bit more for certified seed that will pay good dividends later.