

Late Plantings of Winter Annual Forages

Dr. Dennis Hancock, Extension Forage Agronomist, Crop and Soil Sciences Dept., University of Georgia, Athens Campus

Recently a number of livestock producers have asked about making late (after early November) plantings of winter annuals for forage. University recommendations are to plant winter annuals in October through early November, depending on location in the state. However, in severe fall droughts, plantings may be delayed, hay barns may be nearly empty, hay cost may be too high (if available to buy), or the cost of alternative feeds may be too high. Consequently, the idea of planting winter annuals to get even a small forage yield may be appealing to many producers.

Late fall or winter plantings of winter annuals have not been evaluated for yields in the southeastern states. However, some producers have done this before, sometimes with surprisingly good results, particularly in our southern most counties. A guess is that a producer who does the best job he/she can and who has some luck to go with their management **MIGHT** (the operative word here is "might") produce 2000-4000 lbs of dry matter per acre if planting in late fall or early winter and approximately 1500-2000 lbs of dry matter per acre if planting in late fall or early winter and approximately 1500-2000 lbs of dry matter per acre if planting in late winter.

It should be made clear that late planting winter annuals is a gamble (farming is always a gamble, but this one is more risky than usual). If a producer plants winter annuals in late fall or winter, **there is the possibility that cold weather occurring after the seed germinates will result in the death of the recentlygerminated seedlings**. Furthermore, in order for the seedlings to grow much at all, growing conditions will need to be ideal or near ideal, with appropriate moisture available, plenty of sunlight, and suitable temperatures. Of course, suitable soil fertility and soil pH are essential, and the normal timely application of nitrogen to a young stand will be of particular importance. Soil test-based fertility recommendations remain the same, except that the N applications should be reduced based on the length of the season that is remaining.

The windows of opportunity for even trying this risky approach are narrow, and the tactics are highly dependent upon the time in which the late planting is to occur. If any such planting is to be made in late fall or early winter (late November through early February), it is best to focus on planting annual ryegrass. Winter annual legumes can be added, as well. Annual ryegrass is fairly cold tolerant in the Deep South, and ryegrass seed is relatively inexpensive. Still, if a producer is going to try ryegrass in a planting in late fall or early winter it makes sense to plant a variety known to have the potential to make early growth. There is a high risk of failing to obtain a stand or reasonable forage production with small grains in a late fall or early winter planting. Of the small grains, rye has the best shot at producing reasonable forage amounts when planted at that time of year. Oats do not grow as well in late December through February and are at greater risk of winter injury, particularly when they are small.

Plantings made in late winter (February through early March) are subject to the greatest risk of winter injury. Timing the planting to occur after the last expected blast of severe cold weather is crucial. But, waiting too late will result in heat stress and potentially limit the production season to a period of less than 1 month. In

our southern counties (approximately below the Fall Line), it probably should be done by February 20 or so. In northern counties (Piedmont & Mountain/Valley Regions), a week or two later would likely be the limit. Of all the winter annual grasses, an argument can be made that oats (although the most cold-sensitive small grain species) probably has the most potential for making quick late-winter/spring growth, with triticale being the second choice among the small grains.

Anyone who is going to make late plantings (whether late fall, early winter, or late winter) probably should increase the seeding rate by at least 20% for ryegrass or their chosen small grain relative to the seeding rates recommended for an early fall planting. This should facilitate getting a quick stand and compensating for the lack of sufficient tillering that would normally occur in overwintering annuals. Increased seeding rates of winter annual legumes would generally not be expected to lead to noticeable increases in forage yield when planted in late fall or early winter. Winter annual legumes are best if planted in early fall, but can result in significant yields if planted in late fall or early winter. However, they are unlikely to result in a reasonable return on investment if planted in late winter.

Seed of some varieties of ryegrass and/or small grains are often still available late into the season from some seed outlets. Price varies from dealer to dealer, as would be expected. However, most dealers seek to discount their remaining stock in the winter to clear warehouses for the upcoming growing season.

In summary, **planting winter annuals late should be considered VERY RISKY** and every consideration to alternatively feeding low-price commodities and by-products (corn gluten, soy hulls, wheat mids, etc.) should be evaluated from an economic standpoint. When making a late planting of winter annuals, it is important to remember that one should consider not only the cost of seed, but also fertilizer, fuel, labor, and other costs, as well the risk involved. If one "bets the farm" on a late winter planting, the risk may be too great. If planting in late winter, one should remember that the crop is at significant risk of winter injury and the grass plants will not have a chance to reach their tillering potential. Certainly, productivity of these forages will be greatly reduced from normal expected yields. It is impossible to predict how much yield reduction will occur, but a good manager that receives favorable weather MAY produce 2000-4000 lbs of dry matter per acre if planting in late fall or early winter and approximately 1500-2000 lbs of dry matter per acre if planting in late winter.

Parts of this article were originally co-authored by Dr. Don Ball, Professor Emeritus and Extension Agronomist, Department of Agronomy and Soils, Auburn University, AL



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