

PLANTING DATES

Planting date is a critical component of successful wheat production. Planting too early or too late reduces yield potential. Always plant late maturing varieties first since their varieties most often have the longest vernalization requirements. Recognize though that some medium maturing varieties may have also have long vernalization requirements which makes them less suitable for late planting.

Vernalization requirement varies widely with variety. In order for wheat to vernalize, temperatures must be low and remain that way for a specific length of time. In the absence of cold weather wheat waits until enough heat units are accumulated before heading. This delay in heading usually results in wheat filling the grain during a hot and dry time of the year such as May or early June.

If planting late in the season, choose an early maturing variety because they have, in general, very little vernalization requirements. This ensures the crop will vernalize properly even in a mild or warm winter. Caution should be taken to avoid planting these types of varieties too early in the season. Due to their short season growing abilities, these varieties may enter the jointing and heading phase too quickly and therefore be subject to severe winter kill or damage from late spring freezes.

In fact, varieties such with very short vernalization requirements such as Fleming etc., on average perform best when planted between December 1 and December 15th. In this case, the recommended planting dates are two weeks later than the recommended dates for most other varieties.

The effect of planting dates have on three popular varieties are shown in Table 5. Notice the loss in yield at the late planting date with the late maturing variety. This variety requires longer vernalization and growing days than the early or medium maturing varieties. The effects of late planting can be severe depending on variety.

Table 5. Effect of Planting Date on Yield (bu/A) of Soft Red Winter Wheat, Tifton, 1994

Planting Date	Early	Medium	Late
Nov 23	76.8	78.6	76.5
Dec 7	71.4	69.2	68.8
Dec 20	54.2	47.1	25.3

Data in Table 6 illustrates how severely wheat yields are penalized as planting is delayed into the winter. It is important to plant within the recommended planting time for high yields.

Table 6. Effect of Planting Date on Yield (bu/A) of Soft Red Winter Wheat, Tifton, 1995

Planting Date	Early	Medium	Late
Nov 15	64.5	60.4	56.1
Dec 7	42.2	38.6	39.6
Dec 15	39.6	31.9	33.4
Jan 5	11.1	7.5	6.7

Table 7 lists the recommended planting dates for different regions of the state. These dates represent a trade off between planting early enough to allow for adequate tillering before cold weather begins and planting late enough to avoid excessive heat and moisture stress. In many parts of the country planting dates are set late in order to avoid problems with the Hessian fly, but in Georgia there is no such thing as a "fly-free date".

The optimum window for wheat planting in Georgia is typically one week before the average first frost date for a given area and one week after. Planting during the appropriate time for your area will allow wheat to develop enough tillers prior to January or early February which reduces the likelihood of needing to apply two applications of N fertilizer in the spring. Fall produced tillers will have stronger root systems, larger heads with better capacity for high test weight and consequently, tolerate more stress.

Table 7. General planting times for most wheat varieties grown in Georgia.

Region	Planting Period
Mountain, Limestone Valley	October 10 - November 1
Piedmont	October 25 - November 15
Upper & Middle Coastal Plain	November 7 - December 1
Lower Coastal Plain	November 15 - December 1
Lower Coastal Plains**	December 1 – December 15

**Only varieties with short vernalization requirements