CORN PLANTING TIME

Stephen J. Herbert
Department of Plant and Soil Sciences
University of Massachusetts

Each spring farmers are faced with the decision of when to commence planting their corn crop. Many times weather influencing soil conditions causes a delay, as occurred in many areas of Massachusetts this year. Because of the uncertainty of the weather, farmers need to be ready to plant when the time is right. That means all preparations for planting such as planter maintenance, should have already been completed.

Planting in the warmer areas of Massachusetts, such as the Connecticut River Valley, should begin in late April, and should be completed by early to mid-May, given the appropriate soil conditions. Optimum dates in other regions of Massachusetts are early to mid-May. Soil temperatures of 50°F 7-8 a.m., or 55°F 1-2 p.m., have been recommended as a guide to planting since corn will not grow below a temperature of about 50°F. However, given adequate seed protectant and a boost from starter fertilizer if fertility is not in the high range, corn seed can be placed in the soil when temperature is below that necessary for germination and growth. The determining factor of when to plant now becomes the condition of the soil which is influenced by soil moisture.

Delaying planting to allow for soils to warm to 50°F or 55°F may cause an unnecessary reduction in yield. Time of planting then should be based on soil moisture. The soil is ready to plant when the coulter or disc crumbles the soil as it opens a furrow and when the press wheels close the furrow firmly. Farmers should aim to have at least 60% of their corn planted by the true optimum date, since considerable research has shown there is more yield loss from delayed planting than from planting early.

Remember when planting to drive slowly and follow the manufacturer's recommendations. This is especially important in no-till seeding. If planting speed is too fast soil is thrown away from the press wheels and seed is not covered adequately. Make final planter adjustments in the field and if conditions change readjust in each field. Check the tractor hookup, the alignment of coulter openers and the press wheels. Make adjustments checking seed drop and seeding depth, and readjust as necessary.

In our time of planting study this year at the Research Farm in South Deerfield, the May 6 planting took 15 days to emerge on May 21; the May 23 planting 13 days to emerge on June 5; and the June 8 planting 5 days to emerge on June 13. Clearly the May 6 planting has a great advantage over the later plantings despite the fact the cool wet spring conditions delayed germination and emergence.