SITUATION

Planting corn at the proper depth helps to ensure proper germination and development, allows for optimum seed-to-soil contact, leads to more uniform emergence and helps achieve top yield potential.

FACTORS TO CONSIDER

• Soil texture
• Soil moisture level at planting
• Minimum planting depth
• Effects of deep planting
• Planting depth procedures

ACTION PLAN

1. EVALUATE SOIL TEXTURE. Soil texture is an important consideration in determining the proper planting depth for corn seed. In general, with heavier-textured soils, corn should be planted at a depth of between 1½ to 2 inches, and never more than 2½ inches deep. Planting corn in lighter-textured soils, which can dry out more quickly, may require somewhat deeper placement up to 3 inches, depending upon soil moisture and individual field conditions.

2. MONITOR SOIL MOISTURE LEVELS. To help ensure uniform germination and emergence, always check soil moisture levels at the intended planting depth and then adjust planting depth in line with the planting depth guidelines mentioned above so all corn seeds are planted into moisture.

3. MAINTAIN A MINIMUM PLANTING DEPTH. Planting corn seed at 1½ to 2 inches below the soil surface allows the plant's seminal root system to develop and provide nutrients to the germinating seed. Seed planted at this depth also will allow for the proper development of the nodal roots, which are the primary source of nutrients and moisture to the developing plant after the V6 growth stage, and aid standability later in the season.

4. UNDERSTAND THE EFFECTS OF DEEP PLANTING. Corn seed that is planted too deep can experience emergence problems and result in a nonuniform stand with the potential need for replanting, particularly if the soil is cool and soil moisture is high.

5. FOLLOW PLANTING DEPTH PROCEDURES. Plant corn at a depth of no less than 1½ inches. To help ensure proper seeding depth is maintained across a field, operate the planter at the proper speed, match the seed size to the seed plate or disc air pressure, use appropriate down pressure on the row unit and use the recommended seed lubricant for your planter per the manufacturer’s guidelines. Planting at speeds above the recommended guidelines can cause considerable row unit bouncing, resulting in variable planting depths, uneven emergence and potential yield loss due to the lack of uniform stand establishment.

SUMMARY

Planting corn at the proper depth relative to soil conditions can help ensure the crop gets off to a good start. Remember to check soil moisture levels prior to planting, plant into adequate moisture at a minimum depth of at least 1½ inches and be certain overall field conditions are adequate for proper product placement. For consistent seed placement and uniform emergence, operate the planter at the proper speed and apply appropriate down pressure on the row unit based on the soil conditions.

For more information, contact your local Mycogen Seeds commercial agronomist or trusted agronomic adviser.