

Extension Notes

Personal Column for April 6, 2010

By Gary Hall, Iowa State University Regional Extension Education Director

Dirt Party Before Corn Planting

While crushing clods in the garden, my three year old grandson started throwing the dry soil up in the air. As the soil particles landed in his hair and all over his clothes we loudly exclaimed, “Dirt Party!” A dirt party should become a springtime tradition for all of us involved in agriculture as we consider the soil during this planting season. Take some time to have a dirt party and remember that many crop problems that occur later in the season start with what was done at planting, particularly the planting depth you use.

Proper planting depth in a mellow soil is essential for ensuring good nodal and brace root development. During the rush of getting the corn in the ground, especially under wet conditions, the planter is often raised up. Raising the planter can cause uneven emergence problems. As the seedlings grow, their roots may not become well established into a shallow depth.

Our May winds can quickly dry out the surface soil, resulting in a lack of soil moisture at the surface where seedling roots are found. Shallow rooting depths also can increase the probability of damage from pre-plant and pre-emergence herbicides. Damage from fertilizer also increases with shallow planting, particularly when fertilizing within that planting row.

It’s important to remember that many closing wheels are designed for a 2-inch seeding depth. Planting shallower than 2 inches results in the seed being in loose soil that will dry out more quickly which makes for a great dirt party but won’t provide you with good seed-to-soil contact. Improper seeding depth can contribute to increased stalk lodging since the brace roots didn’t develop properly. Brace roots on shallow planted corn often appear stubby and stunted and can be confused with symptoms caused by herbicide or nematode injury.

Research conducted by universities and the ag industry show that planting at a 2-inch depth compared to a 1-inch depth provides more uniform plant populations and better yields. Both excellent reasons for you to enjoy a season long “Planting Party!”

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