

No-Till Planting & Direct Harvest

Advantages & Disadvantages

No-Till Verses Conventional Tillage

No-Tillage



Conventional Tillage



No-Till Advantages

Low Disturbance – studies indicate that No-Till seeding can result in:

1. Limited opportunity for weed seeds to germinate and establish.
2. Moisture content is maintained in soils.
3. Fuel and time conservation.
4. Prevention of erosion with added soil residue.
5. Moderating soil temperatures.
6. Equipment needed may be reduced.
7. Standing stubble can force the plant to grow more upright or erect.

No-Till Disadvantages

Low Disturbance – studies indicate that no-till seeding can result in:

1. Additional equipment expenses such as trash cleaners and no-till planter.
2. Surface residue is not incorporated into the soil.
3. Increased fungal disease from lack of aeration.
4. Sandy soils may become compact or tight.
5. Soil is slower to warm.
6. Soil has less oxygenation.
7. Risk of proper seed placement in residue.

Direct Harvest

Direct Cutting



Conventional Cutting



Direct Cutting Advantages

Advantages to direct cutting over conventional harvest or windrowing:

1. Decreased equipment cost or needs.
2. Cleaner finished product, less dirt balls.
3. Ability to harvest greater acres per hour.
4. Soil residue and stalks hold soil from eroding.
5. No risk of blowing windrows.
6. No one has to get up in the middle of the night to cut beans.

Direct Cutting Disadvantages

Disadvantages to direct cutting over conventional harvest:

1. Seed bed must be flat without furrows.
2. Additional spray application of desiccant.
3. Cutter bar loss.
4. Smearing from wet soil inside the conventional combine on beans.
5. Smaller harvestable window per day.
6. Seed coat checked or damaged on dry seeds.
7. Can damage germination on beans for seed production.
8. Not recommended on large sized beans such as Kidneys and Cranberry.

Conventional Harvesting Advantages

Advantages to conventional harvest or windrowing over direct harvest:

1. Ability to pull plants for more uniform dry down.
2. Place large sized beans in windrows when pods are still moist to reduce shelling.
3. Gentle handling of dry product, reducing seed coat checks and cracks.
4. Greater window for harvestable conditions per day.
5. Ability to harvest affectively at higher moisture levels.
6. Limited field loss when equipment and conditions are in proper order.

Conventional Harvest Disadvantages

Disadvantages to conventional harvest over direct harvest:

1. Added expense of cutting or windrowing.
2. Exposure to wind when beans are in windrows.
3. Field loss from shelling if cut and combined to dry.
4. Limited acres per hour when picking up small single windrows.
5. Damage that can occur from rain or moisture if crop is in windrows.
6. Additional harvest time incurred.

Take Away Message



Do What's Best For Your Farm!

Questions

