

Indiana - October 2013 (ver. 1.0)

AGRONOMY TECHNICAL NOTE – Quality No-Till Series

The *Quality No-Till Series* provides management techniques for the successful adoption of Quality No-till Cropping Systems. This information is applicable to most Indiana soils and cropping conditions and covers broad application.

In a Quality No-till system there are no *minor* details. The following is a list of “must do’s” if your goal is successful No-till Corn.

1. Quality No-till systems depend on a healthy soil with active, diverse biology. Use cover crops, diverse crop rotations, and/or manure to increase soil health.
2. Adjust the combine to spread crop residue evenly across the full width of your grain head.
3. Manage soil compaction with floatation and/ or controlled traffic. Maintain and/ or improve draining systems.
4. When no-tilling into a sod . . . kill the sod in the fall.
5. Weeds and other pest pressures will not necessarily get worse, but they will change. Scouting for weeds and other pests is the heart of your Integrated Pest Management System.
6. Fall application of herbicide is needed if heavy winter annuals, perennial, and/or emerged herbicide-resistant weed populations are present.
7. Use starter fertilizer, placed in a “2 x 2 band”, (i.e., 2-4” beside the seed and 2” deeper than the seed) which contains 20-60 pounds of nitrogen.
8. Select hybrids that are high-yielding, have high seedling and root vigor, and with high disease resistance.
9. Use seed treatment if no additional insecticide is planned.
10. Inject at least half of the nitrogen below surface residues. If side-dressing, apply as early and with as little disturbance as possible.



11. The planter is the heart of the system. Proper maintenance and adjustments are critical. Every seed should be placed exactly the same depth at exactly the same spacing and in exactly the same environment.
12. Plant slowly, five-mph or less.
13. Plant according to soil conditions, not the calendar.
14. Monitor pH and calcium levels in the top 2-3 inches of soil. Apply high calcium lime at “half as much, twice as often” schedule. If the soil or tissue tests call for magnesium, consider using products that contain Sulfate of Potash-Magnesia (0-0-22-22S-11Mg) that contain soluble magnesium, sulfur, and potassium (such as K-Mag and similar products) that can be surface-applied.
15. Seek advice and recommendations from others who are successful at no-till, not from those who have tried it. Using conventional farming management and methods can lead to disappointment under no-till systems.