



# COVER CROP STUDY IN SOYBEAN & CORN 2020-2021

## BECK'S HYBRIDS PROTOCOL

### Background:

Infield Advantage has partnered with Beck's Hybrids to offer farmers an opportunity to evaluate cover crops on their farm. Farmers will learn about the benefits of different cover crop mixes by receiving seed for an application of a cover crops on one of their fields. This Field Study will begin the fall of 2020 and run into 2021.

### Objective:

How much nitrogen can be sequestered in fields with cover crops planted?

### Participant Requirement:

- New to planting cover crops or haven't planted a cover crop in the previous three years
- Share previous and anticipated cropping and management details with your group leader
- Participant may only register one (1) field in this Field Study

### Field Application:

- Fields will need to be registered by INFA by April 1, 2020
- The field used for this Field Study must be 40 acres. This is a split field trial and a 20-acre section of the field will be planted with cover crops. (To evaluate effectiveness of cover crops, 20-acre section must be the same year after year.)

- Location of cover crops shall be marked with flags, or an application file (raw data) can be submitted. A field map with the location indicated should be submitted with the field registration.
- **Field Selection:** Cover crop application will be determined by what the grower anticipates planting in the spring of 2021. Cover crop seed will be provided in 50 lb bags. Cover crop seed will be available at Beck's Hybrids Atlanta, IN or possibly a local Beck's dealer.
  - **Ahead of Soybeans or Ahead of Corn**
    - Oat/Radish blend (90%/10%)h
    - Planted at 40#/A.
  - **Ahead of Soybeans**
    - Winter Ryegrass/Rapeseed blend (95%/5%)
    - Planted at 40#/A.
- **Application:** The grower may apply the cover crops in a manner that will work best within their management. We recommend an aerial application for the Oat/Radish mix. (Oat/Radish planted after harvest may not produce enough growth before winter.)

## Data Collection:

- **Document tillage, fertilizer applications, harvest date and yield data.**  
This information will be beneficial when reviewing results and planning for the next year's crop.
- **Biomass sampling.** Group leaders and staff will arrange to collect the above ground portion of the cover crops prior to termination to determine nutrient load in the tissue.
- **Comprehensive chemical soil test.** Group leaders and staff will arrange for an 0-8" sample will be taken at soil health assessment timing (see below) to capture soil pH, nitrate-N, organic matter, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, zinc, and boron.
- **Soil health assessment.** Group leaders and staff will collect soil for soil health assessments in both treatment areas. The soil health assessment will include the following set of indicators; soil organic carbon (ppm), aggregate stability (%), bioavailable nitrogen (mg/g dry weight), respiration (mg CO<sub>2</sub> /g dry weight) and active carbon (ppm).

## Final Report:

Each field will have a field report generated with the results of the biomass analysis.