

# COVER CROP STUDY IN CORN AND SOYBEANS 2022-2023

## **FIELD TRIAL PROTOCOL**

#### Objective:

To determine whether cover crops could be beneficial on your farm.

#### Participant Requirements:

- Share previous and anticipated cropping and management details
- Register a single 40-80 acre field

### Field Application:

- Field will need to be registered with INfield Advantage
- The field used for this Field Study must be 40-80 acres and new to cover crops or has been enrolled in INfield Advantage previously.
- This is a split field trial and a 20-40 acre section of the field will be planted with cover crops
- 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

- Selection: Cover crop application will be determined by what the grower anticipates planting in Spring 2023:
  - Ahead of Corn oat/radish or annual rye/radish
  - Ahead of Soybeans cereal rye/radish or cereal rye/rapeseed
- **Application:** The grower may apply the cover crops in a manner that will work best within their operation

#### 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.
- **Comprehensive chemical soil test.** INfield Advantage team will arrange for a 0-8" sample to 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. INfield Advantage team 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).
- **Tissue sampling.** INfield Advantage team will arrange to collect the above ground portion of the cover crops prior to termination to determine nutrient load in the tissue.

#### Final Report:

Each field will have a field report generated from the lab work and Truterra™ sustainability tool.

All data is aggregated. No personal data is shared. Privacy agreements are required.

