Submitting soybean insect pests

- Collect multiple (6–12) intact specimens of all available life stages and not just body parts.
- Include intact plant material showing typical feeding damage.
- Place hard-bodied insects (e.g., beetles, grasshoppers) in plastic bags, pill bottles, or vials.
- Place soft-bodied insects (e.g., caterpillars, aphids) in a vial with rubbing alcohol or hand sanitizer.
- Submit samples in a padded mailer or box to protect against crushing.
- Include completed form IC 449.

Fees*

- Plant sample to assess disease or damage ............... $10
- Soil sample for SCN egg count
  - In state ........................................... $15
  - Out of state ........................................ $20
- Leaf sample to assess for soybean rust .......... No charge
- Insect identification ............................... No charge

* Fees are subject to change. Please call for current prices.

Forms

Forms PD 31, PD 32, and ICM 449 can be found online at www.extension.iastate.edu/store. These forms need to be filled out as completely as possible.
Submitting soybean plant samples

Some common soybean problems can be diagnosed by considering recent weather conditions and time of year, checking individual plants for symptoms, and considering the crop history of the field. When the cause of the problem is uncertain, plant samples can be submitted for diagnosis.

- Provide plenty of fresh material. When possible send the entire plant, including roots and top growth. Include enough plant material to show a range of symptoms.
- Provide a field description that includes facts about soils, nearby plants, a history of the problem, chemicals applied, pattern of problem plants in the field, and other critical information.
- Include photos when possible.
- Wrap specimens in dry paper towels or clean newspaper (do not add moisture).
- Include completed form PD 31.

Submitting soil samples for soybean cyst nematode testing

Soil samples can be collected any time as long as soil is not too wet or frozen. An ideal time is in the fall, after harvest and before the soil freezes.

- Collect a soil core or ¼ cup of soil (a subsample) from 10 to 20 different locations within an area no larger than 10 to 20 acres using a soil sampling probe, hand trowel, or shovel.
- Sample in a zigzag pattern taking care not to sample only from “hot spots” or areas of severely damaged plants.
- Collect soil from the top 8 inches.
- Combine all soil in a bucket and mix thoroughly.
- From the mixed soil sample, place approximately 1 to 2 pints of soil into a plastic bag or paper soil test bag and label with a permanent marker.
- Place each soil sample in a separate bag and seal.
- Store samples in a cool, dark place until shipping.
- Include completed form PD 32.

Submitting soybean rust leaf samples

The national movement of rust should be closely monitored. If rust development in the southern United States is slow, local scouting efforts can be delayed. If the arrival of rust is imminent, leaves may need to be examined to determine if management strategies should be implemented. To identify low levels of soybean rust, samples must be processed in the laboratory using a microscope. If soybean rust is suspected in a particular field, the following instructions should be followed to submit a sample.

- Collect a minimum of 100 leaflets per location.
- Collect leaflets from shaded areas or areas with dense canopy.
- Collect leaflets from the lower to mid-canopy.
- If possible, collect leaflets from early maturing cultivars or early planted fields.
- Collect leaflets that are not extremely infected with other diseases. Too many lesions of other foliar diseases will make identifying soybean rust pustules more difficult.
- Place sample in a seable plastic bag (between paper towels to keep leaflets flat and dry, but do not add water).
- If mailing, place sample in a padded mailer or box.
- Record pertinent information—date, collector’s name, and phone number; location of the field (county, township, section, GPS coordinates).
- Include completed form PD 31 and indicate that it is a soybean rust sample.