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SOYBEAN AND WHEAT DOUBLECROPPING FACT SHEET

This is one in a series of fact sheets from the Mississippi Soybean Promotion Board and the soybean checkoff. Each sheet presents a brief overview of a topic important to Mississippi soybean production. More information on each topic can be accessed through the link at the bottom of the sheet. To see other fact sheets, click here.

Doublecropping refers to the practice of growing two crops in one year. In the midsouthern US, this production system generally involves growing winter wheat and soybeans in rotation. The perceived advantages of doublecropping are: 1) increased cash flow that results from having income from two crops in one 12-month period; 2) reduced soil and water losses by having the soil covered with a plant canopy most of the year; 3) more intensive use of land, machinery, labor, and capital investments; and 4) harvesting more of the solar radiation available in a given year.

Wheat Production Practices

- Use shallow tillage to prepare a seedbed, plant in 6- to 10-in.-wide rows using a seeding rate of 90 to 120 lb/acre, and apply 20 to 30 lb N/acre if wheat follows a summer cereal crop such as corn or grain sorghum, or fallow. Fall-applied N is not recommended if wheat is planted following soybeans.
- Apply appropriate herbicides in fall or late winter if needed to control winter weeds such as wild garlic, curly dock, and annual broadleaf weeds.
- Apply a foliar fungicide that will control diseases such as head scab that affect developing seed. This is necessary to prevent low test weights that are severely penalized at the elevator.
- Apply 90 to 120 lb N/acre in late February or early March, using split applications on soils such as clays with poor internal drainage. This applied N will not affect a following soybean crop.
- Harvest wheat with a combine that has a straw shredder/spreader. Cut wheat at 9 to12 in. above the ground to minimize both horizontal (cut straw that interferes with planter) and vertical (shades emerging soybean seedlings) residue effects when planting soybean no-till (recommended).

Soybean Production Practices

- Soybean varieties selected for superior performance in conventional early plantings can be expected to be among the superior varieties for doublecrop plantings.
- P and K fertilization rates for full-season (non-doublecropped) soybeans should be optimal for doublecropped soybeans.
- Apply a seed treatment that contains both insecticide and broad-spectrum fungicide components to negate the effect of soil- and seed-borne pathogens on germination and emergence, and to provide early-season protection against insects that may reduce stand and/or seedling vigor.
- Soybeans should be planted in narrow rows (< 20 in.) as soon as possible after wheat harvest.
- The least planting delay occurs when soybean is planted into standing or burned wheat stubble; however, there is no agronomic benefit from burning wheat residue. Therefore, the combination of no-till planting of soybeans into non-burned wheat residue is the best management practice.
- Ensure that late-planted soybeans in a doublecrop system have no competition from emerged or emerging weeds at planting and following soybean emergence. Application of preplant burndown and preemergent herbicides is recommended in doublecrop soybean plantings.
- Frequent scouting of soybeans planted behind wheat is critical to detect late-season insect infestations that will be more prevalent in these later plantings.
- The early soybean production system (ESPS) and a soybean-wheat doublecropping system are mutually exclusive. Yield of soybeans that are grown following wheat will be lower than yields from ESPS plantings.

Click here for a detailed discussion of this topic.

Composed by Larry G. Heatherly, Apr. 2019,
larryheatherly@bellsouth.net