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| Please use this form to clearly and concisely report on project progress. The information included should reflect quantifiable results that can be used to evaluate and measure project success. Comments should be limited to the designated boxes. Technical reports, no longer than 4 pages, may be attached to this summary report. |
| Project Number:  |  |
| Project Title:  |  How does cover crops impact soil water dynamics and soybean production in Louisiana? |
| Organization:  |  Louisiana State University-Agricultural Center |
| Project Lead Name: |  Xi Zhang |
| Report Date: |  Jun. 5, 2023 |
| **In the Progress Summary section below, please provide a brief summary of project progress in lay language that will be shared publicly in the** [**National Soybean Checkoff Research Database**](https://www.soybeanresearchdata.com/)**. Do not include any confidential or proprietary information. If no lay language is provided, the contents of this entire report will be published in the** [**National Soybean Checkoff Research Database**](https://www.soybeanresearchdata.com/)**.** |
| Progress Summary (in non-proprietary lay language suitable to be shared publicly): |
|  The project started on April 1, 2023. In the past two months. we1. Established no-tillage research fields in Red River Research Station in Northwest Louisiana.
2. Planted soybean in the fields to collect baseline crop yield data.
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| Detailed Progress Status – Expand upon the above section. What key activities were undertaken and what were the key accomplishments during this reporting period? List each key deliverable from the proposal and describe progress made (or not made) toward achieving it, including metrics were appropriate. |
| 1. According to USDA-NRCS soil map, we established three no-tillage research fields (4-acre each) with contrasting soil types for this cover crop project in the Red River Research Station. Soils are Caplis sandy loam, Moreland silty clay loam, and Latanier clay, respectively.
2. Soybeans were planted in the three fields in late May to collect baseline crop growth and yield data before planting cover crops in fall. (For this project, in 2022 fall, we tried to collect soil moisture data to provide a preliminary evaluation of cover crops’ effects on soil water status. We planted annual ryegrass, crimson clover and their mixture. However, due to late planting time and extremely cold winter, the cover crops did not survive.)
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