**Quarterly Report (2020)**

**Stoneville, MS**

The rotation trial was continued at the Delta Research and Extension Center, Stoneville, MS for 2020 growing season as well. Corn, soybean and sorghum was planted on 6 May 2020. Weeds were managed using herbicides as recommended by the Mississippi State University Extension Service. Net was used to cover sorghum to prevent damage from birds. The average yield of sorghum from the dryland continuous sorghum rotation was 89 bu/ac. The yields for corn and soybean among different rotations are provided below. Growing soybean in rotation with corn increased soybean yield by ~10 bu/ac under both irrigated and dryland conditions. Growing soybean in rotation with sorghum increased soybean yield by ~23 bu/ac under dryland condition.

|  |  |  |
| --- | --- | --- |
| Crop Rotation | Crop | Yield (bu/ac) |
|  |  |  |
| Dryland continuous soybean | Soybean | 53 |
| Dryland corn-soybean | Soybean | 64 |
| Dryland soybean-sorghum | Soybean | 76 |
|  |  |  |
| Irrigated 1:2 Soybean-Corn-Corn | Soybean | 70 |
| Irrigated 2:1 Soy-Soy-corn  | Soybean | 65 |
| Irrigated corn-soybean | Soybean | 68 |
| Irrigated continuous soybean | Soybean | 58 |
|  |  |  |
| dryland continuous corn | Corn | 166 |
| Irrigated continuous corn | Corn | 163 |