



**GRAND CHALLENGES
GREAT SOLUTIONS**

ASA, CSSA, & SSSA International Annual Meeting
Nov. 2-5, 2014 | Long Beach, CA

American Society of Agronomy | Crop Science Society of America | Soil Science Society of America

Start**206-9 Cover Crop Oversowing Soybean As Alternative to Increase Crop Yield.****Browse by
Section/Division of
Interest**See more from this Division: [ASA Section: Agronomic Production Systems](#)See more from this Session: [Agronomic Production Systems: Rotation, Tillage, Crop Pollinator and Cereal Crop Research](#)

Tuesday, November 4, 2014: 10:15 AM

Long Beach Convention Center, Room 103A

Author Index[Share](#) |

Leandro Bortolon¹, Emerson Borgh², Elisandra Solange Oliveira Bortolon³, Francelino Peteno Camargo⁴, Andre Luiz Oliveira Cirqueira⁴, Leonardo Jose Motta Campos⁵, Junior Cesar Avanz⁶, Alan de Ornela Lima⁷, Rose Pamela Barbosa⁷, Olavio Henrique da Silva Junior⁷, Jessica Pereira Souza⁷ and Cibelle Christine Brito Ferreira⁷, (1)EMBRAPA - Brazilian Agricultural Research Corporation, Palmas, Brazil
 (2)EMBRAPA - Brazilian Agricultural Research Corporation, Sete Lagoas, Brazil
 (3)TO, EMBRAPA - Brazilian Agricultural Research Corporation, Palmas, Brazil
 (4)Embrapa - Natl Res Center of Fisheries, Aquaculture and Agricultural Systems, Palmas, Brazil
 (5)CNPASA, Embrapa Soja, Palmas, Brazil
 (6)Embrapa - Brazilian Agricultural Research Corporation, Palmas, Brazil
 (7)Faculdade Católica do Tocantins, Palmas, Brazil

No-till and integrated crop-livestock systems are soil and crop management strategies very well recognized to increase soil and crop productivity, recover degraded pasture, increase land use and farm profitability. In this context, cover crop play an important role to increase soil organic carbon in agricultural systems increasing soil health, improving soil process and increasing crop yield. Soybean production in Northeast Cerrado region in Brazil (Tocantins state), have been increased in areas under degraded pasture with the purpose to implement integrated crop-livestock systems. The most used method to implement ICLS is seeding forage right after soybean harvest to further use as cover crop prior soybean planting. However, we have seen that growers are reducing their potential to increase the number of animal per area due the water limited conditions after forage seeding. Oversowing cover crop into soybean at R5 have been used in some regions to anticipate the forage to beef production. We aimed to investigate the impact of oversowing some species used as both cover crop and forage on soybean yield. Oversowing cover crops increased soybean yield in about 40% compared to soybean-fallow. Cover crop species were similar in increase soybean yield. Use of oversowing cover crops in soybean is a win-win scenario to increase crop and forage yield and also a potential to increase beef production.

See more from this Division: [ASA Section: Agronomic Production Systems](#)See more from this Session: [Agronomic Production Systems: Rotation, Tillage, Crop Pollinator and Cereal Crop Research](#)[<< Previous Abstract](#) | [Next Abstract >>](#)

© Copyright 2014 - [Copyright Information](#), [Privacy Statement](#), and [Terms of Use](#)
 American Society of Agronomy | Crop Science Society of America | Soil Science Society of America
 5585 Guilford Road | Madison, WI 53711-5801 | 608-273-8080 | Fax 608-273-2021
[Certification](#) 608-273-8085 | Fax 608-273-2081