# Increasing Corn and Bean Yields with Conservation Tillage and Fertigation in North-Central Mexico. (A06martinez174356-Poster)

Authors:

- C.Jasso-Chaverria *INIFAP*, *Mexico*
- M.A.Martinez-Gamino\* -INIFAP, Mexico and UC-Davis
- J.Huerta-Diaz UASLP, Mexico
- J.P.Mitchell University of California, Davis

• R.Gomez-Mendoza - INIFAP-CONACYT-SIGHO, Mexico

## Abstract:

In the Plateau zone of San Luis Potosi, Mexico, the scarcity of water for agriculture and the use of standard tillage (one plow and one or two disc operations) are the main obstacles to use more advanced technologies such as conservation tillage and fertigation. The objectives of this study were to develop technology to produce corn and bean using conservation tillage and fertigation, to optimize the use of natural resources (soil and water), and to increase yield of corn and bean. Results showed that using the fertilization doses of 40-60-00 (N-P-K units) in fertigation and conservation tillage, bean yield increased 98% compared to standard tillage and fertilization without fertigation. With corn, yield increased 31% when the 160-60-00 dose was applied with fertigation and conservation tillage. In both crops, a financial analysis indicated that the best option to obtain the highest yield of bean and corn was to combine the formula of 40-60-00 and 160-60-00 respectively, with conservation tillage.

#### **Corresponding Author Information:**

Miguel Martinez University of California, Davis. 1432 Drake Dr. # 2 Davis, CA 95616 phone: (530)752-6842 fax: (530)752-9659 e-mail: martinezg@ucdavis.edu

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