

CONSERVATION TILLAGE CORN, COTTON AND TOMATO SYSTEMS IN CALIFORNIA

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ABSTRACT

Conservation tillage (CT) is not widely practiced in California's Central Valley row crop production systems today. Current estimates of CT acreage in the region are less than 2% for major crops such as corn, cotton and tomatoes. A range of economic and environmental drivers have resulted in interest in alternative tillage systems throughout this area and local networks of farmers, equipment companies and researchers are now beginning to develop and refine CT cropping systems for these crops. The University of California / USDA Natural Resources Conservation Services CT Workgroup has grown to over 490 members in the past five years. Over 70 CT demonstration evaluations have been conducted during this time and a CT annual conference series has attracted over 1200 participants since 1998. A very wide range of CT approaches are being explored according to the specific environmental and crop rotation context of the various production regions throughout the Valley. In addition to cutting production costs, improving air quality and reducing surface water runoff are important potential benefits of CT production systems that are currently being investigated.