

TILLAGE INFLUENCE ON CROP PRODUCTIVITY AND SOIL HEALTH

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Abstract: There is an urgent need to match food production with increasing world population through identification of sustainable land management strategies. However, the struggle to achieve food security should be carried out keeping in mind the soil where the crops are grown and the environment in which the living things survive. Soil are create physical environment suitable for seed germination, seedling emergence and root development. This process requires optimum soil water and soil temperature regimes and freedom from oxygen and mechanical stress. Tillage affect the soil physical environment though its affect on physical properties of soil. The change in bulk density which always accompanies alters the pore size distribution and porosity, volume water content and particle to particle contact. Conservation agriculture (CA), practicing agriculture in such a way so as to cause minimum damage to the environment is being advocated at a large scale world-wide. Conservation tillage, the most important aspect of conservation agriculture, is thought to take care of the soil health, plant growth and the environment.

Keywords: Tillage, Crop productivity, Soil

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