

Energy conservation in tillage with application of plastic mulching : An overview

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ABSTRACT : Generally, energy conservation, fuel savings are related to the amount of reduction in tillage and may be quite substantial with no-tillage. Less machinery is needed for reduced tillage, which contributes to the decrease in overall energy used in crop production. Minimum tillage, no-tillage and mulching have been broadly used in modern agriculture operations which had showed good results in past and in present. These techniques have provided obvious benefits of soil and water conservation on sloping farmland in the hill regions. In order to reduce erosion, weed control and conservation of soil as well as water biodegradable mulch practices are utilized. There is increasing interest in the use of plastic mulching for fruit and vegetable crops in the agriculture field. Plastic mulches have tremendous effect on growth and yield of different crops. Application of plastic mulch on ground is done by manual and mechanical method. Mechanical method is generally used to reduce drudgery of labour with accuracy and efficiency of work.

Key Words : Energy conservation, minimum tillage, biodegradable mulch, effect of mulching on crop growth, limitations of plastic mulch, application of plastic mulch.