## Abstract:

Crop mixture is an important method of high production in agriculture. This technic can affect on soil environmental condition. In order to assess the yield and yield components in intercropping of barley (Hordeum vulgar L.) and clover (Trifolium Spp.) during the harvesting and paste heading an experiment was conducted in split plot experiment in the form of RCBD with three replications at the Research Farm of Agriculture Center of Sistan dam (Iran) in 2013. Factors studied include harvest by two harvesting stage as heading and paste as the main factor and using planting system consists of six different culture, sole barley, sole clover, sole barley + 25% clover, sole barley + 50%clover, sole barley + 75% clover, sole barley + 100% clover Was considered as a secondary factor. Features examined for barley, including stem diameter, stem length, leaf number, ear length, number of grains per spike, 1000 grain weight, grain yield, harvest index and dry weightAnd clover forage yield, dry matter, crude protein and crude fiber were. The results showed that the harvesting stage The spike length, number of grains per spike, grain weight, grain yield, dry weight, harvest index in barley and forage yield, dry matter, crude protein had a significant impact on clover and improve the plant's characteristics. Also planting system on shoot length, spike length, number of grains per spike, grain yield, harvest index in barley and plant dry weight and grain and forage yield, dry matter, crude protein and crude fiber were significant in clover. The highest LER was obtained from sole barley + 25% clover that have sign of advantage of intercropping system compared to sole cropping.

**Key words:** Crude protein, Forage yield, Harvest index, Harvesting stage, LER, Planting system.



## Thesis Submitted in Partial Fulfillment of the Requirement for the degree of Master of Science (M. Sc) in Agronomy

## Evaluation of yield and yield components in intercropping of barley (*Hordeum vulgar* L.) with clover (*Trifolium* Spp.) During two harvesting stage as heading and paste

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