

## Abstract

### Intercropping Soybean Cultivars Under Different Planting Densities

Although intercropping soybean with other crops have been investigated, not much research have been done on intercropping soybean cultivars. Three soybean cultivars( Williams, SRF 450 and Hobbit) with distinct morphological Characteristics were intercropped under four different plant densities ( 22.5,30.3, 45 and 90 plant  $m^{-2}$ ). The plots were established in Mashhad(N.E Iran) with a factorial design. The results of the experiment shwoed that Williams- SRF 450 intercrop treatment had the highest yield ( 4158 Kg  $ha^{-1}$  ).intercropping Williams ( a tall indeterminate cultivar ) with Hobbit (a short determinate cultivar) resulted in the formation of rippled canopy which increased crop canopy surface area that can absord direct sola radiation. This intercrop treatment did not give superior yield because competetive advantage of Williams over Hobbit resulted in a significant increase of empty pods in Hobbit plants.