

Budakli Carpici E. and M.M. Tunali, 2012. Effects of mixture rates on forage yield and quality of mixtures of common vetch combined with oat, barley and wheat under a winter intercropping system of southern marmara region. Journal of Food, Agriculture & Environment, 10(2):649-652.

Abstract

The current research was conducted to evaluate the forage yield and quality of stands of common vetch (*Vicia sativa* L.) in various combinations with annual cereals such as oat (*Avena sativa* L.), barley (*Hordeum vulgare* L.) and wheat (*Triticum aestivum* L.). Mixture rates were formulated using three combinations of common vetch-cereal (75:25, 50:50 and 25:75) under rainfed conditions in the southern Marmara Region, Turkey, during the 2009-2010 and 2010-2011 growing seasons. The field trials were arranged in a randomized block design with three replications. The averages of the two-year findings indicated that the highest dry matter was determined at pure oat stands, followed by common vetch-oat mixtures at ratios of 50:50 and 75:25. The highest crude protein yield was obtained from pure common vetch and common vetch-oat (75:25) stands. A common vetch-oat mixture at 75:25 can be recommended for experimental and similar ecologies because of its higher dry matter and crude protein yields.

Key words: Common vetch, oat, barley, wheat, crude protein, forage, mixture rates.