EFFECT OF CROP ESTABLISHMENT METHOD AND IRRIGATION SCHEDULES ON PRODUCTIVITY AND WATER USE OF WHEAT

Vipin Kumar Sagar1*; R.K. Naresh1; R.B. Yadav1; Satendra Kumar2; Kamal Khilari3 and Raghuvir Singh1

1Department of Agronomy; 2Department of Soil Science; 3Department of Plant Pathology
Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut-250110, U.P., India

Received-06.08.2016, Revised-21.08.2016

Abstract: A field experiment was conducted during 2014-15 and 2015-16 at Meerut, Uttar Pradesh. The grain yield (46.52; 47.63 and 44.01 and 44.88 q ha-1), straw (60.57; 61.55 and 59.94; 102.75 q ha-1) biological yield (107.09; 109.40 and 102.75; 104.82 q ha-1) was and harvest index (43.39; 43.49 and 42.53; 42.77) significantly higher in B20.4 and 4 cm irrigation at IW/CPE 0.8 during both the year. Physiological traits, yield attributes and yields were significantly influenced by land configuration and wheat irrigation schedules. In land configuration systems, B20.4and 4 cm irrigation at IW/CPE 1.2 displayed significantly higher water use efficiency (2.53; 2.51 and 2.19; 2.18 kg m-3) compared with other treatments. However irrigation schedules x land configuration interaction was significant for yield attributes grain, straw and biological yield except 1000 grain weight.

Keywords: Land configuration, Irrigation schedules IW/CPE, Water use efficiency

REFERENCES


*Corresponding Author