



# Yield and economics of sweet corn (*Zea mays* L.) cultivars as influenced by plant population and fertility levels on yield attributes and their interaction effect under zone IV a of Rajasthan

J.X. MASSEY\*, B.L. GAUR AND H.K. SUMERIYA

Department of Agronomy, Rajasthan College of Agriculture, Maharana Pratap University of Agriculture and Technology, UDAIPUR (RAJASTHAN) INDIA  
(Email : gremsdyke@yahoo.co.in)

**Abstract :** A field experiment was conducted during *Kharif* 2001 and 2002 to compare efficacy of three cultivars, three plant population and three fertility levels in sweet corn at the Instructional Farm (Agronomy), RCA, Udaipur (Rajasthan). The test cultivar Madhuri recorded maximum net returns (Rs 56941 ha<sup>-1</sup>) and B/C ratio (5.99:1) and remained at par to genotypes JK SCH 211. Among plant population, 75 thousands plant population recorded significantly maximum green cob and green fodder yield and fetched maximum net returns and B/C ratio than 55000 plants ha<sup>-1</sup>. With regards to fertility levels, application of 90:45 kg N: P<sub>2</sub>O<sub>5</sub> ha<sup>-1</sup> and 120:60 kg N: P<sub>2</sub>O<sub>5</sub> ha<sup>-1</sup> levels of fertility remained at par with each other in terms of yield and economics and application of 90:45 kg N: P<sub>2</sub>O<sub>5</sub> ha<sup>-1</sup> recorded 21.13 and 15.72 per cent higher in green cob and green fodder yield and 23.18 and 16.31 per cent higher in net returns and B/C ratio. Combined application of 75000 plant population alongwith 90:45 kg N: P<sub>2</sub>O<sub>5</sub> ha<sup>-1</sup> recorded significantly higher green cob and green fodder yield by 33.59, 28.93 and net returns and B/C ratio by 37.19 and 23.52 per cent higher over 55,000 plants ha<sup>-1</sup> alongwith 60:30 kg N: P<sub>2</sub>O<sub>5</sub> ha<sup>-1</sup> level of fertility.

**Key Words :** Sweet corn, Plant population, Fertility levels, Cultivars, Yield, Economics

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