

3rd International Conference on Agriculture & Horticulture October 27-29, 2014 Hyderabad International Convention Centre, India

Rabi sweet corn response to plant geometry and fertilizer

P R Mathukia, R K Mathukia, R P Choudhary and B S Gohil Junagadh Agricultural University, India

A field experiment was conducted during rabi seasons 2010 on clayey soil of Junagadh (Gujarat) to study the response of sweet corn to plant geometry (60 cm x 15 cm, 45 cm x 20 cm and 30 cm x 30 cm) and fertilizer (control, 90-45, 120-60 and 150-75 kg N-P₂O₅/ha). The results revealed that plant geometry of 45 cm x 20 cm enhanced growth and yield attributes and thereby green cob and fodder yield along with higher net returns and B:C ratio over 60 cm x 15 cm spacing. Application of 120-60 kg N-P₂O₅/ha improved growth and yield attributes and ultimately higher green cob and fodder yields with higher net returns and B:C ratio over control and 90-45 kg N-P₂O₅/ha. Therefore, spacing of 45 cm x 20 cm and fertilizer dose of 120-60 kg N-P₂O₅/ha could be adopted for higher yield and economical realization from *rabi* sweet corn under south Saurashtra agro-climatic conditions of Gujarat.

rkmathukia@jau.in