Effect of fertilization and root feeding of coconut tonic on the yield of coconut and soil properties

S. SURESH

ABSTRACT
Experiments were conducted in five farmers holdings at Puthalam village consecutively from 2006-07 to study the effect of root feeding of coconut tonic on nutrient concentration and yield of coconut. The soil was sandy loam in texture. The soil had a pH range of 7.7 to 8.0, EC of 0.41 to 0.90 dS m⁻¹, organic C 0.2 to 0.3 %, available N 78 to 88 kg/ha, available P 7.0 to 8.0 kg/ha, and available K 108 to 130 kg/ha. The treatments were: T₁: Control (Co fertilizers), T₂: Recommended chemical fertilizers (1.3 kg urea, 2.0 kg SSP and 2.0 kg muriate of potash), T₃: Root feeding of TNAU tonic without soil application of recommended chemical fertilizers, T₄: root feeding of coconut tonic and soil application of recommended chemical fertilizers. The palm west coast tall was tested. In each treatment 35 palms were tested and mean yield/tree/harvest was recorded. The soil application of recommended N, P, K and root feeding of coconut tonic resulted in highest K content (1.42 to 1.48%) compared to the other treatments. produced significantly more number of nuts (71.2 and 73.5 nuts/palm/year) compared to other treatments during 2007 and 2008, respectively. This was followed by the root feeding of TNAU coconut tonic alone (64.1 and 66.6 nuts/palm/year). The lowest yield was recorded in the control (48 and 48.2 nuts/palm/year, respectively).

Key words: Coconut, Fertilization, Soil, Tonic, Yield