Irrigation Scheduling in Cassava based Forage Intercropping systems

Kandasamy Vaiyapuri, Amanullah Mohamed, and Mohamed Yassin. Tamil Nadu Agricultural University, Lawley Road, Coimbatore-3, coimbatore, 641003, India

Field experiments were conducted to find out the level of irrigation and the effect of intercropping on the growth and yield Cassava at Veterinary College and Research Institute, Namakkal, Tamil Nadu during 2001 and 2002. The popular hybrid of cassava H 226 was tried as test crop. The soil of the experimental site was moderately drained, loamy sand. The soils were low in available N, medium in available P and low in available K. The experiments were laid out in a split plot design with three replications. In the main plot, four levels of surface irrigation at 1.0, 0.80, 0.60 and 0.40 IW / CPE ratio to 5 cm depth were compared. Three intercropping systems viz., sole cassava, cassava + maize (var. African tall) and cassava + cowpea (var. CO 5) were assigned to sub plot. Disease free setts of cassava were planted at a spacing of 90 x 90 cm. Two rows of intercrops were sown in between the rows of main crop as additive intercropping series. Seeds of fodder maize and cowpea were dibbled in lines at a spacing of 30 x 20 cm accommodating two rows of intercrops between the rows of cassava. The results revealed that irrigation at 0.80 IW / CPE ratio registered the highest tuber yield. However this yield was comparable with the tuber yield obtained with irrigation scheduled at 0.60 IW / CPE ratio. The economic evaluation revealed that the BC ratio was higher surface irrigation scheduled at 0.80 IW / CPE ratio followed by irrigation scheduled at 0.60 IW / CPE ratio and were comparable. Among the intercropping systems, sole cassava recorded the highest tuber yield and BC ratio followed by cassava intercropped with cowpea and both were comparable. Cassava intercropped with maize recorded the least tuber yield and BC ratio.

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