

7.1.4.1 Nyathi Ruth (1993). Effect of improved cultural techniques on growth and organoleptic properties of *Corchorus olitorius* L. in Lusaka province of Zambia. (Supervisor: Dr. K. Nichterlein).

Optimum spacing and nitrogen fertilizer application rates for maximum yield and quality of edible fresh leaves of *Corchorus olitorius* were studied at the University of Zambia Field Station during January to May 1992. The nitrogen levels were 0, 40, 80, 120 and 160kg/ha. Intra-row spacings were 20, 30, 40 and broadcasting. Inter-row spacing was 40cm in all plots. The results indicated that leaf yields were higher with nitrogen fertilizer application as topdressing than the control. The highest leaf yield was 1.44 t/ha obtained at 40 kg N per hectare with the lowest yield of 1.02t /ha from the control. There were little difference in crude protein and taste between control and fertilized plots. The crude protein was highest in wide spacing of 40 cm and was lowest in broadcasting treatments. It was concluded from the results of this experiment that maximum leaf yields were obtained through applying topdressing fertilizer of 40kg/ha. The crude protein and taste improved where spacing was done compared to broadcasting. Positive correlation indicated that an increase in leaf yield was accompanied by crude protein increase.