The effects of nitrogen and period of weed interference on the fibre yield of kenaf (Hisbiscus cannabinus L.) in the northern Guinea Savanna of Nigeria

N. C. Kuchinda, W. B. Ndahi, S. T. O. Lagoke and M. K. Ahmed

Abstract

The effect of weed interference on kenaf was evaluated at three nitrogen application rates. The vegetative phase was reduced but the growth and yield were increased by N (86 kg N/ha was the optimum N-rate). Plots kept weed-free had better growth and yield than the weed infested. Unchecked weed growth reduced fibre by 31.5–53.3% compared to the highest yield in the trials. The critical period of weed competition was between 3 and 6 WAS. Within this range, additional initial weed-free period of 1 day increased fibre yield by 19.1 kg/ha, while additional weed infestation period of 1 day reduced the yield by about 13.0 kg/ha.

Author Keywords: Nitrogen nutrition; Weed competition; Fibre production; Kenaf