

**EFFECT OF LIGHT ENVIRONMENT EXPERIENCED BY THE PARENT PLANT
ON THE ESTABLISHMENT PERFORMANCE OF STEM CUTTINGS OF *BACHIARIA DECUMBENS***

L. V. K. Liyanage

An experiment was conducted in a glass house at the University of New England, Armidale, Australia to investigate on the effect of the light environment of the parent plant on the establishment performance of stem cuttings of *Bachiaria decumbens*. The light treatments were 100% sunlight in the glass house (full sunlight), 60% and 30% of full sunlight.

Overall results demonstrated that the stem cuttings taken from full sunlight treatment produced higher number of tillers, larger leaf area and higher dry weights of tops and roots than the rest of the treatments. Stem cuttings obtained from 60% light treatment appeared to be superior to 30% light treatment. These results suggests that at full sunlight, the parent plant may have built up energy more rapidly than what is required and as a result the surplus carbohydrates would have accumulated in stem cuttings which would have contributed for higher top growth and root growth.