

## Mass Propagation of *Casuarina junghuhniana* Miq. Clonal Plants Using Mini-cutting Technique

G. Suresh Kumar, R. Seenivasn and P. Chezhian

*Tamil Nadu News print and Papers Limited  
Kagithapuram, Karur 639136 Tamil Nadu, India*

### Abstract

The modern concept of competitiveness includes producing products to meet the customer's requirements at low costs in a sustainable manner. The stem cutting techniques is the most widely used way for the large scale propagation of *Casuarina*, *Eucalyptus* and other pulp wood species in India. TNPL has started mass multiplication of *Casuarina junghuhniana* Miq. using mini-cutting technique from the indoor sand bed clonal mini hedges. When compared to stem cuttings, indoor sand bed clonal mini hedges improve the rooting potential and quality of root systems and save time and cost effective. Through mini-cutting technique, per square meter we have produced 5 times more cuttings, minimal nutrients and irrigation when compared to field stem cuttings. Moreover, indoor sand bed clonal mini hedges apical cuttings are rooted without rooting hormone and 90 percent rooting will occur where as stem cutting 40 per cent only. In mini-cutting plants, taproots like root system which is helpful to the clones to withstand during heavy winds. Replacing such stump derived stock plants by intensively managed indoor sand bed clonal mini hedges resulted in a noticeable enhancement of cutting capacity for adventitious rooting as well as of the overall quality of the plants produced in much shorter days with easier and cheaper maintenance. The study reveals that mini-cutting method ideal for the large scale propagation of *C.junghuhniana* clones in India.