Durability assessment of chemically treated Gigantochloa scortechinii in unsterile soil laboratory burial tests

Abstract

Culms of Gigantochloa scortechinii belonging to two age groups, 2 and 4 years, were chemically treated with ammoniacal-copper-quaternary (ACQ), borax-boric acid (BBA) and copper-chrome-arsenate (CCA) at 1, 2, 4 and 8 per cent solution strength by soaking, vacuum impregnation and high pressure sap-displacement processes. Unsterile soil laboratory burial tests were then conducted on 2- and 4-year-old bamboo blocks. At the end of the testing period (8 weeks), the 2-year-old culms showed higher weight loss than the 4-year-old culms to attack of decay fungi. Among the treatments, the vacuum pressure treated blocks showed lower weight loss against decay fungi. The 4 per cent preservative solution strength was found to be sufficient in controlling the decay fungi. © KFRI 2007. tors.