

Bamboo has a long history of use in Sri Lanka, but it is less utilized compared with other Asian countries. As our demand for wood products is rising, it is necessary to introduce alternative materials. Bamboo is one of the suitable alternatives as it possesses excellent physical and mechanical properties. However, it is liable to attack by biological deterioration agents. Lack of information and expertise on bamboo preservation has been a drawback in the promotion of bamboo in Sri Lanka.

Different treatment methods ie, dip diffusion, steeping, sap displacement and modified Boucherie were tested for *Bambusa vulgaris* using 5% boron solution as the preservative. In the dip diffusion method, bamboo samples were soaked in the preservative solution for 14 days. The steeping method was carried out by placing the bottom part of the freshly cut bamboo culms with branches in a vessel containing preservative for 7 days. In the sap displacement method, preservative was allowed to penetrate axially into the culms (under atmospheric pressure) by fixing a flexible tube to the butt end of the culm and the other end to a container with preservative. The treatment duration was 7 days. In the modified Boucherie method, preservative was forced axially through the culm with applied air pressure to the preservative container. The treatment was carried out for 6 hours.

The maturity and moisture content of the culms were to effect the penetrability of the preservatives. Young immature culms with high moisture content gave better penetration than mature culms with less moisture. Modified Boucherie method was found to be the most effective method if long length culms are to be preserved in the green (fresh) condition. For short length samples the dip diffusion method gave the highest penetration, while steeping and sap displacement method gave less penetration.