

Decay threshold of acetylated rattan (Calamus manan) against soft rot

ABSTRACT

We investigated the resistance of acetylated rattan against soft rot and other soil inhabiting micro-organisms in comparison with wood of beech and Scots pine. Calamus manan of 10 and 13 years old under rubber tree canopy was acetylated to different levels by reaction times (0.25 to 30 hours) and was tested for soft rot decay for 32 weeks. Acetylated rattan at decay protection thresholds of 15.4% and 16.2% weight gain (WG) were fully protected, as shown by both weight loss and strength loss criteria. The static bending properties of untreated rattan decayed by soft rot were significantly lower than for acetylated rattan.

Keyword: Acetylation; Cultivated rattan; Soft rot; Static bending properties