

Classification of decay resistance against white and brown rot fungi within the cultivated *Calamus manan* stems

ABSTRACT

The decay resistance classes of cultivated *Calamus manan* aged 10 and 13 years old were investigated. One stem of each age was divided into five different portions namely basal (1.5 metre), upper basal (5.5 metre), middle (13.5 metre), upper middle (17.5 metre) and top (22.5 metre) portions above the ground. Cross-wise, the stem was cut into periphery, intermediate and centre sections. The specimen of size 30 mm × 10 mm × thickness (1 × w × t) was oven-dried at 103°C for 24 hours and exposed to agar contained *Coriolus versicolor* (white rot, FPRL 28A), *Pycnoporus sanguineus* (White rot) and *Coniophora puteana* (brown rot, FPRL 11E) for 12 weeks according to ASTM D2017-81 (1986). The results showed that the decay resistance of *C. manan* varies with fungus, but not obviously different with the age and portion. The periphery section has the best resistance class compared to intermediate and centre sections. *C. manan* has a better resistant class against brown rot than those of white rot fungi.

Keyword: Brown rot; *C. manan*; Cultivated rattan; Decay resistance; White rot