

Evaluation of potencial specie for use in safety curtains for forest fire prevention

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ABSTRACT – In urban-rural interfaces, the threat of forest fires to properties, human life, as well as biodiversity is worrying, so different techniques have been developed to mitigate or prevent possible damage. One of these is the use of safety curtains, which are plantings in strips of species with less flammability than the main cultivation, in order to reduce or prevent the spread of fire and may also have overall conservation benefits. Its use has been recommended worldwide, but there are still few tests performed regarding its use. This study aimed to evaluate the flammability of *Ocotea porosa* (Imbuia) specie to compose safety curtains. Fifty replications of epi-radiation burns (250 to 350 ° C) were performed with 1g of freshly collected mature leaves (up to 2 hours after collection). The ignition frequency (FI) in percentage, the ignition time (TI) in seconds, the combustion duration (DC) in seconds, the combustion index (IC) determined by the flame height in centimeters and, Finally and the flammability (VI) value, established through FI and IT, were analyzed. The results showed the following values: FI = 96%, TI = 32.5s, DC = 17.9s IC = 4 (high) and VI = 2 (moderately flammable). It can be concluded that *Ocotea porosa* has potential to compose safety curtains, however, calorimetric and combustibility analyzes are recommended in order to reinforce the results of the present study.

Keywords: preventive forestry, forest protection, green barriers.