

Potency *Acacia nilotica* as Invasive Species at National Baluran Park, East Java- Indonesia

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Acacia nilotica is a thorny wattle native in India, Pakistan, and Africa, and it is widely distributed in tropical and subtropical Africa from Egypt to South Africa. This species has multifunction for human life such as: restore land degradation, fire break, source of timber, fire wood, tannin, and medicine. This species was introduced to Indonesia in Bogor Botanical Garden in 1850 from Calcuta-India botanical garden. This species has commercial value as source of high quality gum. Unfortunately, the production of the gum was very low, and finally they were cut off. Then, this species was introduced to Baluran National Park, East Java.-Indonesia in 1960 as fire break. The aim of this introduction is to hinder spread of fire from savanna to teak forest. Shortly, it grew rapidly and dominated the savanna area. It blocked the growth many kinds of grass as main component of baluran grass land. Besides, the grass also as feeding source of wild oxf java, wild cow and deer. The growth rate of *Acacia nilotica* reached 100-200 Ha per year, and it occupied savanna area nearly 50%. This phenomenon can make the ecosystem imbalance, pressure to savanna existence, especially for herbivores in this area. To solve the problems, biological, mechanical, and chemical treatment had been applied. Elimination by chemical way is not effective and efficient because it spent high cost, while mechanical way by cutting the trees was not only inefficient and ineffective, but also useless, because cutting triggered the dormant seeds to grow and regenerated the coppice. Removal this species by using bulldozer is quite effective, but it could change the land structure. Unfortunately, all the actions haven't been successful yet, and it is still main problem in Baluran National Park.

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