University of Venda

SCHOOL OF ENVIRONMENTAL SCIENCES

AN ASSESSMENT OF THE IMPACT OF ALIEN PLANT INVASIONS ALONG THE RIPARIAN ZONES: A CASE STUDY AT LUVUVHU, LUTANANDWA AND MUTSHINDUDI RIVERS, LIMPOPO PROVINCE, SOUTH AFRICA

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ABSTRACT

The invasion of riverine indigenous vegetation by invasive alien plant species is having a huge impact on the riparian ecosystem. The invasion of riparian zones by invasive alien plants is a serious environmental problem that threatens the sustainable use of products and services derived from such ecosystems. Invasive alien plants may in some instances be of great importance but are undoubtedly a growing threat to the world's many ecosystems. The study took place along three rivers namely; Luvuvhu, Lutanandwa and Mutshindudi and focused mainly on the identification and distribution of invasive alien plants and also on their impact on indigenous plant species along riverine areas. The investigation revealed the dominance of alien plant species in the experimental sites compared to the control sites; such pattern of plant distribution is leading to a decline in the indigenous plant species in the experimental sites compared to the control sites. The dominance of invasive alien plant species appears to be suppressive to the growth, well-being, flourishing and abundance of indigenous plant species in riverine areas. Tentatively the results guide us towards the need to take the necessary management measures of control to prevent the dominance of invasive alien plant species in our ecosystems.

Keywords: *Invasive alien plant, riparian zone, ecosystem, native plant*