Volume XXXIX-B2

Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XXXIX-B2, 35-40, 2012 www.int-arch-photogramm-remote-sens-spatial-inf-sci.net/XXXIX-B2/35/2012/doi:10.5194/isprsarchives-XXXIX-B2-35-2012

© Author(s) 2012. This work is distributed under the Creative Commons Attribution 3.0 License.

FOREST DISTURBANCE LEADS TO THE RAPI D SPREAD OF THE INVASI VE LEUCAENA LEUCOCEPHALA I N TAI WAN

J. C. Chen¹, C. T. Chen², and A. S. Jump³

Keywords: Exotic plants, Ecological invasion, Leucaena leucocephala

Abstract. This study, based on different investigative documents and analytical methods, elucidates spatial distribution of habitats for major invasive exotic plants, *Leucaena leucocephala*, in Taiwan. Results show that *Leucaena leucocephala* is most harmful to broad-leaved trees and its invasion directly relates to changes in the physical environment. *Leucaena leucocephala* can bloom and bear fruits all year round and during the period of seeds sprouting and saplings, the invasion varies greatly among different soil types. *Leucaena leucocephala* prefers weakly acidic soil, though it grows well with other soil textures and nutrients as well. The average spreading rate of *Leucaena leucocephala* is 3.55 ha year⁻¹ on abandoned farm land calculated from the aerial photographs taken in 1982, 1992, 2003, and 2007.

Conference Paper (PDF, 437 KB)

Citation: Chen, J. C., Chen, C. T., and Jump, A. S.: FOREST DISTURBANCE LEADS TO THE RAPID SPREAD OF THE INVASIVE LEUCAENA LEUCOCEPHALA IN TAIWAN, Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XXXIX-B2, 35-40, doi:10.5194/isprsarchives-XXXIX-B2-35-2012, 2012.

Bibtex EndNote Reference Manager XML

¹ Assistant Professor, Department of Forestry, National Pingtung University of Science and Technology, Corresponding Author, No.1, Shuehfu Rd., Neipu, Pingtung, 91201 Taiwan

² Professor, Department of Forestry, National Pingtung University of Science and Technology, Corresponding Author, No.1, Shuehfu Rd., Neipu, Pingtung, 91201 Taiwan

³ Senior Lecturer in Plant Ecology, Biological and Environmental Sciences, School of Natural Sciences, University of Stirling, Stirling, FK9 4LA, UK