Effect of lime and Zn on Establishment Survival and Yield of *Stylosanthes hamata* cv. Verano Sown in Upland Reforestation Areas.

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Abstract

This study was conducted at Ban Samran, Amphoe Kasetwisai Changwat Roi-et to investigate the effect of various rates of lime and Zn supply on establishment, survival and yield of *Stylosanthes hamata* cv. Verano grown in an area of 2 years old *Eucalyptus camaldulensis* reforestation. Experimental plots, 3 x 4 meter, were subjected to 3 rates of lime and Zn supply, e.g. 0, 500 and 1000 kg per hectare and 0, 2, 4 kg Zn per hectare. The plots were supplied with basal mixed fertilizer (15-15-15) at 156.25 kg per hectare. The experimental design was randomized complete block with 3 x 3 factorial arrangement with 4 replications. The cutting was imposed once at 5 months after planting at ground level.

* Research Project No. 13-0264-29.

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Zn application did not affect the growth, establishment and survival of *Stylosanthes hamata*. But the dry matter yields of Veranostylo were affected by different rates of lime supply. However, Verano stylo requires lime at 500 kg per hectare for their optimum dry matter yields.