

**WEED SPECIES DIVERSITY AND THE EFFECTS OF DIFFERENT WEED CONTROL METHODS ON
THE REGROWTH OF WEEDS IN RUBBER PLANTATION IN KOTA MARUDU, SABAH**

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2016

ABSTRACT

Weed is a plant growing where it is not wanted and disturbs the soil, water resources as well as human activities. After application of weed removal methods, regrowth may become a problem to farmers. The study aims to determine the diversity of weed species and the effect of different weed removal methods on the regrowth of weed species conducted within 10 weeks using quadrant and transect line in the rubber plantation at Kota Marudu with area of 3.2 acre. The result showed that there are 7 species obtained with a total of 328 individuals. Species *Asystasia gangetica* (Acanthaceae) have the highest number of individual weeds that was 312 (84.78%) whereas species *Borreria latifolia* and *Lantana camara* has the lowest number of individual weeds that was only 1 individual (0.27%). *Shannon-Wiener Index* showed $H' = 1.95$ which has average diversity and *Simpson's Dominance Index*, 0.27 which has low species evenness. One Way ANOVA at week 2, indicate that there is no significant differences between different weed removal methods on the regrowth of weeds ($p > 0.05$). However, starting from week 3 to 10, indicate that there were significant differences between different weed removal methods on the regrowth of weeds ($p < 0.05$). In conclusion, all weed removal methods result had similar effect on the regrowth of weed in rubber plantation.