

**Effect of organic fertilizers application to the growth of *Orthosiphon stamineus* Benth. intercropped with *Hevea Brasiliensis* Willd. and *Durio zibethinus* Murr**

**Abstract**

The aim of this study was to determine the suitable application rate of different organic fertilizers in relation to growth and yield of *Orthosiphon stamineus*. A Randomized Complete Block Design (RCBD) was used and *O. stamineus* seedlings transplanted with spacing 1.5 m between rows and 0.45 m within rows of plants both under rubber (6×4 m) and durian (15×10 m) canopies with light intensity equivalent to 50% of light intensity after measured. Each site was divided into three blocks or replicates. Each block contained four treatments and 20 plants of *O. stamineus* for each treatment. Three organic fertilizer treatments were applied to each block. The selected fertilizers or organic material were namely chicken dung, cow dung, oil palm of Empty Fruit Bunch (EFB) and control treatment and each treatment was randomly allocated in each block. Fertilizers were applied once every six months for one year at two application rates were 0.9 and 0.6 kg plant<sup>-1</sup>. The growth parameters measured were plant height and fresh and dry weight of leaves for shoot tips 30 cm and above. Chicken dung at rate 0.9 kg plant<sup>-1</sup> resulted in the highest yield (135 kg ha<sup>-1</sup>), followed by oil palm EFB, cow dung and control were 68, 54 and 32 kg ha<sup>-1</sup>, respectively under rubber. The trend also same under durian were 253, 56, 43 and 31 kg ha<sup>-1</sup>, respectively. The fertilizer response trend was found that the chicken dung was the better source of organic fertilizer followed by oil palm EFB and cow dung. Chicken dung applied at 0.9 kg plant<sup>-1</sup> is the most suitable for *O. stamineus* intercropped with rubber and durian. © 2011 Academic Journals Inc.