## Application of Oxifluorfen, Reed Extract, and Kirinyuh Herbicide on Weed Control and Yields of Mung Beans (*Vigna radiata* ( L.)) with No Tilleage System

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## ABSTRACT

Weeds are nuisance plants that have a negative impact on surrounding plants. One way to control weeds on no-tilleage land is by applying inorganic and organic herbicides. This study aims to compare the inorganic herbicide oxyfluorfen with the organic herbicide made from Imperata cylindrica extract and Chromolaena odorata extract for controlling weeds in green bean cultivation. The research was carried out on this experimental field at agroedukasi Caping Merapi and UPN's Plant breeding Laboratory in April up to July used a single factor of Complete Randomized Block Design consisting of 7 treatments with 3 replications, doses of 360 g/ha Oxyfluorfen, 480 g/ha Oxyfluorfen, 48 L/ha I. cylindrica extract, 56 L /ha I. cylindrica extract, 32 L/ha C. odorata extract, 40 L/ha C. odorata extract, and control or without weed controlling. The data obtained was analyzed for variance then tested further using the orthogonal contrast test. The research results showed that oxyfluorfen herbicide treatment could suppress weed growth in green bean plantings at 480 g/ha with a weed control efficiency value of 60.57%. Weed control using the herbicide oxyfluorfen or weed extract did not increase green bean yields. Herbicide dose of 480 g/ha provides the best suppression treatment for weed growth.

Key Words : Oxifluorfen, Mung Beans, Herbicide, Weed extract.