

# **UJI EFEKTIVITAS KOMPOS KULIT PISANG SEBAGAI SUMBER KALIUM PADA PERTUMBUHAN DAN HASIL TANAMAN KEDELAI EDAMAME (*Glycine max* (L.) Merrill)**

**Kian Rafi<sup>1</sup>, Bambang Heri Isnawan<sup>2</sup>, Hariyono<sup>3</sup>**

**Program Studi Agroteknologi, Fakultas pertanian  
Universitas muhammadiyah yogyakarta  
Yogyakarta**

## ***ABSTRACT***

*A study aims to determine the effectiveness of banana peel compost as a source of potassium and determine the dose of banana peel compost as the most optimal source of potassium on the growth and yield of Edamame soybean plants so that the administration of KCl fertilizer is expected to be reduced. This research was carried out in February 2019 until July 2019, at the Muhammadiyah University Yogyakarta Experimental Field in Kasihan, Tamantirto, Bantul, Special Region of Yogyakarta. Lowland.*

*The study was conducted with an experimental method in a poly bag using a Single Factor Treatment Design and arranged in a Completely Randomized Environmental Design. The treatments that were tried were the balance of banana peel compost and KCl fertilizer as a source of Potassium which was balanced based on K<sub>2</sub>O content and consisted of 5 treatments namely: 100% K<sub>2</sub>O KCl, 75% K<sub>2</sub>O KCl + 25% K<sub>2</sub>O compost banana peel, 50% K<sub>2</sub>O KCl + 50% K<sub>2</sub>O compost banana peels, 25% K<sub>2</sub>O KCl + 75% K<sub>2</sub>O compost banana peels and 100% K<sub>2</sub>O compost banana peels. Each treatment was repeated 3 times, at each test consisting of 3 samples and 1 reserve, so that the total number of research units was 60 units.*

*The results showed that the administration of banana skin compost as a source of potassium in the growth and yield of Edamame soybean plants proved to be effective in replacing the role of KCl fertilizer from 25% K<sub>2</sub>O to 100% K<sub>2</sub>O KCl. Giving 75% K<sub>2</sub>O KCl + 25% K<sub>2</sub>O compost banana peels can provide the best growth and yield on Edamame soybean plants*

**Keywords:** *K<sub>2</sub>O, KCl Fertilizer, Alternative KCl*