

INTISARI

PENGARUH KETEBALAN ABU VOLKAN DI ATAS PERMUKAAN TANAH YANG JATUH PADA BERBAGAI FASE TUMBUH TERHADAP PERTUMBUHAN DAN HASIL JAGUNG (*Zea mays* L.)

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Erupsi gunung berapi tidak dapat diprediksi sedangkan menanam tanaman pangan dilakukan secara terus menerus. Abu vulkan hasil erupsi gunung Kelud tahun 2014 mengarah ke barat daya yaitu ke arah Yogyakarta dengan jarak ratusan kilometer. Tanaman jagung adalah salah satu tanaman pangan yang dibudidayakan dari dataran rendah sampai dataran tinggi. Stadia pertumbuhan tanaman jagung yang terkena abu vulkan dapat berbeda-beda tergantung kapan erupsi gunung berapi terjadi. Penelitian ini telah dilaksanakan di Dusun Peni, Palbapang, Bantul, Yogyakarta mulai bulan Juni-September 2016. Penelitian disusun dalam rancangan acak kelompok lengkap (RAKL) faktorial dua faktor, dengan tiga ulangan. Data pengamatan dianalisis menggunakan analisis varian (ANOVA), apabila terdapat beda nyata dilakukan uji lanjut jarak berganda Duncan taraf nyata 5% guna mengetahui perbandingan antar perlakuan. Hasil penelitian menunjukkan bahwa abu vulkan yang jatuh saat tanaman jagung belum berkecambah menyebabkan tanaman jagung tidak tumbuh. Abu vulkan yang jatuh saat tanaman berumur 20 hari atau dalam fase vegetatif secara umum menunjukkan pertumbuhan dan hasil yang paling baik, akan tetapi akar tanaman menjadi serabut.

Kata kunci: *Zea mays* L., ketebalan, abu vulkan

ABSTRACT

***THE INFLUENCE OF VOLCANIC ASH THICKNESS IN THE SOIL SURFACE
THAT FELL VARIOUS OF GROWTH PHASES TO THE GROWTH AND
RESULT OF MAIZE (*Zea mays L.*)***

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Crops planting was done continuously, on the other hand that volcano's eruption was not predicted. Volcanic ash as the result of Kelud Mountains's eruption in 2014 walked into southwest (Yogyakarta) in hundreds kilometers. Maize was one of the crops that grew in lowland until plateau land. Maize growth stage with the volcanic asht was different, and it depended on the time when the eruption was done. This research was done in Peni Hamlet, Palbapang, Bantul Regency, Yogyakarta. It started at June-September, 2016. This research was arranged in randomized completely block design two factors with three blocks replications. Observation data was analyzed by Analysis of Variants (ANOVA). If there was a significant difference, it was analyzed by Duncan with 5% in significance level. That analysis was done to know the comparison between each treatment. The research's result showed that the falling of the volcanic ash when the maize yet germinated caused the maize was not grow. Falling of the volcanic ash when the maize was 20 days old or in the vegetative phase showed the best growth, but the roots of the maize became the fiber roots.

*Keywords: *Zea mays L.*, thickness, volcanic ash*