

# **PENGARUH KONSENTRASI DAN LAMA PERENDAMAN DALAM EKSTRAK BONGGOL PISANG TERHADAP PEMATAHAN DORMANSI BENIH KENTANG VARIETAS GRANOLA**

## **INTISARI**

Rendahnya produktivitas tanaman kentang dipengaruhi oleh beberapa faktor, salah satunya yaitu benih mengalami dormansi. Lamanya masa dormansi benih kentang yaitu 3-3,5 bulan. Hal ini menyebabkan terbatasnya ketersediaan benih kentang bagi para petani. Penelitian ini bertujuan untuk mengetahui pengaruh konsentrasi dan lama perendaman ekstrak bonggol pisang terhadap pematangan dormansi benih kentang varietas Granola. Penelitian ini dilaksanakan pada bulan September sampai dengan bulan Desember 2021, di Laboratorium Agroteknologi Fakultas Agroindustri Universitas Mercu Buana Yogyakarta. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dua faktorial yaitu konsentrasi ekstrak bonggol pisang (50%, 75%, 100%) dan lama perendaman (1 jam, 2 jam, 3 jam). Parameter yang diamati meliputi waktu pematangan dormansi, persentase perkecambahan, jumlah tunas, panjang tunas, dan bobot tunas. Hasil penelitian menunjukkan bahwa konsentrasi dan lama perendaman ekstrak bonggol pisang yang berbeda memberikan pengaruh nyata terhadap parameter yang diamati. Perlakuan perendaman konsentrasi ekstrak bonggol pisang 75% dan lama perendaman 1 jam memberikan hasil terbaik terhadap waktu pematangan dormansi, persentase perkecambahan, jumlah tunas, panjang tunas, dan bobot tunas pada benih kentang.

**Kata kunci:** Benih Kentang, Dormansi, Bonggol Pisang, Konsentrasi, Lama Perendaman

# **THE EFFECT OF CONCENTRATION AND SOAKING DURATION IN BANANA CORM EXTRACT ON THE BREAKING DORMANCY OF POTATO SEED GRANOLA VARIETY**

## **ABSTRACT**

The low productivity of potato is influenced by several factors, one of them is seed dormancy. The potato seed dormancy period is 3-3.5 months length. It causes the limited availability of potato seeds for farmers. This study aims to determine the effect of concentration and soaking time of banana corm extract on the breaking dormancy of potato seed Granola varieties. This study was conducted from September until December 2021, at the Agrotechnology Laboratory, Faculty of Agroindustry, University of Mercu Buana Yogyakarta. This study used a completely randomized design (CRD) with two factorials, namely the concentration of banana corm extract (50%, 75%, 100%) and soaking time (1 hour, 2 hours, 3 hours). The parameters that were observed included dormancy breaking time, percentage of germination, the number of shoots, shoot length, and shoot weight. The results of this study showed that the difference in concentrations and soaking times of banana corm extract had a significant effect on the observed parameters. The soaking process with 75% concentration and 1 hour soaking time of banana corm extract gave the best results on dormancy breaking time, germination percentage, the number of shoots, shoot length, and shoot weight on potato seeds.

Keywords: Potato Seed, Dormancy, Banana Corm, Concentration, Soaking Time