RESPON PERTUMBUHAN DAN HASIL STEK TANAMAN KENTANG (*Solanum tuberosum* L.) PADA BERBAGAI KONSENTRASI THIAMIN DAN JENIS MEDIA TANAM

ABSTRAK

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Penyediaan benih kentang bemutu berjumlah banyak merupakan masalah umum yang dihadapi petani tanaman kentang. Teknologi kultur jaringan dan stek benih kentang dapat dijadikan solusi. Tujuan penelitian adalah mengkaji interaksi antara konsentrasi thiamin dengan jenis media tanam serta konsentrasi thiamin dan media tanam yang tepat untuk pertumbuhan dan hasil tanaman kentang. Metode penelitian menggunakan percobaan lapangan yang disusun dalam Rancangan Petak Terbagi dengan 3 ulangan. Petak utama yaitu konsentrasi thiamin yang terdiri dari tiga taraf yaitu 1,5 ppm, 3 ppm dan 4,5 ppm. Anak petak yaitu jenis media tanam yang terdiri dari 3 taraf yaitu arang sekam:kascing (1:1), cocopeat:kascing (1:1) dan arang sekam:cocopeat:kascing (1:1:1). Data dianalisis menggunakan sidik ragam taraf 5% dan dilanjutkan dengan uji DMRT taraf 5%. Hasil penelitian menunjukkan tidak terdapat interaksi antara perlakuan thiamin dengan media tanam. Konsentrasi thiamin terbaik yaitu 3 ppm pada jumlah daun 6 MST dan bobot kering tajuk. Media tanam arang sekam:kascing (1:1) dan cocopeat:kascing (1:1) memberikan pertumbuhan lebih baik pada tinggi tanaman 6 MST dan 9 MST, diameter batang 6 MST dan 9 MST. Media arang sekam:kascing (1:1) dan arang sekam:cocopeat:kascing (1:1:1) memberikan pertumbuhan lebih baik pada panjang akar. Media arang sekam:kascing (1:1) memberikan pertumbuhan lebih baik pada jumlah umbi dan bobot umbi.

Kata kunci: Stek, Kentang, Media Tanam, Thiamin

GROWTH RESPONSE AND YIELD OF CUTTINGS OF POTATO PLANTS (*Solanum tuberosum* L.) ON VARIOUS CONCENTRATIONS OF THIAMIN AND TYPES OF PLANTING MEDIA

ABSTRACT

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The provision of quality potato seeds in large quantities is a common problem faced by potato crop farmers. this can be obtained by tissue culture technology and potato seed cuttings have been solutions. The aim of the research was to examine the interaction between thiamin concentration with the type of planting media and obtain the right concentration of thiamin and planting media for the growth and yield of potato plants. The research method used was a field experiments arranged in a Split Plot Design with 3 replications. The main plot was the concentration of thiamin which consists of three levels, namely 1.5 ppm, 3 ppm and 4.5 ppm. Subplots was a type of planting media consisting of 3 levels, namely husk charcoal:vermicompost (1:1), cocopeat:vermicompost (1:1) and husk charcoal: cocopeat:vermicompost (1:1:1). The data was analyzed using ANOVA at 5% and followed by DMRT at 5% level. The results showed that was no interaction between thiamin and planting media. The best thiamin concentration was 3 ppm at 6 WAP leaf count and header dry weight. Husk charcoal planting media: vermicompost (1:1) and cocopeat:vermicompost (1:1) provide better growth at plant height of 6 WAP and 9 WAP, stem diameter of 6 WAP and 9 WAP. Husk charcoal:vermicompost (1:1) and husk charcoal:cocopeat:vermicompost (1:1:1) provide better growth at root length. Husk charcoal medium:vermicompost (1:1) provides better growth in the number of tubers and tuber weight.

Keywords: Cuttings, Potato, Planting Media, Thiamin