

ABSTRAK

PENGARUH HERBISIDA NABATI DARI EKSTRAK UBI JALAR (*Ipomoea batatas*) TERHADAP PERKECAMBAHAN DAN PERTUMBUHAN GULMA *Praxelis clematidea*

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Gulma merupakan kendala utama dalam budidaya tanaman sehingga perlu dilakukan pengendalian. Gulma yang sering ditemukan di lahan pertanian adalah *Praxelis clematidea*. Ubi jalar (*Ipomoea batatas*) diketahui mengandung senyawa alelokimia yang berpotensi dijadikan herbisida nabati karena dapat menghambat pertumbuhan gulma. Penelitian ini dilakukan untuk melihat pengaruh ekstrak ubi jalar dari tiga klon (LPG-1, LPG-22, dan Antin-2) serta mengetahui konsentrasi paling efektif dalam menekan perkecambahan dan pertumbuhan *P. clematidea*. Penelitian dilaksanakan Maret hingga Mei 2025 di Laboratorium Ilmu Gulma dan Rumah Kaca Laboratorium Lapang Terpadu, Universitas Lampung. Uji perkecambahan menggunakan Rancangan Acak Lengkap (RAL), sedangkan uji pertumbuhan menggunakan Rancangan Acak Kelompok (RAK) dengan dua faktor dan tiga ulangan. Konsentrasi ekstrak yaitu 0 g/100 ml, 7.5 g/100 ml, 15 g/100 ml, dan 22.5 g/100 ml. Hasil penelitian membuktikan bahwa ekstrak ubi jalar pada konsentrasi 15 g/100 ml dan 22,5 g/100 ml efektif menekan perkecambahan dan pertumbuhan gulma *P. clematidea*.

Kata kunci: Alelokimia, *Praxelis clematidea*, Ubi Jalar

ABSTRACT

THE EFFECT OF BOTANICAL HERBICIDE FROM SWEET POTATO (*Ipomoea batatas*) EXTRACT ON THE GERMINATION AND GROWTH OF THE WEED *Praxelis clematidea*

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*Weeds are a major constraint in crop cultivation, thus requiring proper control. One of the most common weeds found in agricultural fields is *Praxelis clematidea*. Sweet potato (*Ipomoea batatas*) is known to contain allelochemical compounds with potential as a botanical herbicide due to their ability to inhibit weed growth. This study aimed to evaluate the effect of sweet potato extracts from three clones (LPG-1, LPG-22, and Antin-2) and to determine the most effective concentration in suppressing the germination and growth of *P. clematidea*. The research was conducted from March to May 2025 at the Weed Science Laboratory and the Greenhouse of the Integrated Field Laboratory, University of Lampung. Germination tests were arranged in a Completely Randomized Design (CRD), and growth tests were arranged in a Randomized Block Design (RBD) with two factors and three replications. Extract concentrations applied were 0 g/100 ml, 7.5 g/100 ml, 15 g/100 ml, and 22.5 g/100 ml. The results showed that sweet potato extract at concentrations of 15 g/100 ml and 22.5 g/100 ml was effective in suppressing germination and growth of *P. clematidea*.*

*Keywords: Alelochemical, *Praxelis clematidea*, and Sweet Potato*