

**PENGARUH INOKULASI RHIZOBAKTERI PEMACU
TUMBUH (RPT) DARI AKAR TITONIA (*Tithonia diversifolia*)
TERHADAP PERTUMBUHAN STEK MELATI
(*Jasminum officinale*)**

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ABSTRAK

Penelitian dilaksanakan pada bulan Februari sampai Agustus 2015 di Laboratorium Jurusan Tanah dan Rumah Kawat Fakultas Pertanian Universitas Andalas. Tujuan dari penelitian ini adalah mempelajari pengaruh pemberian inokulasi beberapa isolat rhizobakteri pemacu tumbuh dari akar titonia (*Tithonia diversifolia*) untuk meningkatkan pertumbuhan stek melati (*Jasminum officinale*). Penelitian ini berbentuk Rancangan Acak Lengkap (RAL) yang terdiri dari 7 perlakuan 5 kali ulangan. Perlakuannya yaitu: A = (kontrol), B = (Growtone), C = (Growrone + 1 ml inokulan), D = (Growtone + 2 ml inokulan), E = (Growtone + 4 ml inokulan), F = (Growtone + 6 ml inokulan) dan G = (Growtone + 8 ml inokulan) . Data hasil pengamatan dianalisis secara statistik dengan uji F pada taraf 5%. Hasil penelitian menunjukkan bahwa pemberian dosis inokulan rhizobakteri pemacu tumbuh dari akar titonia dapat meningkatkan pertumbuhan stek melati. Akan tetapi peningkatan dosis inokulan belum mampu memberikan pengaruh nyata terhadap jumlah daun, jumlah cabang dan tinggi stek melati. Perlakuan inokulan rhizobakteri 1 ml cenderung dapat meningkatkan pertumbuhan tanaman dengan rata-rata jumlah daun 48,60 helai, jumlah cabang 5,80 dan tinggi tanaman 22,90 cm. Sedangkan untuk populasi bakteri perlakuan inokulan 2 ml meningkatkan populasi bakteri pelarut P dari 4,41 cfu/g tanah menjadi 5,71 cfu/g tanah dan bakteri pemfiksasi N (*Azospirillum*) di 4,47 cfu/g tanah menjadi 5,15 cfu/g tanah.

Kata kunci : *Inokulan, rhizobakteri pemacu tumbuh, titonia*

**EFFECT OF INOCULATION OF GROWTH ENHANCING
RHIZOBACTERIA DERIVED FROM ROOTS OF TITHONIA
(*Tithonia diversifolia*) ON THE GROWTH OF JASMINE
(*Jasminum officinale*) CUTTINGS**

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ABSTRACT

A research on effect of inoculation of growth enhancing rhizobacteria derived from roots of tithonia (*Tithonia diversifolia*) as growth stimulator on the growth of Jasmine (*Jasminum officinale*) Cuttings was conducted from February to August 2015 in the wired-house and Laboratory of soil science Faculty of

Agriculture, University of Andalas. The purpose of this research was to study the effect of some isolates of rhizobacteria inoculation derived from the roots *Tithonia* (*Tithonia diversifolia*) to enhance the growth of jasmine cuttings (*Jasminum officinale*). This study consisted of 7 treatments and 5 replications. The treatments were: A = (control), B = (Growtone), C = (Growtone + 1 ml inoculant), D = (Growtone + 2 ml inoculant), E = (Growtone + 4 ml inoculant), F = (Growtone + 6 ml of inoculant) and G = (Growtone + 8 ml inoculant). The treatment units were placed at wired-house based on completely randomised design. The data collected were statistically analyzed the variance samples by using F test at 5% level of significance. The results showed that application of the inoculant improved growth of jasmine cuttings. However, different volume of inoculant was not able to provide a significant effect on the number of leaves, branches and the height of jasmine cuttings. The application of inoculant for 1 ml tended to improve plant growth through improving number of leaves (48.60), branches (5.80) and plant height (22.90 cm). While application of the inoculant for 2 ml improved P- dissolving bacteria by 5.71 cfu / g soil and N- fixing bacteria (*Azospirillum*) of 5.15 cfu / g soil.

Keywords: *inoculants, growth enhancing rhizobacteria, Tithonia*

