

ISBN NO: 978-602-51262-0-8

EKA SUSILA



PROSIDING

SEMINAR NASIONAL

**INOVASI TEKNOLOGI DALAM MEWUJUDKAN
KEMANDIRIAN PANGAN NASIONAL
BERKELANJUTAN**

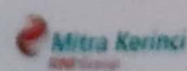
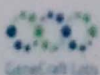
**GEDUNG SERBA GUNA POLITANI
RABU 4 OKTOBER 2017**

DISELENGGARAKAN OLEH



**POLITEKNIK PERTANIAN NEGERI
PAYAKUMBUH**

DIDUKUNG OLEH:



PROSIDING

SEMINAR NASIONAL TAHUN 2017

“Inovasi Teknologi Dalam Mewujudkan Kemandirian Pangan Nasional Berkelanjutan”
Gedung serbaguna Politeknik Pertanian Negeri Payakumbuh, Rabu 4 Oktober 2017

Prosiding dan Scientific Program :	Dr. Ir. Agustamar, MP Ir. Gusmalini, M.Si Ir. John Nefri, M.Si Ir. Irwan Roza, MP Ir. Irwan A, M.Si Fidela Violalita, S.TP, MP Indra Laksana, S.Kom, M.Kom Fidela Violalita, S.TP, MP Indra Laksana, S.Kom, M.Kom drh. Ulva Mohtar Lutfi, M.Si Hidayat Raflis, SP, M.Si Rince Alfia Fadri, S.ST, M.Biomed Ir. Fajri, MP Ir. Syakib Sidgi, M.Si Ir. Evawati, MP Ir. Deni Sorel, M.Si Annita, SP Haryadi Saputra, A.Md
Editor Pelaksana	Prof. Dr.Ir. Santoso, MP Prof. Dr. Novelina, MS Khandra Fahmy, S.TP, MP, Ph.D Dr. Ir. Susi Desminarti, M.Si Dr.Neni Trimedona, S.Si,M.Si Dr.Hendra Alfi, SP, MP Dr.Ir. Naswir,M.Si Fidela Violalita, S.TP, MP Indra Laksana, S.Kom, M.Kom Ir. Harmailis, M.Si Perdana Putera, ST, M.Eng Hidayat Raflis, SP, M.Si Efaleni Nasfita Yasmardi,S.Sos
Reviewer	
Layout	

Penerbit

Politeknik Pertanian Negeri Payakumbuh
Jl. Raya Negara Km. 7 Tanjung Pati Kec. Harau
Kab. Limapuluh Kota, Sumatera Barat 26271
Telp : (0752) 7754192
Fax : (0752) 7750220
Email : lembagapenelitiandanpengabdian@gmail.com



THE ARBUSCULAR MYCORRHIZAL FUNGI (AMF) INDIGENOUS AS ONE OF DETERMINANTS OF THE ESSENTIAL OIL CONTENT OF SHALLOTS (*ALLIUM ASCALONICUM* L)

Eka Susila#, Aswaldi Anwar*, Auzar Syarif*, Agustian*

Agriculture Science Study Program, Post Graduate Andalas University, Gedung Pascasarjana, Kampus Limau Manis, Padang, 25163, Indonesia

* Agroecotechnology Department, Agriculture Faculty of Andalas University, Kampus Limau Manis, Padang, 25163.
Email: ekasusila38@yahoo.com, aswaldianwar@yahoo.com, auzar_syarif@yahoo.com, agustian@faperta.unand.ac.id

Abstract— Shallots is popular because of its distinctive taste and smell which is characteristic of shallots containing essential oil. AMF effectiveness testing is often seen from plant growth and yield. Answering the question of the effect of AMF existence and AMF type compatibility on shallots quality improvement based on the essential oil content produced has not been reported. The purpose of this research is to know 1) the presence of indigenous FMA isolates on root of shallots based on root colonization, 2) the effect of various types of indigenous AMF on the essential oil content of shallots. The potted study was prepared using Completely Randomized Design in green house, with one factor of AMF type 6: (*Glomus* sp1, *Scutelospora* sp1, *Glomus* sp2, *Glomus* sp3, *Gigaspora* sp1, *Glomus* sp4) and one treatment without AMF. The similarity of variance between treatments was tested with Least Significant Difference test (LSD) at a 5% significance level. The results showed that 1) AMF inoculation increases the percentage and the Intensity of infection at the root compared with the treatment without AMF inoculation, 2) Inoculation of various types of indigenous AMF was significant different on the essential oil content of shallots.

Keywords— Shallots, Indigenous of AMF, Compatibility, essential oil.