

Author: [ADVANCED](#)

Volume Page

Keyword: 

[TOP](#) > [Available Issues](#) > [Table of Contents](#) > [Abstract](#)

ONLINE ISSN : 1349-1008

PRINT ISSN : 1343-943X

Plant Production Science

Vol. 9 (2006) , No. 1 71-77



[\[PDF \(573K\)\]](#) [\[References\]](#)

Plant Regeneration Capacity of Calluses Derived from Mature Seed of Five Indonesian Rice Genotypes

[Nono Carsono](#)¹⁾ and [Tomohiko Yoshida](#)²⁾

1) United Graduate School of Agricultural Science, Tokyo University of Agriculture and Technology

2) Faculty of Agriculture, Utsunomiya University

(Received: June 30, 2005)

Abstract: Establishment of a suitable system for plant regeneration of rice calluses derived from mature seed is a prerequisite for genetic transformation using callus as the target tissue. Selecting the most suitable medium and assessing the genotype performance for *in vitro* response are essential requirement for this purpose. The experiment with five Indonesian rice genotypes showed that callus-proliferation capacity (CPC) and callus-growth capacity were significantly affected by genotype and CPC by medium. The shoot-regeneration capacity and plantlet-regeneration capacity were affected by the interaction effect between genotype and medium. However for green plant-regeneration capacity, it was affected independently by genotype and medium. Culture media D1 and NB₅ were the most suitable media for callus subculture and plant regeneration, respectively. Genotypes Fatmawati and BP-140 consistently performed best in the callus subculture and plant regeneration.

Keywords: [Embryogenic calluses](#), [Plant regeneration](#), [Rice](#), [Subculture](#)



[\[PDF \(573K\)\]](#) [\[References\]](#)

Download Meta of Article [\[Help\]](#)

To cite this article:

Nono Carsono and Tomohiko Yoshida: "Plant Regeneration Capacity of Calluses Derived from Mature Seed of Five Indonesian Rice Genotypes". *Plant Production Science*, Vol. **9**, pp.71-77 (2006) .

doi:10.1626/pps.9.71

JOI JST.JSTAGE/pps/9.71

Copyright (c) 2006 by The Crop Science Society of Japan



[Japan Science and Technology Information Aggregator, Electronic](#)

