



UNIVERSITY OF SOUTHERN MINDANAO
USM Agricultural Research and Development Center (USMARDC)
Plant Pathology Research Laboratory
Kabacan, Cotabato

RESULTS OF THE BIOASSAY TEST

Name of the Pathogen: *Fusarium oxysporum* f. sp. *cabense* (Foc) Tropical Race 4 (source: infected cavendish banana)

Treatments: Shukaku riki (5 ml/liter, 10 ml/liter, 15 ml/liter, 20 ml/liter)
: Chemical check: Difenconazole (standard recommended rate)
: SDW check

Remarks: All levels of shukaku riki biofertilizer (5, 10, 15, 20 ml/liter of water) inhibited the growth of Foc TR4 *in vitro* comparable to the chemical check (difeconazole) which were rated Very Effective (VE).

DATA

Table 1. Degree Zone of Growth (DZG) (mm) of Foc TR4 applied with different levels of different levels of Shukaku riki biofertilizer after 72hrs.

Treatments	I	II	III	IV	V	Mean	DE
5ml/LH2O	8.5	10.0	12.0	9.0	5.0	8.9	VE
10/LH2O	11.0	11.0	10.5	7.0	9.0	9.7	VE
15/LH2O	9.0	7.0	9.5	12.5	7.0	9.0	VE
20/LH2O	7.5	7.0	6.0	8.0	9.0	7.5	VE
Difenconazole	0.0	0.0	0.0	0.0	0.0	0.0	VE
SDW	38.0	35.5	35.5	39.5	34.5	36.6	NE

Diameter Zone of Growth

Diameter Zone of Growth (DZG) mm	Degree of Effectiveness (DE)
0-10	Very Effective
11-20	Effective
21-30	Moderately Effective
31- above	Not Effective (NE)

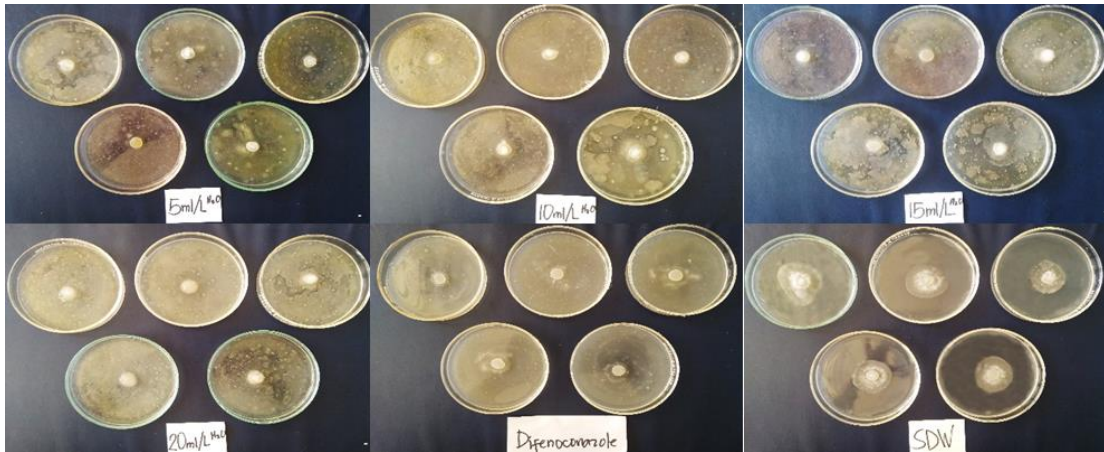



Figure 1. Bioassay set up of effects of different levels of different levels of Shukaku riki biofertilizer against Foc.

Date of Analysis: December 6-14, 2021

Analyzed by:


TAMIE C. SOLPOT, PhD
USMARDC PPRL Laboratory Head