

## *Magnaporthe grisea*

2 \*1 1

86/7/14:

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2  
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*Magnaporthe grisea*

147

222

3

2

### **Vegetative Compatibility Groups in Population of *Magnaporthe grisea* (Hebert)**

#### **Barr, the Causal Agent of Rice Blast in Mazandaran Province**

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#### **Abstract**

Vegetative compatibility groups of *Magnaporthe grisea* was determined using nit mutants of 147 monoconidial isolates collected from different areas of Mazandaran province. Nit mutants were selected from fast growing sectors on MMC medium. Two hundred twenty- two nit mutants were

selected and kept for experiment related to genetic complementation. Phenotype of nit mutants was identified using sodium nitrate, sodium nitrite, hypoxanthine, ammonium tartarat and uric acid. Most of the nit mutans (50%) belonged to nit1 phenotype. Each mutant was crossed with tester isolates. As a result three vegetative compatibility groups were identified among rice blast isolates in Mazandaran region. VCG2 was the most abundant group and VCG3 had the lowest number of isolates.

**Key Words:** Mazandran, Rice Blast, Vegetative compatibility group

(1998 )  
 (1985)  
 (1976)  
*Neurospora Aspergillus* ; ) *Magnaporthe grisea* (Hebert) Barr  
*Fusarium* ( *Pyricularia grisea* (Cooke) Sacc.  
 (1985) .(1985 ) 50  
*Verticillium Fusarium*  
 1989 )  
 .(2001 1994 1992  
 M. 540 (2000)  
*grisea* )  
 .(1998  
 4  
*M. grisea*  
 (1380)  
 78 ( )  
 2  
 4

<sup>2</sup>Nit mutant complementation tests

<sup>1</sup>Nit

20 °C

(1384)

*M. grisea* 116

3 4

( )

5 6

26 28 °C

( )

40

2/5

*M. grisea*

24

Archive of SID

)

(

10

20

)

(

17

(1380

)

27 °C

1

3 4

50

(1998

)

3 4

<sup>1</sup> Minimum medium

10

26 28 °C

(1 )

(1985 )

(1 )

(1987 )

*M. grisea*

( )

26 28 °C

15

(1987)

(2004)

1

1

*M. grisea*

26 28 °C

*M. grisea*

2 3

5 6

50

46

M

( 4) 3

)

(

/1	18	/	...	210
				1387

*M. grisea*

27

147

120

*Magnaporthe*

1

*grisea*

\*

\*

VCG

V1	76/5/13	A1	A	Rat-6
V1	76/5/9	C2	C	Sht-25
V2	77/5/20	B1	B	Soa-4
V2	77/6/1	E1	E	Kon-6
V2	77/6/1	F2	F	Ash-8
V2	77/5/18	F13	F	Sht-4
V3	78/6/3	D1	D	Rat-11

(2004)

1

2

26/53

F B E

Soa-

Sht-25 Rat-6

Sht-4 Ash-8 Kon-6 4

6/12

67/34 .

Rat-11  
*M. grisea*



Iso-13

1

Iso-58

( )

( )

IR-

4

2

1

3

IR-4

IR-2

3

2

IR-3

A

(1380)

F E

(1384)

*M. grisea*

116

147

V3 V2 V1

99

39

9

(1380)

IR- IR-3 IR-2 IR-1

/1	18	/	...	212
				1387

2 1

6 (2004)

A

3/4 3/2 1/7 1/7 28 F E D C B

*M. grisea* 62

DNA

*M. grisea*

Pot2

*M. grisea*

3

D

3

( )

F A

*Magnaporthe grisea*

.1380

170

.1384

.317 305 2 :

*Magnaporthe grisea*

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