

()

Magnaporthe grisea (Hebert) Barr

*

(// : // :)

Magnaporthe grisea

°C

% *Mat1-1* (%))

Mat1-2

M. grisea

Magnaporthe grisea . :

. ()

Magnaporthe grisea

Pyricularia grisea :] (Hebert) Barr
[(Cooke) Sacc.

. ()

-
1. Parasexual cycle
 2. Sexual dimorphism
 3. Mating type

E-mail: jnikkhah@ut.ac.ir

*

() .

آ
Mat1-1

.()

1

.()

Mat1-2 Mat1-1

()

l)

% (

.()

.()

()

°C)

°C

Ceratosphaeria grisea

Magnaporthe grisea (Hebert) Barr

% -

.()

PDA

PDA

.()

/

.()

°C

()

.()

...
: () TH16
Mat1-2 KA9
KA3 TH12 Mat1-1
% / - Mat1-2 Mat1-1
°C 1 KA3 KA9 ()
TH16 TH12

TH16 TH12 ")²
KA9 KA3 /

() °C °C
TH16 KA9 ()
× ×
()
KA9
TH16

(%)
() Mat1-1
KA9
TH16
(%)

1. fingermillet (*Eleusine coracana*)

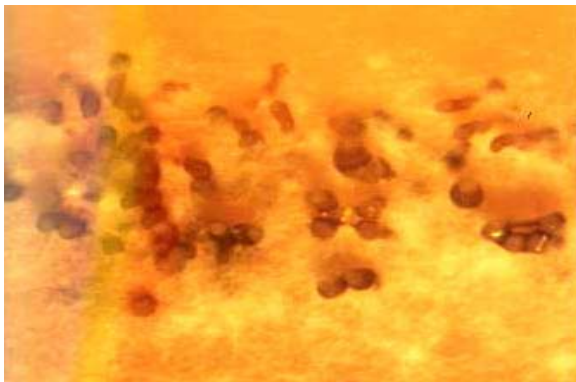
2. RFA (Rice Flour Agar)

% () %
 % ()
 ()

% % %

% % %
 ()

Magnaporthe grisea



Maz-17

Magnaporthe TH16

(x) *grisea*
Mat1-2

Magnaporthe

grisea

(% /) (% /)
 (% /) (% /)
 (% /) (% /)



Maz-39

Magnaporthe grisea KA9
 (x) *Mat1-2*

... :

.()

() ()
() ()



Maz-39
Magnaporthe TH16
(x) *Mat1-2* *grisea*

1
()
Mat1-1

M. grisea

%

Mat1-2

.() *Mat1-1*

.()

.()

.()

و

Mat1-1

.()

1. Clonal lineage

.()

REFERENCES

Magnaporthe grisea (Herbert) Barr

Magnaporthe grisea(Hebert

Barr)

3. Blakeslee, A. F. 1904. Sexual reproduction in the Mucorinae. Proceeding of National Academy of Science, USA 40: 205-319.
4. Dayakar, B. V., N. N. Narayanan & S. S. Gnanamanickam. 2000. Cross-compatibility and distribution of mating type alleles of the rice blast fungus *Magnaporthe grisea* in India. Plant Disease 84: 700-704.
5. Glass, N. I. & G. A. Kulda. 1992. Mating type and vegetative incompatibility in filamentous ascomycetes. Annual Review of Phytopathology 30:201-224.
6. Hebert, T. T. 1970. The perfect stage of *pyricularia grisea*. Phytopathology 61: 83-87.
7. Lesli, J. F. & K. K. Klein. 1996. Female fertility and mating type effects on effective population size and evolution in filamentous fungi. Genetics 144: 557- 267.
8. Leung, H. & P. H. Williams. 1985. Genetic analyses of electrophoretic enzyme variant, mating type, and hermaphroditism in *Pyricularia oryzae* Cavara. Canadian Journal of Genetic and Cytology 27: 697- 704.
9. Mekawatankarn, P., W. Kositratana., T. Phromrakasa & R. S. Zeigler. 1999. Sexually fertile *Magnaporthe grisea* rice pathogens in Thailand. Plant Disease 83: 939-943.
10. Nottoghem, J. L. & D. Silue. 1992. Distribution of mating type alleles in *Magnaporthe grisea* populations pathogenic on rice. Phytopathology 82: 421-424.
11. Tanaka, Y., N. Murtata & H. Kato. 1979. Behavior of nuclei and chromosomes during ascus development on the mating between either rice-strain of *Pyricularia*. Annales Phytopathological Society of Japan 45: 181-192.
12. Valent , B., M. S. Crawford., C. G. Weaver & F.G. Chumley. 1986. Genetic studies of fertility and pathogenicity in *Magnaporthe grisea*. Iowa state Journal of Research 60: 565-594.
13. Vigi, G. & S. S. Gnanamanickman. 1998. Mating type distribution and fertility status of *Magnaporthe grisea* populations from various hosts in India . Plant Disease 82: 36-40.
14. Vigi, G. & W. Uddin. 2002. Distribution of mating tyoe alleles and fertility status of *Magnaporthe grisea* causing gray leaf spot of perennial ryegrass and augustinegrass turf. Plant Disease 84: 827-832
15. Urashima, A. S., S. Igarashi. & H. Kato. 1993. Host range. Mating type, fertility of *Pyricularia grisea* from wheat in Brazil. Plant Disease 77: 1211-1216.

...

:

16. Yaegashi, H. & N. Nishihara. 1976. Production of the perfect stage in *Pyricularia* from cereals and grasses. *Annals Phytopathological Society of Japan* 42: 511-515.
17. Yaegashi, H. & M. Yamada. 1986. Pathogenic races and mating types of *Pyricularia oryzae* from soviet Union, China, Nepal, Thailand, Indonesia and Colombia. *Annales Phytopathological Society of Japan* 52: 225-234.
18. Zeigler, R. S. 1998. Recombination in *Magnaporthe grisea*. *Annual Review of Phytopathology*, 36: 249-275.

