

..... / /

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Japonica Indica

waxy

()

PCR

waxy

n

(CT)_n

n (CT)_n

PCR

/

Waxy

:

-
-
-
-
-

(*Oryza sativa* L.)

% /

(CT)_n - bp
] (n = n =)

(CT) (CT) (CT)
(-%)

(CT) (CT) (CT) .()
(-%)

(%) (CT) waxy

.()

% (CT)

.() ()

() waxy

waxy () 5-Leader bp)

% / (waxy

waxy

(CTTTGTCTATCTCAAGACAC)

(TTGCAGATGTTCTTCCTGATG)

()

Oryza ()

(CT)_n Wx ()

) Waxy

..... / /

DNA (

Waxy

()

DNA CTAB

()

DNA *Waxy* n (CT)_n

Waxy (CT)

()

() juliano OSR19

()

/ DNA

/ RM190

/ PCR dNTPs

Waxy

°C

°C

°C

°C

°C *Waxy*

.....

()
 % (CT)

(CT) .
 % /

% (CT)

(CT) .
 % (-%)

(CT) (CT) (-%)

(-%)

(CT) (CT) (CT) (CT) (-%)

(CT) (CT) (CT) ()

)

(

) (CT)_n

(CT) () (n= n=

(CT) (- bps)

() (CT) (CT) (CT)_n

(CT) (CT) (CT) (CT) (CT)

(%)

(CT)

()

(CT)

(CT)_n %

\hat{I} / /

WX

$(CT)_n$

\hat{a}

$-bp$

(\quad)

(\quad)

(CT)

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Evaluation of Genetic Diversity By Using of Link Maker For Amylase Content of Some Iranian Local Rice Cultivars

M.R. Rahemi¹, S.K. Kazemitabar², A. Moumeni³, A.A. Ebadi⁴ and N. Farhadi⁵

Abstract

Molecular markers are the best method for investigating the genetic diversity. In this experiment, 72 cultivars including *Indica* and *Japonica* were investigated in Rice Research Centre of Iran. In order to evaluate the genetic diversity of locus *waxy* linked to the trait controlling the amylose content, PCR was performed using two oligonucleotides (484 and 485) and scored. The important Iranian cultivars of rice were screened using *waxy* microsatellite marker and classified into seven groups based on (CT)_n repeats ranging from n=7 to 20. The amplified PCR products ranged from 102 to 128 bps in length and represented the (CT)_n repeats of (CT)₇, (CT)₈, (CT)₁₄, (CT)₁₇, (CT)₁₈, (CT)₁₉ and (CT)₂₀, that were according to amylose content of cultivars in Iranian germplasm classified in seven groups for that locus and explained 70%, 72%, 78.95%, 80% and 70% of each group variations, respectively.

Keywords: Rice, *Waxy* microsatellite, Oligonucleotide, Amylose content

1- B. Sc. Nuclear Science and Technology, Nuclear Technology Center Atomic Energy Organization of Iran

2- Assistant professor, Sari Agricultural Sciences and Natural Resources University

3- Assistant professor, Rice Research Institute, Rasht

4- Researcher Instructur, Rice Research Institute, Rasht

5- B. Sc. Institute of Standard and Industrial Research of Iran