TEST MULTILOCATION EARLY MATURING STRAIN HOPE RICE AGE IN THE PROVINCE JAMBI

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ABSTRACT

Superior varieties of rice is one of the major components that play a very dominant technology in improving crop production in the Jambi Province. The formation of varieties through a long process, where the latter is a multilocation trials. In the year 2010 had been implemented multilocation trials expectations rice strains (productivity > 7 tonnes / ha, early maturing age <90 days) in the District of West Tanjung Jabung Jambi Province. Testing aims to get the rice strain that adaptive expectations and high production in the Jambi Province. Testing using a randomized block design with 10 lines and two varieties of the comparison with three replications. The expected output of this testing activity is the rice strains 2-3 (productivity> 7 tonnes / ha, early maturing age <90 days). Test results showed that strains of rice clumps strains / varieties of rice plants is generally good and upright compact and sturdy vigor in general (score 1), flowering age and physiological age of the shorter cooking (early maturing) under 90 days compared with comparator varieties, thus these strains may be used in rice cropping intensity increased program IP to rice 400. Contained the highest rice production in strain OMCS2000-SKI-2 (8.058 tons of paddy / ha) was higher than comparable varieties varieties Inpari 1 (5.21 tons / ha) and Inpari 13 (5.75 tons / ha).

Keywords: Strains / varieties, production, age of early maturing rice

ABSTRAK

Varietas unggul padi merupakan salah satu komponen utama teknologi yang berperan sangat dominan dalam meningkatkan produksi tanaman pangan di Provinsi Jambi. Pembentukan varietas melalui proses yang cukup panjang, di mana proses terakhir adalah uji multilokasi. Pada tahun 2010 sudah dilaksanakan uji multilokasi galur harapan padi (produktivitas > 7 ton/ha, umur genjah < 90 hari) di Kabupaten Tanjung Jabung Barat Provinsi Jambi. Pengujian bertujuan untuk mendapatkan galur harapan padi sawah yang adaptif dan produksi tinggi di Provinsi Jambi. Pengujian menggunakan Rancangan Acak Kelompok dengan 10 galur dan 2 varietas pembanding dengan tiga ulangan. Keluaran yang diharapkan dari kegiatan pengujian ini adalah 2-3 galur harapan padi (produktivitas > 7 ton/ha, umur genjah < 90 hari). Hasil pengujian galur harapan padi menunjukkan bahwa bentuk rumpun galur/varietas tanaman padi pada umumnya bagus yaitu kompak dan tegak serta vigor pada umumnya kokoh (skor 1), umur berbunga dan umur masak fisiologis lebih pendek (genjah) dibawah 90 hari dibandingkan dengan varietas pembanding, dengan demikian galur-galur tersebut dapat digunakan dalam propgram peningkatan intensitas pertanaman padi menjadi IP padi 300. Produksi padi tertinggi terdapat pada galur OMCS2000-SKI-2 (8,058 ton GKG/ha) lebih tinggi dari varietas pembanding varietas Inpari 1 (5,21 ton GKG/ha) dan Inpari 13 (5,75 ton GKG/ha).

Kata Kunci : Galur harapan/varietas, produksi tinggi, padi umur genjah

INTRODUCTION

Rice plants are important food crops in the Jambi Province so that the commodity is a priority in supporting agricultural programs. In Jambi Province rice planting area is 149 338 ha, 119 486 ha harvested area, the productivity of 4.31 tonnes / ha with a total production of 514 941 tonnes. Rice productivity levels are still low compared to the potential productivity of several new varieties of rice.

The low productivity of rice because of the use of the same variety in a region with long periods of time, thus no longer able to produce higher due to limited genetic ability (Makarim *et al*., 2004). **Hence** the need for new varieties (VUB), in **lieu** of the old varieties that have experienced a decrease in productivity. Need for efforts to increase rice production in the province of Jambi to carry out the planting VUB to production centers.

In addition to replacing old varieties with the VUB, the use of quality seed (certified) in integrated crop management can improve outcomes (Zaini *et al*., 2004), because of quality seeds will be able to grow well on land that is less favorable conditions, free from pest attack carried the seeds that will reduce the risk of crop failure. On the other hand many plant breeders have produced varieties of various plants that have advantages in yield, resistance to pests and diseases, tolerance to abiotic stresses, and quality results. Advantage is channeled from the hands of breeders to subscribers (customers) through the seed. This means that the improved varieties will be felt by customers only if quality seeds of these varieties are available on a commercial scale. Quality means the seed has to be authentic (genuine, authentic, true-to-variety) to be able to reflect the characteristics of varieties represented in accordance with the description, live (viable) to grow when planted, healthy (healthy) so as not to spread the seed-borne diseases (seed- borne diseases) and clean (especially of weed seeds) in order not to be a source of weed infestation. For rice, the dominance of high yielding varieties in Indonesia $\geq$ 80%. This means that more than 80% of fields planted with improved varieties. The use of improved varieties have contributed to the substance of an average increase national rice production has now reached around 4.5 t / ha (Pick, 2004). Institute for Agricultural Technology Jambi has a mandate to provide location-specific technologies, providing the information required in the process of agricultural

development and to driving the development of agriculture in the region. Connected with the Ministry of Agriculture and Jambi should be able to provide the technology that is ready to be developed by farmers / other users. One of the many technology components required of farmers is a new high yielding varieties (VUB) rice is well adapted to the specific location that can increase the productivity of agricultural commodities with high efficiency values.

Therefore, breeding efforts should continue to be made through the assembly and testing of varieties in locations that represent a particular agroecological adapt continuously to adapt to the specific area or environment. Improved varieties is one technology that plays an important role in increasing the quantity and quality of agricultural products. Varieties of technical and economic benefits that a lot for the development of a farm business, including: the growth of crop plants to be uniform so that a simultaneous, higher yield, higher quality results and in line with consumer tastes, and the plant will have a high resistance to pests and disease and has a high adaptability to the environment so as to minimize the cost of inputs such as fertilizer and the use of drugs (Suryana *et al*, 1997).

Besides, that's one way to cope with biotic and abiotic environmental stress on the rice crop is to plant varieties that fit the environment. Therefore, the formation of varieties is still underway and is intended to obtain high yielding varieties of high yield potential, resistant / tolerant to various stress and have a good quality. By itself to obtain necessary test strains in the hope of paddy field (Kustianto, B, 2001). Testing activities are aimed to get rice hopes strains 2-3 (productivity> 7 tonnes / ha, early maturing age <90 days) in Jambi Province.

METHODOLOGY

Multilocation testing activities ages early maturing rice strains expectations held in the Sri Agung village, Batang Asam District Tanjung Jabung Barat District of Jambi Province. Testing activities conducted from April to August 2010 during the dry season in 2010.

Random testing activities using Design Group (RAK) with three replications. Data were analyzed with LSD. Rice strains used expectancy of 10 strains of life expectancy early maturing rice varieties and 2 for comparison. The materials to be used in the multilocation trials consisted of strain (Table 1):

Table 1. Lines / varieties of rice used in the hope of rice strains multilocation trials early maturing age in Jambi Province in 2010.

Code	Strain	Description
A	IR77298-14-1-2-14-SKI-3	Very early maturing
B	IR77298-14-1-2-10-SKI-2	Very early maturing
C	OM5930-SKI-2	Very early maturing
D	OMCS2000-SKI-2	Very early maturing
E	BP2854-5E-KN-17-2-2-3*B-2-2*B-SKI-1	Very early maturing
F	BP2854-5E-KN-17-2-2-3*B-2-2*B-SKI-2	Very early maturing
G	IR73971-87-1-1-1-1-SKI-1	Very early maturing
H	IR77168-34-2-3-3-SKI-2	Very early maturing
J	IR77168-34-2-3-3-SKI-3	Very early maturing
K	IR78581-12-3-2-2-SKI-2	Very early maturing
L	OM1490 (INPARI 13)	Checks
M	INPARI 1	Checks

Data collected on these activities include vegetative and generative phase of plant by the method of data collection are as follows:

A. Vegetative phase:

1. Plants form clumps (BTK RUM): visual assessment of the types of plants viewed from the compact / scattering)
2. Sturdiness Plant (score) (Vig): Vigor (sturdiness of plant). Several factors may affect the vigor interact (eg, number of tillers, plant height).
3. Number of productive tillers: Calculated number of productive tillers

B. Generative Phase:

1. Age of flowering, the number of days since spread to date 50% of flowering plants in experimental plots.
2. Mature age, the number of days since spread to date on the panicle grain reaches physiological mature phase (about - about 75% of existing plant clumps of rice grains on the panicle has a yellow ripe)
3. Plant height, the average plant height of 10 cluster sample is determined at random on each plot. Plant height was measured from the ground or base of the stem to the tip of the highest panicle. Observations made at the time of harvest.
4. Number of productive tillers: Calculated number of productive tillers
5. The number of panicles per hill, which is average - average number of panicles from 10 families were randomly determined samples. Observations made at the time of harvest.
6. Amount of grain content and grain vacuum, which is average - average number of grain fill and empty grain clumps of 3 samples taken at random from the sample to the number of panicles per hill. At each cluster sample is observed number of panicles, grain number and grain fill empty.
7. Weight of 1000 grains of rice content, ie dry weight of 1000 grain cleaner grain at a certain moisture content (14%). Perform the measurement of water content immediately after the weighing of grain weight.
8. Stress response of plants to iron toxicity, low temperature stress and resistance to pests and plant diseases, which was conducted using a scoring system according to the SES (IRRI, 1996).

Phase of the activity are as follows:

- Determining the location: Location which is used in this activity is irrigated land
- Determination of cooperator farmers: Conducted in coordination with related agencies to explain the activities to be carried out simultaneously to determine land to be used for research activities.
- Processing of land.

- Making experimental plot: making plot experiment with 4 x 5 m with three replications.
- Preparation of the seedbed.
- Planting: Planting is done by transplanting (Tapin). Planting is done after the seedlings were 21 days dipersemaian, with spacing of 20 x 20 cm and the number 1 seed / clump.
- Fertilizers: Urea 150 kg / ha, SP-36 100 kg / ha and 100 kg KCl / ha. The entire SP-36 and KCl given at the time of planting, while the urea was given three times each third dose at planting, at 4 weeks and 7 weeks after planting.
- Control of pests and diseases can be done with environmental sanitation, toxic bait installation and use of pesticides.
- Stitching: performed when the plants are 1-2 weeks. Stitching done to the plants die, using seeds that are still available.
- Weeding is done 2 times the weeding I at the age of 3 weeks after planting and weeding to II at the age of 7 weeks after planting.
- Data entry and data processing is done statistically

RESULTS AND DISCUSSION

Keragaan Plants

Appearance of plants such as data in Table 2 shows that the growth of rice plants varied. Of the clumps seen that of the 12 strains tested contained 7 strains that have a compact and upright form clumps (KTG) and 4 strains that have spread and form clumps of erect plants (MTG). From this data shows that the growth of strains / varieties of rice in general form of the mass is compact and upright well. Similarly, the rice plant vigor, which can be seen from 12 lines / varieties were tested, 10 lines / varieties have a very sturdy vigor (score 1) and a strain that has a sturdy vigor (score 3). If you look at the appearance of strains of rice that were tested both in the form of clumps and vigor showed that these strains have the potential to be developed as a form / type of plant will determine the potential of a variety. Related to the shape of the plant roots, stems, leaves and yield components. Yield components

of productive tillers perumpun or unit area, grain content per panicle, and grain content per unit weight of the grains. Whether or not the root of the result directly to the stem, leaves and tillers.

Table 2. Forms of plants and plant vigor lines / varieties of rice tested multilocation testing activities ages early maturing rice strains hope in Jambi Province

Code	Strain	BTK Rumpun	Vigor (Skor)
A	IR77298-14-1-2-14-SKI-3	MTG	1
B	IR77298-14-1-2-10-SKI-2	KTG	1
C	OM5930-SKI-2	MTG	1
D	OMCS2000-SKI-2	KTG	1
E	BP2854-5E-KN-17-2-2-3*B-2-2*B-SKI-1	MTG	1
F	BP2854-5E-KN-17-2-2-3*B-2-2*B-SKI-2	MTG	1
G	IR73971-87-1-1-1-1-SKI-1	KTG	1
H	IR77168-34-2-3-3-SKI-2	KTG	1
J	IR77168-34-2-3-3-SKI-3	KTG	1
K	IR78581-12-3-2-2-SKI-2	KTG	1-3
L	OM1490 (INPARI 13) (Chek)	MTK	1
M	INPARI 1 (Chek)	KTG	1

Note:

BTK Clumps:

KTG : Compact, Vertical
MTG : Spread, Vertical
MTK : Spread,drooping

Vigor : (Score)

1 : Very Sturdy
3 : Sturdy
5 : Moderate
7 : Weak

Plant height

Test results showed that the strains / varieties tested had plant height between 85.33 cm - 99.33 cm (Table 4). The results of statistical analysis showed that the strain IR77298-14-1-2-10-SKI-2 significantly different from strains of IR77168-34-2-3-3-SKI-3 and BP2854-5E-KN-17-2-2-3 * B-2-2-SKI * B-2, but not significantly different from other strains and varieties for comparison. The highest plant height found in gakur BP2854-5E-KN-17-2-2-3 * B-2-2 * B-SKI-2 (99.33 cm) and lowest in strain IR77298-14-1-2-10 -SKI-2 (85.33 cm).

Plant height is a standard nature (heredity). The difference in height of a strain / variety is caused by an influence of environmental conditions. If the conditions to grow well, the rice plant height is usually 80-120 cm. From the plant height data shows that the tested rice varieties with plant height of 85.33 cm - 99.33 cm high plants including rice and are to be developed adaptive enough for the plant height was included in the high

category for the rice crop was <110 cm (Silitonga, TS, et al, 2003). Criteria for selection in rice include rice plant height, where height is concerned with short-term crops and short panicles and also the resistance of plants to kerebahan. Plants will be lower at the higher location of the sea surface (Simanulang, 2001). Plant height is also one of the selection criteria in the rice plant, but does not guarantee high growth rate of production (and Dradjat Suprapto, 2005).

Table 3. Plant height, flowering age of 50%, mature age and height physiological strains / varieties of rice tested in multilocation trials activities ages early maturing rice strains hope in Jambi Province

No.	Strain	High Plant (Cm)	Age 50% flowering (days)	Age mature physiological (Days)
A	IR77298-14-1-2-14-SKI-3	95.00 d	49.33 c	68.00 bc
B	IR77298-14-1-2-10-SKI-2	85.33 a	45.67 ab	67.33 bc
C	OM5930-SKI-2	89.33 abc	50.33 c	69.67 abc
D	OMCS2000-SKI-2	87.33 ab	49.00 bc	67.67 c
E	BP2854-5E-KN-17-2-2-3*B-2-2*B-SKI-1	87.00 ab	50.67 c	68.00 abc
F	BP2854-5E-KN-17-2-2-3*B-2-2*B-SKI-2	99.33 f	51.67 c	68.67 ab
G	IR73971-87-1-1-1-1-SKI-1	93.00 cd	49.67 c	68.67 abc
H	IR77168-34-2-3-3-SKI-2	87.67 ab	50.00 c	68.33 abc
J	IR77168-34-2-3-3-SKI-3	91.67 bcd	49.00 bc	68.33 abc
K	IR78581-12-3-2-2-SKI-2	87.67 ab	49.67 c	69.00 a
L	OM1490 (INPARI 13) (Chek)	87.33 ab	44.67 a	60.67 ab
M	INPARI 1 (Chek)	89.00 abc	49.67 c	70.00 c

Note: The numbers on the same column followed by same letter are not significantly different in
Duncan's test

Age 50% flowering and physiological Mature Age

The diversity of flowering age and the age of mature physiological strains / varieties of rice were tested due to the diversity of vegetative growth phase and genetartif of each strain / variety. The duration of the vegetative growth phase is the cause of differences in age of the plant which is also caused by genetic factors of a crop (De Datta, and 19 821 in Endrizal Jumakir, 2005).

From Table 3 shows that age is very diverse flowering between 44.67 to 51.67 HST. The results of statistical analysis showed that the age of flowering varieties OM1490 (Inpari 13) (Chek) significantly different from strain OMCS2000-SKI-2 but not significantly different from other strains, which have the shortest life flowering varieties Inpari 13 (check) and the longest in strain BP2854 -KN-5E-17-2-2-3 * B-2-2 * B-SKI-2. The results of statistical analysis showed that the age of mature physiological strain IR78581-12-3-2-2-SKI-2 strain bebeda real with IR77298-14-1-2-14-SKI-3, IR77298-14-1-2-10 SKI-2-and comparator varieties Inpari 1, but not significantly different from other strains. From the age of mature physiological data shows that the shortest age Inpari varieties found in 13 (Chek) is 60.67 days and the longest in the varieties Inpari 1 (Chek) that is 70 days.

Of data ripe old age of flowering and physiological strain of rice that were tested had a shorter lifespan (early maturing) under 90 days compared with comparator varieties (check) Inpari Inpari 13 and 1, and thus these strains may be used in support of the program increased cropping intensity paddy rice to the IP 400.

Number of Productive Tillers and Number Malai per Clumps

Establishment of productive tillers determine the number of panicles of rice plants. The more productive tillers greater the number of panicles. There is a correlation between the number of panicles with the results, because the more the higher the number of panicles of rice plants.

Productive tillers per hill or broad unity is the determinant of the number of productive tillers panicle thus is one of the components that directly influence the level of grain yield (Simanulang, 2001).

From Table 4 shows that the average productive tillers of the strains / varieties tested varied in number. The results of statistical analysis showed that the number of progeny lines IR77168-34-2-3-3-SKI-3 significantly different from comparative varieties Inpari Inpari 13 and 1, but not significantly different from other strains. The highest number of productive tillers present in varieties Inpari 1 (check) (28.33 tillers) and lowest in strain IR77168-34-2-3-3-SKI-3 (22.67 chicks).

From the data the number of panicles terlhat that there is variation in the number of panicles of the strains tested. Panicle number found on most varieties Inpari 1 (Chek)

is 19.66 while the number of panicles panicle at least there is the strain IR78581-12-3-2-2-SKI-2 (13.66 panicle).

1000 grain weight of grain content

1000 grain weight of the lines / varieties were tested that varied between 25-27 gr. There are four strains that have a weight of 25 grams of beans, six strains that have a weight of 26 grams of beans and two strains that have a grain weight 27 gr. The results of statistical analysis of the 1000 grain weight showed that there is no real difference between the strains and varieties for comparison. The highest seed weight (27 g) contained in strain IR77298-14-1-2-14-SKI-3 and IR77168-34-2-3-3-SKI-2, seed weight is heavier than comparable varieties and other strains. Weight of 1000 grains of rice are not directly describe a large or a small grain of rice strains or varieties. Lines / varieties of gabahnya, 1000 grain weight will be high, and vice versa. Grain size is influenced by genetic traits as well as the growing power of adaptation to the environment, (Fagi and Las, 1988).

Table 4. Productive tillers, panicle number per hill and grain weight of 1000 lines / varieties of rice tested in multilocation trials activities ages early maturing rice strains hope in Jambi Province

No	Strain/Variety	Total Productive Tillers panicle	number per clump	weight 1000 grains (gr)
A	IR77298-14-1-2-14-SKI-3	25.67 abc	18,33 bc	27 a
B	IR77298-14-1-2-10-SKI-2	23.33 ab	18,00 bc	26 a
C	OM5930-SKI-2	24.33 ab	16,00 abc	25 a
D	OMCS2000-SKI-2	24.67 abc	18,66 c	25 a
E	BP2854-5E-KN-17-2-2-3*B-2-2*B-SKI-1	23.00 ab	17,66 abc	26 a
F	BP2854-5E-KN-17-2-2-3*B-2-2*B-SKI-2	23.00 ab	14,33 ab	26 a
G	IR73971-87-1-1-1-1-SKI-1	24.33 ab	17,00 abc	25 a
H	IR77168-34-2-3-3-SKI-2	25.00 abc	16,33 abc	27 a
J	IR77168-34-2-3-3-SKI-3	22.67 a	17,66 abc	25 a
K	IR78581-12-3-2-2-SKI-2	23.67 ab	13,66 a	26 a

L	OM1490 (INPARI 13) (Chek)	26.67 bc	14,33 ab	26 a
M	INPARI 1 (Chek)	28.33 c	19,66 c	26 a

Note: The numbers on the same column followed by same letter are not significantly different in
Duncan's test

Different weight of 1000 grains of rice are properties where the ability of a crop varieties / strains produce grain that many are opposed to the ability to produce grain is large and heavy, but high production can also be achieved by the amount of grain that many, although not very large in size (Simanulang, 2001).

Rice yield is determined by the amount of grain yield components such as content per panicle and 1000 grain weight. Obvious correlation with the weight of the 1000 grain and grain content per panicle is a reference to the selection criteria to obtain high yields.

Number of Grain and Grain fill void

The results of statistical analysis of the amount of grain fill indicate that the strain of IR77168-34-2-3-3-SKI-3 significantly different from strain OM5930-SKI-BP2854-2 and 5E-KN-17-2-2-3 * B-2 -2 * B-SKI-2 and ridak significantly different from other strains and varieties for comparison. The highest content of grain contained in strain OM5930-SKI-2 (67.66 points) and lowest in strain IR77168-34-2-3-3-SKI-3 (42.66 points).

The results of statistical analysis showed that the number of empty grain strain contrast varieties Inpari a significantly different strain OM5930-SKI-2 and IR77168-34-2-3-3-SKI-2, and not significantly different from other strains and varieties of comparative Inparai 13 . The highest grain hollow contained in strain BP2854-5E-KN-17-2-2-3 * B-2-2 * B-SKI-2 (30.00 points) and lowest in strain Inpari 1 (Chek) (10.00 grains). This empty grain crops in the inability to plant grain filling, the vacuum causes the results will not be high this could be due to genetic or environmental factors. Empty grain rice will affect the outcome, the higher the percentage of grain hollow then its effect on rice yields grew, which resulted in higher seed production of hollow low rice crop. The number of grains per panicle content has significant correlation with the results, so the number of grains per panicle content is one of the reference selection criteria to get high. The number of grains associated permalai real content with the plant but is strongly

influenced by grain vacuum. Similarly, the weight of the contents of rice grain is one of the determinants of weight outcomes (Simanulang, 2001).

Grain yield

Results of a plant is determined by the components of the plant, further stated that the nature of the components with each other to have a close relationship, the imbalance between the components of these results will greatly affect the potential outcome.

Table 5. The average number of grain content and grain vacuum, and the strain / rice varieties tested in multilocation trials activities ages early maturing rice strains hope in Jambi Province

No.	Strain/Variety	Content of grain (grain)	Grain vacuum (grain)	Results (ton / ha)
A	IR77298-14-1-2-14-SKI-3	60,33 ab	15,33 ab	6,812 ab
B	IR77298-14-1-2-10-SKI-2	49,00 ab	20,33 abc	7,203 ab
C	OM5930-SKI-2	67,66 b	22,33 bc	6,531 ab
D	OMCS2000-SKI-2	56,00 ab	14,66 ab	8,058 b
E	BP2854-5E-KN-17-2-2-3*B-2-2*B-SKI-1	58,00 ab	12,00 ab	6,598 ab
F	BP2854-5E-KN-17-2-2-3*B-2-2*B-SKI-2	65,33 b	30,00 c	5,657 ab
G	IR73971-87-1-1-1-1-SKI-1	57,33 ab	20,33 abc	6,995 ab
H	IR77168-34-2-3-3-SKI-2	55,33 ab	23,00 bc	6,719 ab
J	IR77168-34-2-3-3-SKI-3	42,66 a	12,00 ab	6,160 ab
K	IR78581-12-3-2-2-SKI-2	50,33 ab	16,00 ab	5,549 ab
L	OM1490 (INPARI 13) (Chek)	49,66 ab	20,00 abc	5,751 ab
M	INPARI 1 (Chek)	55,00 ab	10,00 a	5,212 a

Note: The numbers on the same column followed by same letter are not significantly different in
Duncan's test

The results of statistical analysis showed that grain yield comparable varieties (Inpari 13) significantly different from strain OMCS2000-SKI-2 and not significantly different from other strains and comparative variketas Inpari 1. Data from the test results indicate a wide range results from the strains / varieties were tested which contained the highest results in strain OMCS2000-SKI-2 (8.058 tons of paddy / ha) while the lowest are

the varieties Inpari 1 (Chek) (5.21 tons of paddy / ha) . The results obtained by the tested strains are higher than comparable varieties Inpari Inpari 13 and 1, these results indicate that the tested strains have developed a high yield potential in irrigated land.

Reaction to pest attacks, disease and Phenotypic Acceptance Rate (PACP).

Based on the observation of pests, there is a stem borer attack in some strains, but this has no effect on the growth of rice plants .. These pests appear at the time the rice into the bunting with a low-intensity attacks 5%. Control efforts carried out by spraying with insecticides and environmental sanitation to prevent the pests do not attack other ketanaman.

From Table 6 shows that of the tested strains in general are resistant to neck blast, ni it only attacks the symptoms shown by the range between 5-10%. While for leaf blast disease strains that are diseased leaves Blas intensity of the attacks 5-10% (score 3). This disease appears when plants begin to cook rice. Symptoms of the disease is indicated by brown leaf spots that are shaped like a rhombus. Disease demonstrated by Blas panicle panicle neck partially rotten and dark.

Table 6. Disease resistance against strains of rice, Phenotypic Acceptance Rate (PAcp) and horizontal root lines / varieties of rice tested in multilocation trials activities ages early maturing rice strains hope in Jambi Province

No.	Galur/Variertas	Neck Blast (Score)	PAC (Score)	Leaf Blast (Score)	Root fall (Score)
A	IR77298-14-1-2-14-SKI-3	1	1	1	1
B	IR77298-14-1-2-10-SKI-2	3	1	1	1
C	OM5930-SKI-2	1	1	3	1
D	OMCS2000-SKI-2	3	3	3	1
E	BP2854-5E-KN-17-2-2-3*B-2-2*B-SKI-1	3	3	1	1
F	BP2854-5E-KN-17-2-2-3*B-2-2*B-SKI-2	3	3	3	1
G	IR73971-87-1-1-1-1-SKI-1	3	3	3	1
H	IR77168-34-2-3-3-SKI-2	1	1	3	1
J	IR77168-34-2-3-3-SKI-3	3	3	1	1
K	IR78581-12-3-2-2-SKI-2	1	3	1	1
L	OM1490 (INPARI 13) (Chek)	1	1	1	1
M	INPARI 1 (Chek)	1	1	1	1

Ket :
- Neck Blast and Leaf Blast - PAcp

Score : 0 : no one attacked
1 : less than 5% affected
3 : 5-10% attacked

Skor : 1 : Very good
3 : Very good

From the observation of phenotypic acceptability (PAcp) looks at large strains tested showed very good performance (score 1) and good (score 3). This situation suggests that the strains tested showed good performance during the growth until harvest.

Observation of phenotypic acceptability (PAcp) is an assessment of the whole plant, especially in kenampakkan panicle at harvest (physiologically mature phase). at a location of the rice growing environments (Balitpa, 2002).

CONCLUSIONS AND RECOMMENDATIONS

1. Form clumps strains / varieties of rice plants that were tested are generally good and upright is compact and sturdy vigor in general (score 1).

2. Ripe old age of flowering and physiological shorter (early maturing) under 90 days compared with comparator varieties, thus these strains may be used in the program increased the intensity of the rice paddy to the IP 400.
3. The test results obtained by two strains of rice hope hope rice strains that have production> 7 tonnes / ha early maturing age <90 days, namely, strain IR77298-14-1-2-10-SKI-2 (7.233 tons of paddy / ha) early maturing age of 68 days and strain OMCS2000-SKI-2 (8.958 tonnes paddy / ha) age of 69.67 days early maturing.
4. Contained the highest rice production in strain OMCS2000-SKI-2 (8.058 tons of paddy / ha) was higher than comparable varieties varieties Inpari 1 (5.21 tons of paddy / ha) and Inpari 13 (5.75 tons of paddy / ha).

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