

Summary of presentation

Fruit Selection and Breeding

Identification of betalains and expression analysis of betalain gen in dragon fruit varieties

Trần Thị Oanh Yến , Ngô Văn Bình , Kui Lin-Wang³ và Andrew Allan

SUMMARY

Seven dragon fruit varieties (red flesh Long Dinh 1, pink purple flesh LD5, purple red flesh T7, pink white flesh T12, yellow peel and B666-hybrid with yellow peel) having different phenotypes for peel and flesh coloration such as red, brown red, pink red and yellow in fruit peel and red, pink purple, pink white and white in fruit flesh were analyzed for betalain content and gene expression. Betalain content of these varieties had been determined by UV-VIS, results showed that betalain content in peel and flesh of red flesh dragon fruit Long Dinh 1 was highest. Betalain contents of samples with red, pink red, brown red colour in fruit peel and red, pink purple in flesh were higher than those of samples with white and pink white flesh. Expression analysis of three genes in the betalain biosynthesis pathway coding for enzymes Laccase, DOD, and CYP76AD by qRT-PCR, results suggested that CYP76AD might play an important role in pigment determine in peel and flesh of dragon fruit. CYP76AD expression strongly influences on red color in flesh and peel of dragon fruit and completely absent in phenotypes with yellow peel and white flesh. Deep sequencing of dragon fruit RNA gave enough data for isolation of the key genes for betalain production - DOD, Laccase and a newly described P450 (CYP76AD1). It appears that this is the key gene for red/yellow differences in dragon fruit as its expression is absent in yellow fruit. Gene variants are currently being isolated for this gene to allow for marker assisted selection.

Keywords: *Betalain, gene expression, pink purple dragon fruit, qRT-PCR, yellow dragon fruit.*

Result of breeding big fruit and thick flesh longan variety

Đào Thị Bé Bảy, Hồ Thị Ngọc Hải và Trần Thị Oanh Yến

SUMMARY

In Vietnam, there is a wide large sources of longan germplasm with about 30 varieties/clones. Each variety has some good and bad characteristics. Such as Xuong com vang variety has good fruit quality, big size, thick flesh but fruit dropping ratio after fruit setting is high. Tieu da bo variety has high yield, small fruit, big seed and thin flesh.

In order to improve Xuong com vang and Tieu da bo longan variety, a total of 1,719 hybrids had obtained from four combinations of Tieu da bo longan x Xuong com vang longan (1,224 hybrids), Xuong com vang x Tieu da bo (340 hybrids), Sai Gon x Tieu da bo (11 hybrids), Long longan x Tieu da bo (65 hybrids), Tieu Vung Tau x Tieu da bo (79 hybrids). In 2011, the results in quick evaluation of 48 hybrids, four hybrids (coded as: T - 138, X-148, T-87 and T-104) showed good characteristics such as fruit weigh (> 11,0g), thick flesh (> 6,0 mm) and high brix value (> 23%).

Keywords: Longan, big fruit, thick flesh.

Assessment of genetic diversity on durian cultivars from producing areas in South of Vietnam using inter simple sequence repeat (ISSR) marker

Nguyễn Phương Thúy, Trần Thị Oanh Yến, Trần Thị Thảo Như, Phạm Thị Mươi, Lê Thị Cẩm Tú, Hoàng Văn Hiếu và Mai Văn Trị

SUMMARY

The genetic variability among durian varieties including local, exotic and promising ones from producing areas in South of Vietnam was analyzed using the Inter Simple Sequence Repeat (ISSR) technique. Genomic DNA was extracted from fresh leaf samples of 30 collected varieties, using 16 ISSR markers. Among them, 10 ISSR markers showed high polymorphism and used for genetic diversity analysis, they were ISSR807, ISSR808, ISSR810, ISSR815, ISSR828, ISSR835, ISSR850, ISSR855, ISSR866 and ISSR888. A total of recorded alleles were 112 alleles, three ISSR markers showed high polymorphism such as ISSR850 (18 alleles), ISSR828 (13 alleles), ISSR888 (13 alleles), an average was 11,2 alleles for one ISSR marker. Based on the results from the dendrogram analysis, two clusters of 2 sub-groups in each could be separated with similarity coefficients ranging 0,56. The results showed the existence of diversity among durian varieties. The ISSR analysis promises as an effective tool in estimating genetic polymorphism in different accessions of durian cultivars in South of Vietnam.

Keywords: DNA, Durio zibenthinus Murr., genetic diversity, Molecular markers, ISSR (Inter Simple Sequence Repeat).

Fruit Production

Effects of plant population density on fruit yield and fruit quality of Queen pineapple (*Ananas comosus*)

Nguyễn Trịnh Nhất Hằng và Nguyễn Minh Châu

SUMMARY

The pineapple of Queen variety which has been cultivated for long time in the acid sulfate soil of Mekong River Delta, the area and production are approximately of 22,400 hectares and 261,320 tons. Many factors are involved in the determination of planting density. The present study was conducted in Tan Phuoc district, Tien Giang province which arrange densities vary from as low as 45.000 plants/ha to as high as 80.000 plants/ha. Densities are selected to manage these relationships with a view to effecting the desired production. The result showed that the plant population density influenced on Queen pineapple fruit weight and fruit yield.

Keywords: Queen pineapple, density, *Ananas comosus*.

Researches on selecting the citrus (*Citrus* sp.) rootstocks tolerant to drought, acid sulphate soil conditions at Mekong Delta

Lê Thị Khoẻ, Đỗ Hồng Tuấn, Nguyễn Ngọc Anh Thư, Võ Hữu Thoại và Nguyễn Minh Châu

SUMMARY

*Under scenarios of climate change, irrigation water sources are scarcity, in drought stress conditions, growth, development, yield and quality of crops may be reduced. Genetic diversity of wild and cultivated species and cultivars adapted to the adverse environmental conditions are helpfully investigated and developed. Therefore, in order to select citrus genotypes tolerant to drought conditions the experiment was conducted in the duration of 2008-2012. The research results showed that the native citrus genotypes named as Truc (*Citrus hystrix*), Chua pumelo (*C. maxima* (Burm.) Merr.), Thanh tra pumelo (*C. maxima* (Burm.) Merr.), Do pumelo (*C. maxima* (Burm.) Merr.) were better drought tolerance. The good scion-rootstock combinations were Sanh orange (*C. nobilis*) grafted on Truc (*C. hystrix*) rootstock based on morphological characters and precocious, good quality fruits; The group of Da xanh pumelo and Nam roi pumelo (*C. maxima* (Burm.) Merr.) grafted on Chua pumelo (*C. maxima* (Burm.) Merr.), Thanh tra pumelo (*C. maxima* (Burm.) Merr.) and Do pumelo (*C. maxima* (Burm.) Merr.) with respect to morphological and drought tolerant characteristics. The results also showed that Mat orange (*C. senensis*), Long Co Co pumelo (*C. maxima* (Burm.) Merr.), Tau lemon (*C. limona*) were better tolerant to aluminum toxicity under hydroponic and acid sulphate soil conditions. The study on the scion and rootstock interactions tolerant to the acid sulphate soils obtained that the first combination groups of seedless Mat orange grafted on Mat orange (*C. senensis*) rootstock, Duong mandarin grafted on Tau lemon (*C. limona*) rootstock were best acid sulphate soil adaptation and compatibility and the second group of Sanh orange (*C. nobilis*) grafted on Mat orange (*C. senensis*), Da xanh and Nam roi pumelo (*C. maxima* (Burm.) Merr.) grafted on Long Co Co pumelo (*C.**

maxima (Burm.) Merr.) rootstock were good tolerant to acid sulphate soils and fruit quality.

Keywords: Acid sulphate soils, drought, local *Citrus species*.

Fruit Protection

Study on characterization of *Colletotrichum* species associated with anthracnose on hot pepper (*Capsicum annuum*)

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Nguyễn Thành Hiếu¹ và Trần Kim Cương¹

SUMMARY

Fungal isolates from infected anthracnose hot pepper fruits in Binh Dinh, Tay Ninh, Tien Giang, Dong Thap and Hau Giang that showed typical anthracnose symptoms were identified as *Colletotrichum acutatum*, *Colletotrichum truncatum* and *Colletotrichum gloeosporoides* base on morphological characters and 28S rRNA gene sequencing. Base on descriptions of the morphological characteristics such as diameter, colony color, shape spores during incubation, there was a direct optical correlation with phylogenetic groups.

Keywords: *Colletotrichum* sp., *Capsicum annuum*, anthracnose.

Studying of pathogenicity of *Colletotrichum* species associated with anthracnose on hot pepper in Viet Nam

Nguyễn Ngọc Anh Thu , Lê Thị Tường , Đoàn Cao Kên ,
Nguyễn Thành Hiếu và Trần Kim Cương

SUMMARY

Fungal isolates from infected anthracnose hot pepper fruits in Binh Dinh, Tay Ninh, Tien Giang, Dong Thap and Hau Giang that showed there are 25 isolates belonging to *Colletotrichum* species.

Assessment of pathogenicity of all strains isolated from infected hot pepper anthracnose when inoculate back on the Sung vang chau Phi hot pepper (declining fruit hot pepper), the most destructive race TG3, design to be TG8, and TG10 TG9 and do the same on erect fruit hot pepper with varieties 207 showed TG8, TG9 strains were the most heavy disease. These results have important significant for inoculating to choose varieties hot pepper able anthracnose resistance.

Keywords: Hot pepper, anthracnose, Colletotrichum.

Screening the resistant ability to anthracnose disease of some potential varieties/hybrids chilli

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SUMMARY

Anthrachnose is one of the most important diseases in chilli in many cultivation regions of Vietnam. The disease was reported to be responsible for 20-30% annual yield loss of total chilli production in the Mekong Delta. At present, to control this disease, many synthetic systemic fungicides are being used. However, these pesticides may lose their usefulness due to negative consequences for human health and the environment and development of resistance in pathogen populations. The identification and use of resistant genotypes against Colletotrichum is the important component for genetic improvement of chilli. In this study, 127 chilli genotypes/varieties were screened to identify resistant clone to the disease. The results showed that CĐ11, CĐ12, CT113 and 122 clones were moderate resistance to pathogen.

Keywords: Chilli, anthracnose, Colletotrichum, resistant, etc.

Study on efficacy of Paecilomyces sp. infesting on Dysmicoccus brevipes on pineapple

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SUMMARY

Mealybug, *Dysmicoccus brevipes* is vector of pineapple mealybug wilt disease. Mealybug lives in the soil and rapid population. Due to many difficulties in the management by chemicals, therefore, studying on *Paecilomyces* fungi against Mealybug is very necessary. The result showed that six *Paecilomyces* species could control against *Dysmicoccus brevipes*. P.RCC1 and P.cuc species were given good effect to control *Dysmicoccus brevipes* respectively 72.51% and 86.32% at laboratory conditions. In greenhouse conditions, P.RCC1 species was good effect to manage *Dysmicoccus brevipes* 74.09% in the 11 days after treatment.

Keywords: Pineapple, *Dysmicoccus brevipes* mealybug, *Paecilomyces* fungi.

Utilization of SOFRI Tru kien to control ants on dragon fruit

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Nguyễn Văn Hòa và Nguyễn Minh Châu*

SUMMARY

Dragon fruit (*Hylocerus undatus*) planted in Binh Thuan (20,000 ha), Tien Giang (2,500 ha), Long An (1,500 ha), Dong Nai (70 ha), Tây Ninh (110 ha) with total production 400,000 tons (Department of Crop Production, 2010). Results from field survey, we recorded 7 species of ants. The theme for the purpose of integrated pest management on dragon fruit to produce high productivity and quality dragon fruit. The result of isolation and identification from ant body and canker spots on fruit showed that there were presenting of major *Fusarium* sp. and bacteria. Three major species of ant effect to canker on skin of dragon fruit are *Paratrechina longicornis*, *Cardiocondyla wroughtonii* and *Paratrechina* sp... Ants are the first major agent to wind on skin of dragon fruit and also fungus and bacteria to attack the dragon fruit as the secondary causal agent.

Some batches of dragon-fruit goods for exporting were detected pesticide residue recently. The objective of this study is to improve SOFRI Tru kien bait to effect controlling ants on dragon fruit orchard improve fruit's quality, and increase fruit's yield and also to be safe for the customers. We also carried out the experiment on applying of SOFRI Tru kien on dragon fruit growing areas in Tien Giang, Long An, Dong Nai and Ba Ria - Vung Tau provinces, which had high effect to control ants. On SOFRI Tru kien treatment, the fruit yields of these orchards were clearly higher in compared with untreated orchards.

Keywords: Control ants, dragon fruit, fungi and bacteria, SOFRI Tru kien.

Application of antagonism products on integrated disease management of citrus root rot

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SUMMARY

Citrus is one subtropical fruit which occupied more than 60,000ha in the Mekong Delta. Unfortunately, root rot disease attacked severely at different stages from young tree to old one and caused serious problem in reducing yields and fruit qualities. However, agro-chemicals may lose their usefulness due to limitation of soil drenching application and

negative impact on the environment. To overcome the above disadvantages, the use of antagonisms in the integrated management of root rot disease is very necessary.

These investigation results showed that SOFRI-Trichoderma and SOFRI-Streptomyces could reduced the presence spores of Fusarium sp. in soil up to seven months after applied by soil dilution technique method. While SOFRI- Paecilomyces was also quite effective significant in reducing of Pratylenchus sp. and Meloidogyne sp. populations in both soils and King mandarin roots as compared to non-treated. In addition, similar results also occurred with both disease incidence and disease intensity of demonstration model which were lower than the control.

Keywords: Citrus, root rot, Fusarium, Trichoderma, Paecilomyces, Streptomyces, Pratylenchus.

Effect of the different orchard management methods on reinfection of Greening disease

Đỗ Hồng Tuấn và Nguyễn Minh Châu

SUMMARY

The research was conducted during the time of November 2010 to December 2012, at SOFRI' farm in order to reduce the reinfection of Greening disease in King mandarin orchards by (1) selecting the planting date of the free-disease seedlings, (2) applicable prevention of Diaphorina citri Kuwayama and thinning for management of uniform flushes. Applying of agronomy and plant protection practices on citrus. Results showed that the psyllids population at treatment King mandarin intercropping with Xa ly guava was lower than other treatment. To combine King mandarin intercropping with seedless guava or King mandarin intercropping with Xa ly guava and applying systemic insecticide by drenching Confidor 100SL (imidacloprid) of trade name solution in the area of 10 cm around the tree base by interval of two months and thinning for management of uniform flushes. Two demonstrations were done in early November 2010 and trees in both treatments after planting 26 months and the infection of the Greening disease was from 3.17 to 7.94 percent. Insect pests, red mite and nematode damaged to two varieties of guava weren't damage to King mandarin. This application was high effective when applying to citrus orchard planted by free-disease seedlings in severely infected areas to prevent infectious disease after planting. As a result, applying was practiced on both treatments could recommend and apply on citrus farm to reduce infection Greening disease after planting.

KHẢO SÁT HIỆU LỰC DỊCH TRÍCH HOA MÓNG TAY (IMPATIENS BALSAMINA) PHÒNG TRỪ BỆNH XÌ MỦ THÂN PHYTOPHTHORA TRÊN SẦU RIÊNG

Effect of fruit extract from balsam (*Impatiens balsamina*) on controlling of Patch Canker caused by *Phytophthora palmivora* on Durian

Đặng Thị Kim Uyên và Nguyễn Văn Hòa

SUMMARY

Patch canker is a very serious problem on durian, the integrated disease management strategy should be used for controlling of this disease, one of these options is using of plant extract for safety production. In this investigation, the fresh crude extract of Balsam (*Impatiens balsamina*) was attempted, the results shown that amongst balsam varieties, the fruit extract from red and violet flower plants gave better control the growth of *Phytophthora palmivora* under laboratory conditions. In the field trials, the fresh pure crude fruit extract revealed best control of the patch canker caused by *Phytophthora palmivora* and it was almost equal effects as of the Fosetyl - al at the dose of 7g/liter of water.

Keywords: *Phytophthora palmivora*, Balsam - *Impatiens balsamina*

Postharvest Technology

Results of the influence of kinds and concentrations of the preservatives on the quality and storage ability of rambutan after harvest

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SUMMARY

To evaluate the influence of kinds and concentrations of preservatives applied to the quality and storage ability of postharvest rambutan, we conducted four experiments on four chemicals by dipping Java rambutan (*Nephelium lappaceum* L.) in hydrochloric acid solutions, lactic acid solutions, salicylic acid solutions and sodium metabisulfite solutions.

Results showed that rambutan dipped in a solution of HCl at pH 4.5 for 6 minutes, in a solution of lactic acid at pH 4.5 for 6 minutes, in a solution of salicylic acid at pH 4 for 4

minutes or in a sodium metabisulfite solution at 0.25% for 2 minutes could maintain the quality of postharvest rambutan to 12 days at 13oC.

Assessed quality and storage capacity of rambutan in the form of productions in the Southeast and Mekong Delta of Vietnam

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SUMMARY

Quality and storage ability of rambutan fruit depend mainly on the pre-harvest factors and harvested time. Improving the postharvest quality and storage life must be simultaneously carried out from the solution both before and after harvest. Therefore, to obtain the rambutan quality management approaches suitable to meet the requirements of the market, it is necessary to have a survey in general on quality and storage ability of rambutan fruits from the different production forms like GAP and non GAP; the main season and off-season; different ecological zones like the Mekong River Delta and Southeast.

The results of the survey showed that rambutan fruits of the GAP and non GAP production in the Mekong River Delta were significantly different in thickness of the pericarp. In addition, rambutan fruits of the GAP production were less susceptible to chilling injury during storage at 12oC and recorded as safer in pesticide residue quick tests as compared to the non GAP production.

Rambutan fruits in the main season and off-season were significant different in the a* value of pericarp color, length of the fruit, brix and titratable acidity. Storage ability of rambutan fruits in the main season was better than fruit in the off season.

In comparison rambutan grown in the Mekong River Delta and the Southeast, it indicated that the a* value of pericarp color, brix and titratable acidity of rambutan fruits from Mekong River Delta, all were higher than that of fruits from Southeast. Furthermore, rambutan fruits in the Mekong River Delta had storage time at 12oC better than fruits in the Southeast.

Keywords: Rambutan, storage, quality, production.

Determine maturity indices three types of rambutan (Java, Nhan, Rongrieng) in main crop at Mekong Delta

Dương Thị Cẩm Nhung, Nguyễn Thanh Tùng, Đỗ Văn Ôn, Đặng Linh Mẫn, Phạm Hoàng Lâm và Nguyễn Văn Phong

SUMMARY

To determine proper harvesting maturity indices of Java, Rongrieng, “nhan” rambutan, the surveys were conducted in the main season on rambutan orchards being grown these cultivars at various communes belonging of Tien Giang and Ben Tre provinces. To record exactly days for harvesting, the hanging cards were used by hanging up rambutan bunches on the trees, which have been flowering and fruit setting and the fruits were harvested at six various harvesting stages, namely for Java, fruits were harvested at 92, 97, 102, 107, 112 and 117 days of flowering and fruit setting; Rongrieng at 85, 92, 99, 106, 113, and 120, and “Nhan” rambutan at 92, 99, 106, 113, 120 and 127 days respectively. Fruits after harvesting were brought to the lab and subjected to evaluate the physico-chemical properties and quality of fruit to select the most suitable harvesting index.

The results showed that the most suitable harvesting index of Java rambutan in the main season was at the stage of 102-107 days; “Nhan” rambutan: 106-113 days, at the stage 99-106 days for rong rieng rambutan respectively.

Keywords: Rambutan, maturity index, quality.

Study on antagonistic potential of Lactobacillus isolated from Vietnam’s traditional fermented products to the main postharvest diseased causal agents on rambutan fruits

Nguyễn Thị Ngọc Trúc, Phan Thị Mỹ Dung, Phạm Hồng Điệp và Nguyễn Văn Phong

SUMMARY

In order to find out potential antagonists which could be used as biocontrol agents to control postharvest diseases on rambutan fruits, an investigation was conducted via two surveys as follows: (i) Identification of main postharvest diseased causal agents on rambutan fruits and (ii) Evaluation on the antagonistic potential of Lactobacillus (LAB) isolated from different sources of Vietnam’s fermented products. The investigation showed that two fungus causing two different symptoms as spread-blurred and black rot on the pericarp of rambutan fruits during storage were identified as Lasiodiplodia

pseudotheobromae and Phomosis mali respectively. The investigation result of 61 isolates indicated that the isolate of “Dcai KL 2” had the highest antagonistic level (+++++) to both fungus mentioned above. And among the remaining isolates, 14 isolates were at the level of (++++), 13 isolates of (++++) and 33 isolates of (++) . All of 61LAB isolates were negative with catalase, analysed by CaCO₃, and positive Gram. Most of them had a morphology in circle shape, light yellow color, thickness and size ranged from 1.0 to 2.1mm.

Keywords: Rambutan, postharvest disease, Lactobacillus.

Vegetables

Result of breeding on hybrid cherry tomato Long Dinh

Trần Kim Cương và Huỳnh Vũ Sơn

SUMMARY

Breeding of hybrid cherry tomato has been done in Southern Horticultural Research Institute (SOFRI) since the year of 2009. First hybridization program was made between 5 pure lines using diallele methods. Selection for a prospect combination has been done and among 20 hybrid combinations produced, after 3 basis trials, the hybrid Long Dinh (B1 x B5) is considered one with strong growth, indeterminate habit, medium plant height, early harvest, attractive fruit and high yield. The results of larger size trials in 2012 showed that, in Lam Dong field condition this hybrid has vigorous growth, resistant to the some important diseases, high yield (60 tons/ha); and in net house in Tien Giang condition, it is also better than the control variety. The hybrid cherry tomato Long Dinh could be used in the farming areas of the Southern provinces.

Agronomic traits of some declining fruit hot pepper genotypes

Huỳnh Thị Phương Liên và Trần Kim Cương

SUMMARY

The source materials of declining fruit hot pepper including 28 genotypes were grown for evaluation some agronomic traits in the rainy season of 2012. The result showed that 2 lines CD3 and CD6 were resistant to anthracnose disease but low yield; 5 lines including CD24, CD25, CD26, CD27 and CD28 have very spicy fruit but low yield and susceptible to anthracnose disease; 4 lines including CD5, CD7, CD17 and CD18 have attractive fruit, high yield and low infection rate; 4 lines including CD2, CD11, CD15 and CD23

gave very high yield however the rate of anthracnose disease were also very high. These prospective samples should be used as parental materials in future breeding.

Agronomic traits of some erect fruit hot pepper lines

Nguyễn Ngọc Vũ, Huỳnh Vũ Sơn và Trần Kim Cương

SUMMARY

A total of 97 erect fruit hot pepper lines which collected and isolated by SOFRI was grown at the experimental field to select good lines for future breeding. The growth and some agronomic traits were recorded. The result showed that the most of lines have soon flowering and harvesting date; other traits have more different. All the traits were classified into suitable groups and some superior lines also determined, such as: 10 lines (CT35, CT38, CT44, CT67, CT54, CT56, CT37, CT55, CT83, CT74) have more than 300 fruits/plant, 11 lines (CT42, CT20, CT45, CT58, CT83, CT55, CT59, CT56, CT41, CT43, CT54) yield more than 150g/plant, 12 lines (CT83, CT87, CT76, CT45, CT49, CT14, CT67, CT35, CT32, CT11, CT92, CT18) were slight anthracnose disease infection. These are promising lines as material for hot pepper breeding hybrid.

Genetic diversity in cucumber genotypes using RAPD markers

Trần Kim Cương và Nguyễn Thị Lang

SUMMARY

In this study, 90 cucumber varieties/pure lines which collected, isolated and preserved by SOFRI were evaluated the genetic diversity using 12 RAPD markers. RAPD data analysis and tree diagram were established using method of UPGMA in NTSYS-pc software 2.1. The results indicated that all the primers gave high polymorphism, from 92.2 to 100%, the bands were from 180 to 3.600bp in size, including from 1 to 7 alleles. Total alleles were recorded as 58, average of 4.8 alleles/1 primer. The tree diagram analysis results showed that the genetic diversity coefficient of 90 cucumber varieties/pure lines ranged from 0.22 to 0.56. At similarity value of 0.53, they were classified into five main groups with many small groups. There are close genetic relationships between some of cucumber accessions, so that it is necessary to combine with phenotypic evaluation to eliminate redundant accessions for efficient management the genetic resources.

Flowers

Results on observation and evaluation of some imported Lily varieties grown at Tien Giang in 2011

Lê Nguyễn Lan Thanh, Nguyễn Thị Hương Lan và Nguyễn Văn Sơn

SUMMARY

Flower production plays an important role in the Vietnamese agriculture in the last few years. Recently the market demand for Lily flower pot is increasing in Mekong Delta region. The experiment was carried out in Nov. 2011 - Jan. 2012 at Tien Giang to evaluate the growth and development characteristics of four Lily varieties imported from Netherlands. The varieties were arranged in CRD with five replications, 10 pots/replication, 3 plants/pot. The result showed that almost varieties grew and developed well under Tien Giang ecological condition. Out of them, three Lily varieties showed beautiful flowers such as Manissa, Cobra and Sorbonne. However, only Cobra is the best one with the highest flower quality and economic efficiency in comparison with the others.

Keywords: Lily varieties, development, growth, flower pot.

NÔNG NGHIỆP PRAU HOA QUẢ BỀN VỮNG

Results of collection, conservation and evaluation of fruit tree genetic resources at SOFRI

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Trần Thị Oanh Yến và Phạm Thị Mười*

SUMMARY

In 2012, we have conserved of 642 varieties or clones of 38 kinds of tropical and subtropical fruit trees with 415 local and 227 foreign one. We evaluated and described some kinds of fruit such as: pummelo, mango, jackfruit, durian, longan, papaya, avocado and rambutan. Used of MĐN06 jackfruit, Monthong durian, Rongrieng rambutan germplasm to produce fruit.

Keywords: Collection, conservation, evaluation, resources of fruit trees.