

Summary of presentation

Natural balance in Soil and IPM strategy of vegetable and fruit

PGS.TS.Nguyễn Thị *

*Phân Viện Cơ điện và Công nghệ sau thu hoạch

SUMMARY

All most vegetable and fruit diseases are agented by harmful soil born Micro-Organisms (MO). In soil the fauna of beneficial and antagonistic (MO) are very rich which can control the harmful one protecting plants healthy. However, because it has not been conservation farming, and using too much chemical fertilizer and insecticide...making poor nutrition as well as beneficial and antagonistic MO fauna that destroy natural balance in soil. By that way plants are not well growing, and disease more severely...A principle of IPM strategy is keeping natural balance that it is not only upper the soil on canopies of plants but also in soil. The beneficial and antagonistic MO fauna and their activity strict belong to how rich and balance nutritional compounds based on bio-organic and humus compounds in soil. So that we have to have conservation farming with soil stabiliser organic fertilizer for making soil fertility. Nowaday we have some successes in IPM but it's limited because we are not studying how taking care balance in soil. Keeping natural balance in soil based on bio-organic fertilisers which is very importance not only for IPM strategy but also for quality of vegetable and fruit products.

Transgenic Eggplant (*Solanum melongena* Linnaeus) for insect resistance

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SUMMARY

*Transgenic eggplant (*Solanum melongena* cv. Co2) plants expressing Bt-cryIAb or snowdrop lectin gna gene were evolved by Agrobacterium-mediated transformation system. Putative transgenic T₀ lines of Co2 expressing cryIAb (7 lines) and gna (4 lines) were obtained. The integration and expression of the genes of interest were confirmed by histochemical Gus assays, PCR, Southern and Western blotting analyses. Molecular analyses in T₁ progenies harbouring cryIAb or gna gene proved the presence and expression of the transgenes of interest.*

*T₁ progenies expressing CryIAb or GNA were used for shoot and fruit borer (SFB; *Leucinodes orbonalis* Guenee) bioassays. Shoots and fruits from the plants expressing CryIAb (P-Co2IAb-5 and P-Co2IAb-9) were completely free from the damage, while it exhibited partial resistance by reducing larval weight (11.58%) in line harbouring gna gene (P-Co2Ubigna-2) ten days after release.*

Transformation of Truncated Coat Protein Gene of ICRSV-Ab Isolate into French bean

Nguyễn Văn Hòa, Lê Thị Thu Hằng, Y.S. Ahlawat *

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SUMMARY

*Indian Citrus Ringspot Virus (ICRSV) is one of the most serious disease on citrus in India. In the present investigation, the CP gene of ICRSV-Ab (One isolate from Abohar, Punjab, India) was amplified by using CP-FW/CP-R-Eco primers and cloned in pGEMT-easy vector in E.coli DH5 α and then released by BamH I and Sac I (from vector) restriction enzyme, respectively. The vector pBI121 was linearised using the same enzymes. Transformation of the resultant plasmid in E. coli strain DH5 α yielded recombinant colonies. Colony PCR was conducted but there was no PCR product was amplified with the same set of primers. When plasmids were isolated and restricted with BamH I and Sac I, a thick band on the gel at 900bp position, and also positive in southern hybridization. Subsequently, we analyzed the sequence, there is another site of Sac I present at 900 bp position suggesting that the reversed primer site was removed and when another reversed primer (ICRSV-951) nearby this site was used, a PCR product of 814 bp was achieved. The single selected clone having CP gene in sense orientation in pBI 121 was hitherto called as CpSTR (Coat protein Sense truncated) and used for plant transformation. CpSTR was mobilised into Agrobacterium tumefaciens strain LBA4404 with the help of pRK2013 plasmid in E. coli by triparental mating method. The colony PCR amplification from Agrobacterium colony was confirmed. Internodes explants of French bean (*Phaseolus vulgaris* var. *saxa*) were used for transformation. Co-cultivation of explants was done by growing them in co-cultivation medium and then selection medium. Total DNA were extracted from transformed plants and PCR was done. The result suggest that truncated protein gene of Coat protein of ICRSV-Ab has been integrated into French bean genome and obtained the transformed plants with CP gene expressed the gene by translating the virus specific protein.*

RAPD markers: application to varietal identification and molecular cluster analysis of citrus varieties/species in Vietnam

Nguyễn Thanh Nhân, Tokurou Shimizu*, Mitsuo Omura*, Nguyễn Minh Châu

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SUMMARY

*For better characterization and evaluation of citrus germplasm in Vietnam, citrus phylogeny was investigated using RAPD markers. Of 150 decamer primers tested, 15 primers that produced good amplification products and polymorphism selected for cluster analysis of 37 varieties/species of Citrus genus. About seventy five percent (75%) of the total 150 bands that produced in mandarin group was polymorphic. The size of the bands ranged from 240 bp to 3200 bp. There were no DNA polymorphisms among sweet orange varieties (*C. sinensis*) observed. This result was the same as on King mandarin (*C. nobilis*) individuals having differently fruit appearance and its quality collected from different planting regions. However, with the selected primers, it was sufficient to distinguish all mandarin varieties, even between quýt Duong and its zygotic individuals, or other natural hybrids of *C. medica* and *C. sinensis*.*

Analysis on genetic diversity of citrus germplasm in Vietnam by using microsatellite markers

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* Viện Nghiên cứu nông nghiệp Pháp (INRA) - Corsica- Pháp

SUMMARY

*Genetic relationship of 118 individuals of six more economically representative species of citrus (*C. reticulata*, *C. sinensis*, *C. maxima*, *C. nobilis*, *C. aurantifolia* and *C. limon*) and 13 others of rutaceae family were estimated by amplification of seven microsatellite loci from nucleus (ssr) and five microsatellite loci from chloroplast (cpsr). We have performed a neighbor joining analysis on the basis of a dissimilarity matrix among the different varieties. polymorphism of 7 ssrs and 5 cpsrs was sufficient to obtain genetic aggregations where the group mains were clearly identified: the pummelo group, the mandarin group, the orange group, the limon group, and the lime group. The citrus species relationships were in broad agreement with those estimated by previous analyses based on morphological traits, suggesting that ssr data will be useful for exploring infra-generic citrus genetic taxonomy. The microsatellite could distinguish clones of the same variety as king mandarin, sweet orange,...*

Development of Virus resistant Cell Lines of Bell Pepper (*Capsicum annuum* L.cv. California Wonder) through in vitro Techniques

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SUMMARY

*Virus diseases of bell pepper constitute an important factor contributing to low yields and reduced fruit quality rendering the growing of pepper uneconomical. Since, no effective control measure against virus diseases are known, some of the in vitro approaches introduced during past few decades, have proved very efficient in retrieval virus free plants. The present investigations are also an effort towards obtaining virus resistant cell lines through in vitro techniques using green islands. The plants growing in the field were indexed for presence or absence of virus(es). Explants for callus induction and proliferation were taken from fully expanded mature leaves showing clear mosaic symptoms and then indexed. The presence of only Potato Y Potyvirus (PVY) in *Capsicum annuum* L. var. California Wonder was recorded in the field samples as well as the cultures. The explants i.e. leaf discs were sterilized in Bavistin (0.2%) for 5 minutes, followed by a treatment with sodium hypochlorite (20%) for 10 minutes. Nodular, hard and green coloured callus was obtained on MS medium supplemented with BAP (0.5-2.0 mg/l) alone or in combination with NAA (0.1-1.0 mg/l). The best medium for multiplication and maintenance of calli was worked out to be MS medium supplemented with 1.0 mg/l of BAP in combination with 0.5 mg/l NAA. However, shoot regeneration could not be obtained in the presence of BAP (0-5mg/l) alone or in combination with various auxin like NAA, IBA and IAA (0-5mg/l). Among the eighty calli derived from dark green island tissues of infected leaves only eighteen tested negative against PVY antisera. The virus free and/or resistant cell lines obtained under present investigations need further studies to obtain virus free and/or resistant plants.*

The preliminary results on selection seedless clones of sweet orange, duong mandarin, king mandarin and daxanh pummelo varieties

Trần Thị Oanh Yến, Nguyễn Ngọc Thi, Nguyễn Nhật Trường và Phạm Ngọc Liên

SUMMARY

Seedless citrus is an important characteristic for fresh consumption in local and international markets. In the south of Vietnam, daxanh pummelo, duong mandarin, king mandarin, and sweet orange have high quality and yield, however, number of seed per fruit is high. One of methods of seedless citrus breeding is selection clones from natural populations. After three years of survey, we selected: 1/ one clone of sweet orange variety having high quality and yield, no seed per fruit and empty pollens (observed by staining acetocarmine 45%), and seedless is stable through 3 years of survey, even pollinated by pollens of king mandarin and daxanh pummelo, however, these pollination increased fruit setting as comparing to control (natural pollination); 2/three clones of daxanh pummelo variety have high quality and yield but number of seed per fruit is not stable through 3 years of survey. No seedless clone of duong mandarin and king mandarin varieties has not been found.

Preliminary result of observation and selection of Duong La Cam pomelo seedless in some province of the Southeast region

Nguyễn Văn Thu và Nguyễn Văn Hùng

SUMMARY

*(Orange-leaflike) sweet pomelo **la cam** is the most promising variety in Southern-East in general and in Bien Hoa and Bach Dang – the two famous pomelo regions in particular thanks to its good quality, good-looking fruit shape with the welcoming of markets, and less pestilent insect-infected than other varieties. However, the weakness of this variety is that there are still a lot of seed, which much affects the probability to sell. Those researches to find Orange-leaflike sweet pomelo with no seeds or very few seeds, good quality is an important approach.*

The results are as following: We have chosen the best 4 individuals whose codes are: B13 N, B26 N, B12 N, B17BD, two of which -B17BD and B12 N- are with the fewest seeds of all.

Result of selection of Com vang sua hat lep durian variety (Chin Hoa)

*Đào Thị Bé Bý, Nguyễn Ngọc Thi, Trần Thị Oanh Yến,
Nguyễn Nhật Trường, Phạm Văn Vui, Nguyễn Văn Hùng,
Lê Quốc Thịnh, Huỳnh Văn Tấn, Phạm Ngọc Liên và Nguyễn Minh Châu*

SUMMARY

Com vang sua hat lep durian variety was grown by seed in 1977 at Cho Lach district - Ben Tre province. During 6 years of observation on the selected SIBL clone in farmer's orchards and trials at Tien Giang and Binh Phuoc province, this variety revealed outstanding characteristics such as vigor tree, high yield and stable, excellent fruit quality. Its flesh is thick, soft, non fiber, creamy, and bright yellow colour, with small seed or seedless, high ratio of flesh/ fruit. Therefore, this durian variety is well adapted in the South of Vietnam.

The results on trial on introduced papaya varieties at Tiengiang

Tr n Th Oanh Y n

SUMMARY

Thirteen introduced papaya varieties from Malaysia, United State, Thailand, Taiwan,.. and six local varieties were grown for trials at Tiengiang during 2002-2003. Some papaya varieties showed high quality and yield, tolerant to virus diseases on papaya, they are Dailoan tim (local varieties), Khakdum, Kokdum, Niensee (introduced varieties).

Results on comparison of red flesh dragon fruit hybrids

Tr n Th Oanh Y n và Ph m Ng c Li u

SUMMARY

Twelve selected hybrids from 188 hybrids of Binhthuan dragon fruit (Vietnam) and red flesh dragon fruit (Colombia) hybridization, and two parental varieties have been grown for trials at Tiengiang (in Oct. 2002), Longan (Jan. 2003) and Binhthuan (March, 2003). In Tiengiang, the hybrids were evaluated at the first year, in Longan and Binhthuan, only some hybrids appeared flowers and fruits. The preliminary results at Tiengiang showed hybrids with codes h14, h2, h15, h3, h1, especially h14 hybrid had high quality and yield.

The preliminary results of inducing mutants by gama irradiations on woodbuds of daxanh and duonglacam pummelo, king mandarin and duong mandarin

Tr n Th Oanh Y n, Nguy n Nh t Tr ng, Ph m Ng c Li u, và Nguy n Minh Châu

SUMMARY

Daxanh pummelo, duonglacam pummelo, king mandarin and duong mandarin have high yield and good quality. However, numbers of seed per fruit are high, these buds of these varieties were exposed to 3, 5, 6, 7, and 9 kilorad (kr) of gamma irradiation. the irradiated buds were grafted to rootstocks (Volkameriana) in the free-greening citrus nethouse. ld_{50} was near 5kr in daxanh pummelo and king mandarin; however, no buds receiving more than 5kr initiated growth (exception one bud of daxanh pummelo with dosage of irradiation 7kr). Grafted trees that grew were field grown until fruiting and seed per fruit was count. The preliminary results, several clones of king mandarin showed seedless with red orange flesh color and thin peel (2-3mm). They are clones with codes: 333, 334, 344 (dosage level 3,0kr); and 362, 364, 366, 375, 454 (dosage level 5,0kr).

Studies on embryo rescue in mango

à Th Bé B y và Nguy n Minh Châu

SUMMARY

The present investigation entitled “Studies on embryo rescue in mango” was undertaken at the Southern Fruit Research Institute (SOFRI), during the time (2/2002 - 12/2003) to standardize the in embryo rescue technique in mango to improve the breeding efficiency. The results of the studies are summarized follow:

- 1. The best medium for culture initiation in embryo was B₅ (macro) + MS (micro + organics).*
- 2. Sucrose at 60 g/liter was noted to the best level for embryo rescue and medium was supplement 200 mg casein hydrosate/liter + 400 mg L- glutamine /liter improved culture establishment with ratio embryo rescue 76,11 % and 75,00 % (for 45 and 60 days old fruitlets).*
- 3. The embryo of 45 and 60 after pollination gave optimum success with the growth regulators in combination of 1 mg NAA /liter + 2 mg BA /liter with increase in embryo length, width and weight.*
- 4. The embryo after culture establishment grew best upon culture incubation in continuous dark with the best embryo growth length, width and weight.*
- 5. Sucrose at 40 g/liter was noted to be best level for embryo germination and also the root and shoot emergence were early. Germination of embryo was significantly better with incubation in 12/12 hour and this treatment also recorded minimum days to root and shoot emergence.*
- 6. The best medium for germination in embryo was 2 mg BA/ liter + 0,5 mg GA₃ / liter. The days to emergence of root and shoot were recorded minimum in the treatment.*
- 7. The shoot and root length was higher with the sucrose level applied at 40 g/ liter along with 10 g glucose /liter.*

Investigation of the efficiency of some practices in Cayenne propagations

*Ph m Ng c Li u, Nguy n Ng c T nh, Ph m V n Vui, Tr ng Phan Kh i và Claude Teisson**

** Cirad-flhor-Pháp*

SUMMARY

The experiments on vegetative propagation methods in cayenne pineapple (Ananas comosus L.) were conducted in the South of Vietnam. We obtained the results: 1/ the rate of sucker multiplication of vertical cutting pineapple stem method showed higher than that of horizontal cutting pineapple stem method (10.5 and 9.5 folds, respectively), the prices of one sucker produced from 2 above methods are 217DVN and 227DVN respectively 2/ the rate of sucker multiplication of method of destruction of pineapple shoots grown from suckers when having weigh: 15-20g, heigh: 7-10 cm and 200-300g, 25-30 cm were 16.7 and 4.2 folds respectively. however, price of them is lowest (132DVN and 53DVN/sucker, respectively). 3/ method of crown vertical cutting and separated 3-5leaves/piece, the rate of sucker multiplication obtained 25-27 suckers/crown with price 158 DVN/sucker.

Effect of dissolved oxygen concentration on the adventitious root of papaya cultivars (*Carica papaya*) in water culture

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SUMMARY

Thirty day- old seedling of four cultivars viz. Philippines Wild, Da Moc, Jampada and Tai Nung No.2 were cultivated in half strength Hoangland solution with different dissolved oxygen concentrations 6.2, 4.5, 3.2, 1.8 ppm for 50 days. Total biomass allocation, adventitious rooting, aerenchyma development and ethylene production in four papaya cultivars were measured. At the end of experiment, the result showed that Philippines Wild cultivars increased in total biomass, number of adventitious root on the stem base in dissolved oxygen concentration 4.5ppm more than those other cultivars. The aerenchyma tissue were developed in roots of four cultivars in different dissolved oxygen. The dissolved oxygen concentration 4.5ppm also enhanced ethylene production in roots of Philippines Wild cultivars. The result suggested that dissolved oxygen concentrations in water culture papaya plants can regulate adventitious rooting and ethylene production.

Effect of foliar fertilizers on fruit yield and quality of mangosteen (*Garcinia mangostana* L.)

Nguyễn Văn Thảo, Lê Thị Khế, Huỳnh Văn Tấn, Nguyễn Minh Châu

SUMMARY

Foliar spray of several fertilizers improved fruit yield and quality of mangosteen at three different timings 15 days after full bloom at 7 days interval. The application Grow-more (20-20-20) increased fruit number, weight, yield, marketable fruit number (>80g) and better fruit rind colour and consequently draw more incomes. However, there are no significant difference in the total soluble solids (Brix%), pH and percentage of flesh-fruit among the treatments.

Effect of NPK rates on the yield and quality of mangosteen fruits grown in Ben Tre

Huỳnh Văn Tấn, Nguyễn Minh Châu

SUMMARY

The Effect of NPK rates in combination with chicken manure on yield and quality of mangosteen fruits was investigated. The result showed that treatment of 1200gN + 1200g+ P₂O₅+ 1200g K₂O and 20 kg chicken manure significantly increased number of fruits and weight of fruit compared to control.

Influence of thiourea and urea on the emergence of new shoot in mangosteen

(Garcinia mangostana L.)

Nguyễn Văn Thảo, Lê Thị Khê, Huỳnh Văn Tấn, Nguyễn Minh Châu

SUMMARY

Spraying Thiourea and urea to induce new shoot growth in mangosteen (Garcinia mangostana L.) carried out in Cho Lach, Ben Tre province. Thiourea at different concentrations (0.25%, 0.375% and 0.50%) in this trial surpassed to all the other treatments in respect of enhancement of earlier new shoot growth, flowering and harvesting date and production of higher leaf area, fruit yield (fruit number and yield/plant), flesh percentage and Brix (%). These treatments were also proved to be the best in increasing number of flowers, dried leaf weight, and bearing fruits with better quality parameters such as rind colour, fruit weight, pH and less translucent flesh fruit percentage but there was no significant difference as compared to control or urea (1.0, 1.5 and 1.75%) applications.

Effect of some foliar fertilizers on flowering in mangosteen (G. mangostana L.)

Nguyễn Văn Thảo, Lê Thị Khê, Huỳnh Văn Tấn, Nguyễn Minh Châu

SUMMARY

The effect of some foliar fertilizers on the improvement of flowering in mangosteen was conducted at Cho Lach, Ben Tre province. The result of the experiment showed that MKP at 100gr and 150gr/8 liters of water gave the best result in enhancement of earlier flowering, intensity of flowering per shoots and thus resulted in increasing crop load and earlier harvest of higher yield. These treatments, however, produced fruits with dark crimson rind coloration. The other parameters i.e. Brix (%), pH, the percentage of flesh per fruit, fruit weight, leaf area and dried weight exhibited no significance to control and among themselves.

Effect of spray fertilizer on leaves on efficiency and fruit-quality efficiency and fruit-quality of Mangosteen in alluvial-soil South East Viet Nam

Nguyễn Văn An, Nguyễn Văn Hùng, Mai Văn Tr và Bùi Xuân Khôi

SUMMARY

Spray fertilizer on leaves is form contribute supply and satisfy nutrient requirement into tree quickly special when roots is activating badly. An experiment about spray fertilizer on leaves on mangosteens (RCBD design, 7 treatments, 3 replications, on 24years old mangosteens) realized in alluvial soil South East Viet Nam. The results showed that spray Plant food (20-30-20), Miracle-gro (18-18-21), Growmore (20-20-20) and Growmore (15-30-15) on mangosteen were affected well to fruit weigh, fruit colour, efficiency and fruit-quality.

Initial Result about follows habit bloom on branches and effect of prune on efficiency and fruit-quality of Mangosteen in alluvial-soil South East Viet Nam

Nguyễn An , Nguyễn Văn Hùng, Mai Văn Tr và Bùi Xuân Khôi

SUMMARY

Prune is a technique correct adjust density, measure and position of branches in parasol of tree. The tree will photosynthesis better than common. We must prune for to cut down unnecessary branches for concentrate nutritious to fruit-branches. Ensure efficiency and fruit-quality will increased. An experiment about prune on mangosteen (RCBD design, 4 treatments, 5 replications, on 24years old mangosteen) realized in alluvial soil South East Viet Nam. The results showed that cut down unnecessary branches and 10% second grade branches on mangosteen were affected best to take shape new buds, efficiency and fruit-quality.

Effects of different practices for flowering inducing of Hoaloc mango

Võ Thị Truyen, Nguyễn Thành Hải

SUMMARY

This study aimed at observing the impact of various practices to minimize growth development and to speed up the flower inducing. The practices applied such as: gulling, Paclobutrazol, root cutting...I was conducted that Paclobutrazol applied along with stress creating could gave highest result of flowering on Hoaloc mango.

Effect of some bagging materials on fruit quality and disease control of Hoa loc mango

Võ Thị Truyen, Nguyễn Thành Hải

SUMMARY

This investigation showed that use of Polypropilen (PP) or dark colour paper for bagging could improve the brightness and colour of Hoaloc mango fruits. However, PP bag could bring the most advantages in practical as well in efficiency of preventing some pests and improve the fruit performance.

Effect of some kind of NPK and organic fertilizers on yield and fruit quality of Nam roi pummelo (Citrus maxima (Burm.) Merr.)

Võ Hải Thuỳ, Nguyễn Văn Sơn, Nguyễn Minh Châu

SUMMARY

The result showed that organic fertilizer treatments gave similar yield of Nam roi pummelo in comparison to NPK fertilizer treatments; application of NPK and organic fertilizers improved efficiently in pH of soil and nutrient contents in soil; nitrate accumulation in fruit of Nam roi

pummelo was very low and negligible. However, there were no significant difference in yield and fruit quality of Nam roi pummelo among treatments.

Effect of Nitrogen, Phosphate and Potassium Fertilizer Rate on Yield and Quality of Pummelo Duong La Cam Variety in Vinh Cuu – Dong Nai

Huỳnh Ngọc T, Mai Văn Tr, Nguyễn Văn Hùng, & Bùi Xuân Khôi

SUMMARY

A field experiment was conducted from 10/2002 to 9/2003 in an eight – yields – old pomelo orchard, Duong la cam variety was planted in distance 6m x 6m in Vinh Cuu district Dong Nai province. It was laid out in RCB design with 7 treatments and 4 replication.

The result showed that treatment of 800N: 500P₂O₅: 700K₂O (gr/tree/year) effected pomelo on the vegetative growth, it gave better and significantly increasing on yield, brix degree as compared with the control and other treatment.

Effect of organic manures on the growth and Phytophthora Disease of Durian in the Southeast region

Mai Văn Tr và Nguyễn Thị Thúy Bình

SUMMARY

Phytophthora palmivora Butl. causes the most destructive and economically significant diseases of durian (Durio zibethinus Murr.) in Vietnam. Growers suggested that overdose application of chemical fertilizers to durian reduces the natural resistance to the diseases and is the cause of P. palmivora epidemics on durian. Additionally, overuse of chemical causes concern of environment. Added application of organic manures is a possible solution for the situation. The field trial aimed to compare the effect of four organic manures including chicken, pig and cow, and city waste manure on the growth and Phytophthora diseases of durian. The result revealed that annual application of organic manures increased the height of tree and diameter of canopy comparing to untreated treatment. Use of chicken manure and city waste manure also reduced the incidence and severity of P. palmivora canker, increased significantly yield of durian.

Preliminary result on the investigation of the improvement of the pulp hardness of Monthong durian fruits grown in Ben Tre

Huỳnh Văn T n, Nguyễn Minh Châu

SUMMARY

It was found that the hardening of pulp in fruits of Monthong durian could be solved by cultural method. The result of the experiment showed that treatment of Ca₃(PO₄)₂+ KNO₃ + Ca₃(PO₄)₂+ KNO₃, could help decreasing significantly the uneven fruit ripening mentioned Monthong grown in Ben Tre.

Effect of additional pollination on Red flesh Dragon fruit

Trần Minh Trí, Bùi Thị Minh Hằng và Nguyễn Minh Châu

SUMMARY

*The findings showed that Red Dragon fruit (*Hylocereus undatus*) got flowering when doing the supplemented pollination with the pollen taken from other Dragon fruit species/clones such as Cho Gao and Binh Thuan white flesh dragon fruit. All trials gave good results in terms of fruit weight, skin thickness, Brix, flesh texture and color as compared with that of self-pollination.*

Effect of flowering inducing treatments on flowering ratio and fruit quality of Cayenne pineapple

Võ Thị Truyen, Nguyễn Thành Hữu

SUMMARY

This investigation used 8 treatments to induce flowering on Cayenne pineapple. The result showed that the best treatment was: 20 ml Etherphon 500ppm with Thiourea 5000ppm and Borac 500ppm per plant applied in the morning.

Molecular characterization of four isolates of Indian citrus ringspot virus

Nguyễn Văn Hòa⁽¹⁾ và Y.S. AHLAWAT⁽²⁾

SUMMARY

The 1283 nucleotides of coat protein of four isolates of Indian Citrus Ringspot Virus, ICRSV-Dl, ICRSV-Ab, ICRSV-Ah and ICRSV-Pu have been cloned in pGEM-T easy vector and sequenced. Nucleotide and deduced amino acid sequences have been analyzed showing variation at N terminus and conserved in the core region. Sequence analysis and phylogenetic tree of both nucleotide and amino acid sequences showed that the two isolates ICRSV-Ab and ICRSV-Dl shared close relationship with ICRSV-D - an isolate from Delhi sequenced earlier and formed one cluster, while the two isolates ICRSV-Ah and ICRSV-Pu were distantly related to the first cluster and form another cluster, and hence they were considered as different strains of the same virus. The restriction maps were generated and confirmed the sites of restriction by cutting with enzymes Sac I, Pst I and Cla I. The results will be useful for construction of the CP gene for pathogen mediated resistance strategy.

Key words: ICRSV, strains, genome, cloning, sequencing, restriction map.

Detection of some major virus diseases on Banana in the South Vietnam

Nguyễn Thị Ngọc Trúc, Lê Thị Thu Hằng

SUMMARY

Banana Bunchy Top virus disease in Vietnam created relatively various symptoms in different ecological regions. The result of this study confirmed that the virus were of genome type II, 4 different syndroms of Banana streak lines including two with identical symptom and two of symptomless type. There were both BBTV and CMV or BBTV and BSV on the same host plant. All samples were BBrMV negative.

Preliminary quantification of DNA of citrus Huanglongbin Pathogen in the Mekong Delta

Nguyễn Thị Ngọc Trúc, Lê Thị Thu Hằng, Nguyễn Thanh Nhân

SUMMARY

This investigation aimed at using of DNA marker and DNA quantity device with violet ray OD 260nm to evaluate the DNA titer of Candidatus Liberibacter asiaticus of various leaf samples of different infested varieties and psyllid samples in field condition. Among the citrus varieties, Tieu mandarin gave highest DNA pathogen and the DNA of pathogen in psyllid was obtained in high quantity.

Survey of Fungicides resistance of Colletotrichum gloeosporioides from mango production

Nguyễn Ngọc Bình, Lê Thị Thu Hằng, Huỳnh Văn Thành và Nguyễn Văn Hòa

SUMMARY

Fungicidal treatments aimed in reducing inoculum levels in the field include Mancozeb, Chlorothalonil, Benomyl and other fungicides. Pre-harvest applications of Benomyl and some other fungicides are currently restricted if used on fruit destined for certain export market. Isolates of Colletotrichum gloeosporioides collected during one year from different areas survey were used to determine the incidence of resistance to Benomyl, Propineb, Mancozeb, Chlorothalonil, Carbendazim and Flusilazol using an in vitro assay. All the isolates tested were resistant to fungicides, of which Propineb, Mancozeb and Chlorothalonil gave highly and Benomyl, Carbendazim moderately resistant and Flusilazol gave sensitivity reaction for Colletotrichum gloeosporioides.

Preliminary result of the investigation on the susceptibility of 45 citrus varieties/cultivars on citrus canker (Xanthomonas axonopodis pv. citri)

Nguyễn Văn Hòa, Nguyễn Khánh Ngọc, Lê Thị Thu Hằng, Huỳnh Văn Thành

SUMMARY

The result of the investigation on the reaction of 45 citrus varieties/cultivars on citrus canker natural infection during 22 Oct to 19 November 2003, showed that the most susceptible variety was chanh tuong, followed by Schweppes Wil lemon and sanh. The most resistance one was Clausellina Satsuma mandarin, Pamplemousse pink pummelo, then Valencia late orange and Soan orange (the most local resistance variety). The result also shown that the susceptibility was descending from lemon, lime, sanh, tangelo, pummelo and orange.

Preliminary results of the investigation on disease infection on red dragon fruit

Nguyễn Khánh Ngọc, Lê Ngọc Bình, Nguyễn Văn Hòa

SUMMARY

The preliminary investigation at Long An, Tien Giang and Binh Thuan shown that, the red dragon fruit was infected by several diseases, which were also infected white dragon fruit such as fruit rot, flower rot, Anthracnose, black spot, brown spot, Fusarium wilt. The pathogens were isolated and identified as *Colletotrichum* sp., *Fusarium* sp., *Alternaria* sp., *Gloeosporium* sp., *Curvularia* sp., *Rhizoctonia* sp. Of them, *Colletotrichum* sp. and *Fusarium* sp. were more common and dominant, particularly during the raining season. There is not significant difference between the white and red dragon in infection of *Colletotrichum* sp. in the lab test.

Effect of some fungicides on powdery mildew fruit disease in rambutan

Lê Ngọc Bình, Lê Ngọc Bình, Nguyễn Văn Hòa

SUMMARY

Powdery mildew of rambutan caused by *Oidium* sp., which caused much damage to young shoots, flowers, fruits. Since farmers applied high dose of different chemicals, which lead the fungus resist to fungicides. In this investigation, we tested 6 different chemicals such as Score (0,25ga.i.), Carbenzim 50 wp (0,25ga.i.), Anvil (0,015ga.i.), Daconil (0,015ga.i.), Kumulus (0,0016ga.i.), Ridomil (0,34ga.i.) for controlling of the disease. The result shown that all the chemicals used were effective to control powdery mildew unto 14 days after second spray. The results also showed that Anvil (0,015ga.i.), Daconil (0,015ga.i.) and Ridomil (0,34ga.i.) gave early effect in controlling of the disease than other chemicals.

Effect of some fungicides on Phytophthora fruit rot disease of longan

Lê Ngọc Bình, Nguyễn Khánh Ngọc, Huỳnh Văn Thành, Nguyễn Văn Hòa

SUMMARY

Fruit rot disease of longan, caused by *Phytophthora* sp., is an important disease, which caused damage to fruit and reduced the yield. For controlling of this disease, farmers have used many different fungicides with increasing the dose day by day, it makes the fungus resist to fungicide. For checking the effective in controlling of some fungicides on *Phytophthora* sp. cause fruit rot disease, we carried out the experiment under field condition. The result shown that, among the tested fungicides, the fungus was still susceptible to tested fungicides such as Ridomil (2,72 ga.i.), Alliette (8ga.i.), Carbenzim (10ga.i.), Dithane-M-45 80 wp (32ga.i.), Metalaxyl (2,5ga.i.) except Carbenedazim (10ga.i.). Under field condition, they shown still good to control fruit rot disease of longan up to 14 days after second spray.

Effect of different beginning and ending applications of fungicide on mango yield and postharvest disease caused by Anthracnose

Hoàng Hữu C , Mai Văn Tr & Bùi Xuân Khôi

SUMMARY

Anthracnose (Colletotrichum gloeosporioides) is an important disease on mango (Mangifera indica) in Southeast region of Vietnam. It cause serious loses to mango from blooming to harvesting. A trial with 4 treatments of different beginning and ending applications. The times were exacted: Begin blooming, fruit set, 14, 28, 42 days after fruit set. A treatment was sprayed 3 times in order: Begin early – final early; Begin late- final late. Fungicides were used in the trial including Mancozeb, Benomyl and Propineb. The result showed that: Begin to spray fungicides early control disease attack flowers, improved fruiting set and make to higher yield. Final to spray fungicides late control better harvest disease cause by anthracnose.

Anthracnose disease control on mango by fruit bagging

Lê Ngọc Bình, Lê , Huỳnh Văn Thành và Nguyễn Văn Hòa

SUMMARY

Anthracnose disease is a serious disease on mango. This disease is widely distributed in cultivating areas. The disease occurs on leave, new shoots, twigs, inflorescence, fruit and takes place all the year round, especially under high humidity condition. For control of anthracnose disease, the study is aimed to evaluate the fruit bagging by using paper, cloth and nylon bagging integrated with the other control measures in the field during 2002 - 2003. Results showed that disease levels among treatments during fruit setting to harvesting stage were reduced due to low incidence and severity of the disease. The trees used with fruit bagging to control anthracnose gave more effective, especially, in case of cloth and paper bags in comparison with nylon bagging, chemical and control one.

Preliminary result of evaluation of the susceptibility of mango cultivars and some other fruit crops to Colletotrichum gloeosporioides Penz.

Lê Ngọc Bình, Huỳnh Văn Thành và Nguyễn Văn Hòa

SUMMARY

Anthracnose is a serious disease of mango, it infects to almost all the mango cultivars. Recently, farmers used many kinds and high dose of chemicals to control it, which raises resistance of fungus to chemicals. During this investigation, we tested the susceptible of the 13 different mango cultivars to Colletotrichum gloeosporioides. The result shown that all the cultivars tested infected by fungus with different levels. Of them Chauhangvo, Xoai ghep, Cat chu, Cat Hoa Loc and Xiem num were more sensitive to fungus than Khiêusav i, Irwin, Canh nong and Thanh ca. In addition to mango, papaya, banana, chili, guava, tomato and lime is also infected during the test.

Biological characteristics of *Colletotrichum gloeosporioides* penz. infecting under Lab. test.

Lê Ngọc Bình, Lê Thị Thu, Huỳnh Văn Thành và Nguyễn Văn Hòa

SUMMARY

Anthrachnose (Colletotrichum gloeosporioides Penz.) is a serious disease of mango and other fruit crops. The biological characteristics of this fungus were studied during this investigation. It shown that the mycelium color of different isolates from different locations revealed different. The conidia was peanut pod shape, the length of conidia was not much different among the isolates. Germination of conidia and appressorium formation were formed at 7 days after inoculation and immediately after keeping in water condition. The temperature and pH were also affected to the growth of mycelium and conidia formation; at 25 -30 °C and pH 5-6 were optimum for the growth of mycelium and pH 4 and 7 were best for conidia formation.

Investigation of disease on Da bo longan and reaction of *Phytophthora* sp. on some fungicides under lab condition

Lê Thị Thu, Huỳnh Văn Thành, Nguyễn Văn Hòa

SUMMARY

*During the investigation on longan (nhân tiêu da bo) at Ch. Lách, Bến Tre, five diseases were recorded. Of them, melanose spot (*Meliola* sp.) and lichens were more common (96% & 78 %), but fruit rot (15%) and black flower (15%) caused more damaged to longan. The reaction of *Phytophthora* sp. to some fungicides were investigated and shown that the fungus still susceptible to Ridomil, Aliette, Dithan, Metalaxyl while it seemed to be resistance to Carbenzim. The fungus grown fastest during 3 – 4 days after inoculation.*

Studying of characteristic of scale on Cayenne pineapple (*Ananas comosus*) and pesticide control method

Nguyễn Quốc và Mai Văn Trâm

SUMMARY

Vietnam have been developing cayenne pineapple areas for supply to Manufactories and Markets. All most of Technology had been applied: Breeding, distance- amount, pests and diseases, grass management.... Pests and diseases is important problems, one of them is scale. It is very important pests, is vector to transmit virus disease (wilt disease), cause to decreasing of yield. Therefore, studying of characteristics of scale on cayenne pineapple and pesticide control method is very important.

*The result had showed that scale is an important pest on cayenne pineapple. It lives with ants (*Dolichdorus thoracicus*), and they help themselves. When the scale moves, they can bring virus from this plant to the other.*

The result of pesticide control method showed that Basudin (10H, 50kg/ha) is the best, next is Supracide (50ND, 1,5litter/ha), Polytrin (440DD, 1,5 litter/ha).

Study on biology characteristic of mealybug on major fruit trees in Tien Giang, Ben Tre province

Lê Minh Tâm, Lê Quốc i n, Nguyễn Văn Hòa

SUMMARY

Mealybug is a key pest of fruit trees. It attacks not only on the cluster but also the the root and makes difficult for farmer to manage them. In this survey, we recorded 13 species of mealybug, which damaged all parts of the tree (abnormal young shoot, young fruit stage, mature fruit stage) on 15 kinds of fruit tree.

Effect in controlling mealybug of some pesticides in the lab condition

Lê Minh Tâm, Lê Quốc i n, Nguyễn Văn Hòa

SUMMARY

In the lab condition, pesticides as Supracide 40EC at 3 concentrations 0,05%; 0,1%; 0,15%, Admire 050EC at 3 concentrations 0,05%; 0,1%; 0,15%, DC-Tron Plus 98,8EC at 3 concentrations 0,5%; 0,75%; 1% had high effect in control mealybugs on mango leaves. However with longan and pineapple fruits, the effect of these pesticides were low for control mealybugs.

Sensitivity to the fruit flies *Bactrocera dorsalis* Hendel and *Bactrocera correcta* Bezzi of mangosteen, cavendish banana, xiem banana variety, dabo longan

Nguyễn Thị Kim Thoa, Lê Quốc i n, Nguyễn Văn Hòa, Barbara Waddell

SUMMARY

*Adult fruit flies *Bactrocera dorsalis* and *Bactrocera correcta* were obtained from lab., which have been provisioned with water, sugar, protein, etc. So that they ready for oviposition under specific conditions. The experiments were carried out with 20 flies per cage for 24 hours, two treatments were unpunctured and punctured fruits for each variety and fruit fly species.*

*After keeping for 14 days, the results shown that Mangosteen was not infested by both *B. dorsalis* Hendel and *B. correcta* Bezzi. Cavendish banana was only infected by *B. dorsalis* Hendel; While Xiem banana and Dabo longan were infected by both species.*

Study on fruit borer (*Conogethes punctiferalis* Guen.) and effect of it's control methods on durian

Lê Minh Tâm, Lê Quốc i n, Nguyễn Văn Hòa

SUMMARY

*Recently, Durian cultivated area is increasing year by year which leads to the increasing of pests such as fruit borer *Conogethes punctiferalis* Guen., *Allocaridara maleyensis* Craw., *Pseudococcus* sp., ect. Among these insects, *Conogethes punctiferalis* Guen. occurred with high density of larvae infesting skin of the young fruits, especially at the wrist to first size. To control *Conogethes punctiferalis* Guen. Karate 2.5EC, Success 25SC, Sumialpha 5EC, fruit bagging were*

used. The result shown that were effective. In addition, fruit bagging with white paper at stage 21 days after fruits set also shown good result.

Study on biological characteristics of mango's shoot borer and control of *Alcidodes frenatus* Faust and *Chlumetia transversa* Walker on mango by chemical and bio-chemical methods

Hu nh Thanh L c, Nguy n D ng Tuy n, Lê Qu c i n, Nguy n V n Hòa

SUMMARY

Mango (*Mangifera indica* L.) is an important fruit crop in the Mekong Delta, Vietnam. Unfortunately, it is attacked by many insect pests (17species). Out of them, shoot borer seems to be more common and causes much damage. In this investigation, we recorded four most important species such as *Sybulus* sp., *Alcidodes frenatus* Faust, *Chlumetia transversa* Walker and *Plocader ruficornis* Newman. They mostly attacked and caused damaged to young shoot (growth stage, flowering stage). Among the four, *Sybulus* sp. was more common and caused much damage in comparison with others. Understanding the biological characteristics of these species are important to control them.

Chemical and bio-chemical methods were attempted to control *Alcidodes frenatus*, *Chlumetia transversa*. The results shown that Regent 5 SC (irrigation), Karate 2.5 EC and Success 25 EC (spraying) were effective to control them.

Control of mango fruit borer (*Deanolis albizonalis* hampson) by using chemical and bio-chemical methods

Hu nh Thanh L c, Nguy n D ng Tuy n, Lê Qu c i n, Nguy n V n Hòa, Nguy n Minh Châu

SUMMARY

Fruit borer (*Deanolis albizonalis* Hampson) is an important insect causing damage on mango. It presents on all mango cultivated areas and on all varieties of mango in the Mekong Delta of Vietnam. Farmers had used a lot of insecticides to manage it, which leads the fruit borer to resist to chemical used. The results of the investigations shown that:

- Only mango was host tree of *Deanolis albizonalis* among 7 fruit varieties tested. -
- Ratio of *Deanolis albizonalis* on mango at harvesting stage was high 15%.
- Napthalene 98% (6 traps per tree), Karate 2.5 EC (0,02 g.a.i./liter) and Success 25 EC (0,9 g.a.i./liter) were effective on *Deanolis albizonalis*.

Effect of temperature on storage life and quality of Cayenne pineapple

Minh Hi n, Thái Th Hòa, Ph m Hoàng Lâm, Nguy n Thanh Tùng

SUMMARY

Cayenne pineapples harvested at 105th day after flowering can be stored during 2 weeks at 10-20°C. After that chilling-injury symptom (internal browning) is observed.

Effect of fungicide treatments on postharvest diseases control of Cayenne pineapple

Minh Hi n, Thái Th Hòa, Nguy n Thanh Tùng

SUMMARY

Cayenne pineapples harvested at stage of 105 days after flowering are treated with Benomyl at different concentrations (0, 500, 1000, 1500 and 2000 ppm) and stored at 18°C. The treatments 1000 ppm and 1500 ppm can control effectively rotting and quality fruit is maintained after 3 weeks at 18°C. Therefore, it is necessary to analyze fungicide residue of the fruit after storage.

Maturity indices of Cayenne pineapple

Thái Th Hòa, Minh Hi n, Nguy n Thanh Tùng

SUMMARY

Maturity indices of Cayenne pineapples planted at Tan Lap village, Chau Thanh district, Tien Giang province were investigated from February to October 2003. Growing duration of these cultivars is 105-120 days after flowering. TSS and sugar: acid ratio is 13.07-14.90°brix and 15.56-17.15, respectively.

Effect of low temperatures on ‘Queen’ pineapple’s postharvest quality

Nguy n Thanh Tùng, Ph m Hoàng Lâm, Thái Th Hoà, Minh Hi n

SUMMARY

‘Queen’ pineapples harvested at stage of 90 days after flowering were stored at different temperatures 7°C, 12°C, 15°C, 20°C and ambient temperature (control). At 15°C, the fruits had internal browning symptom with ratio of 100% after 14 days. The fruits could be maintained 2 weeks with 20% of internal browning and quality fruit was acceptable.

Maturity indices of ‘cau’ Banana

Thái Th Hòa, Ph m Hoàng Lâm, Nguy n Thanh Tùng, Minh Hi n

SUMMARY

Maturity indices of ‘Cau’ bananas planted at Tan Thach village, Chau Thanh district, Ben Tre province are investigated. The growing duration of fingers is 45-50 days after flowering of second hand. The fingers could ripe normally at ambient temperature after 6-7 days and the quality was good with TSS of 23.65-25.00°brix.

Effect of low temperatures on ‘gia’ bananas quality and storage life

Nguy n Thanh Tùng, Ph m Hoàng Lâm, Minh Hi n, Thái Th Hòa

SUMMARY

‘Gia’ bananas harvested at a stage known as ‘three quarters full’ were stored at different temperatures 10°C, 12°C, 15°C and ambient temperature (control). At 15°C, ‘gia’ bananas could be maintained during 3 weeks. The fingers had chilling-injury symptom at the lower temperatures (10°C and 12°C) that affected on banana quality after ripening.

Maturity indices of ‘gia’ banana

Thái Th Hòa, Phạm Hoàng Lâm, Nguyễn Thanh Tùng, Minh Hi n

SUMMARY

Maturity indices of ‘gia’ banana planted at Tan Thach village, Chau Thanh district, Ben Tre province were investigated. The growing duration of fingers is 65-70 days after flowering of second hand. The fingers could ripe normally at ambient temperature after 7 days and the quality were good with the total sugars of 16.5-17.0%.

Maturity indices of mangosteen fruit

Thái Th Hòa, Minh Hi n, Nguyễn Thanh Tùng

SUMMARY

Maturity indices of mangosteen fruit planted at Tan Thienh village, Cho Lach district, Ben Tre province were investigated. The fruits were the best qualities (apparent and organoleptic) at stage 104–108 days after flowering. In this stage, TSS and titrable acidity were 15.00-16.33°brix and 0.5%, respectively.

Effect of temperature on ‘Monthong’ durian quality and storage life

Minh Hi n, Thái Th Hòa, Nguyễn Thanh Tùng

SUMMARY

‘Monthong’ durians harvested at stage of 120 days after flowering were stored at different temperatures 12°C, 15°C and ambient temperature (control). At 15°C, the fruits could be maintained during 15 days. Chilling-injury symptoms were observed in fruits kept at 12°C (3rd week) that caused the ripening anomalous and fruit quality was bad.

Maturity indices of ‘Monthong’ durian

Thái Th Hòa, Nguyễn Thanh Tùng, Minh Hi n

SUMMARY

Maturity indices of ‘Monthong’ durian planted at Cho Lach district, Ben Tre province were investigated. The fruits were the best quality at stage of 116-123 days after flowering. Pulp ratio was 30.88-32.12%. TSS, total sugar and starch contents were 8.89-9.05°brix, 6.43-6.64% and 9.64-9.97%, respectively.

Maturity indices of ‘hong’ mandarin

Thái Th Hòa, Nguyễn Thanh Tùng, Minh Hi n

SUMMARY

Maturity indices of ‘hong’ mandarin planted at Lai Vung district, Dong Thap province were investigated. Fruits harvested at stage of 38-39 weeks after anthesis were the best quality (apparent and organoleptic). Medium fruit weight was 140.60-152.27 g. TSS, TA, reducing sugar and total sugar contents were 12.43-12.97°brix, 1.19-1.25%, 3.58-3.56% and 9.28-9.36%, respectively. Juice content was high level (50.82-53.65%).

Effect of temperature on storage life and quality of red flesh dragon fruit

Minh Hi n, Thái Th Hòa, Nguy n Thanh Tùng

SUMMARY

Red flesh dragon fruits harvested at stage of 27 days after flowering were stored at different temperatures 5°C, 10°C, 15°C and ambient temperature (control). At 10°C, the fruits could maintained during 2 weeks, after that the quality fruit was decreased and the rotting was developed rapidly.

Maturity indices of ‘Lo ren’ star apple

Thái Th Hòa, Nguy n Thanh Tùng, Minh Hi n

SUMMARY

Maturity indices of ‘Lo ren’ star apple planted at Vinh Kim village, Chau Thanh district, Tien Giang province were investigated. 245-255 days after anthesis, the fruits were the best quality with an edible proportion of 38.26-44.48%. TSS and total sugar contents were 14.33-14.70° brix and 10.89-11.90%, respectively.

The world’s durian market, durian supply and demand in South Vietnam

oàn H u Ti n, Hu nh V n V , T Minh Tu n

SUMMARY

The world’s durian production is concentrated in South-East Asia, in which Thailand is the most producer (it takes 58% of the world durian output) with the average increased rate at 3.9% and 5.5% of areas and output in recent ten years. The demand of durian products is quite large and increased, specially in Asian market as Hongkong, Singapore, Taiwan. Thailand is the largest exporter of durian products in the world with the average increased rate at 16% per year. In Vietnam, production and consumption of durian are concentrated in South Vietnam and durian production. They have not met properly the demand particularly in almost of the months in year except May, June, July and August.

Preliminary result of study on market resolution for potential star apple

T Minh Tu n, oàn H u Ti n, L ng Ng c Trung L p, Hu nh V n V

SUMMARY

Milk fruit cultivation is increasing in Tien giang province as one of special tropical fruits though it has been ignored in many regions of Vietnam. This investigation showed its good markets and some aspects related to the fruit quality for commodity and postharvest technology.

Effect of bio- organic fertilizers on yield and fruit quality of Watermelon

Nguy n Thanh Binh

SUMMARY

A trial involving five bio-organic fertilizers from Taiwan was conducted on watermelon in Cai Lay district, Tien Giang province to examine the effect on yield and fruit quality. The primary result showed that the combination of Biogreen No.2 and StrongÜ gave the increase in fruit weight, yield, and Brix as compared to farmer control.

Field trial of some commercially grown tomato hybrid cultivars

Trần Kim Cường

SUMMARY

Thirteen commercially grown tomato hybrid cultivars collected from market were evaluated to choose the best one for recommends.

The result showed that the hybrid cultivars 607 gave highest yield, thick fresh. The hybrid cultivars which were cultivated in a long time include TN52, TN148, Red Crown 250 showed sensitive to some important diseases. The cultivars Carioca recorded highest yield, but had not good fruit quality.

Field trial of some commercially grown cucumber hybrid cultivars

Trần Kim Cường

SUMMARY

Eight F1 hybrid cultivars of cucumber collected from market were evaluated for their yield, fruit characters, plant growth and resistance to diseases during the 2003 rainy season. The result showed that four F1 hybrid cultivars include Sm 3001, 702, Malai 759 and Amata 765 were suitable for cultivation in this season.

Comparison between some eggplant varieties using commercial seeds

Nguyễn Thị Hằng Lan, Trần Kim Cường

SUMMARY

Eight eggplant varieties include seven F1 hybrid varieties and one domestic variety as the control, were evaluated for their yield, quality and diseases resistance. The result showed that Ca xanh cao san variety gave the highest yield (40 tons/ha) and higher than control variety. Mustang, Com xanh, Dok variety's yield did not significantly differ from the control varieties. It was also recorded from this investigation that Com xanh variety had the highest fruit quality.