



MSPP

Newsletter

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PERSATUAN FISILOGI TUMBUHAN MALAYSIA

Malaysian Society of Plant Physiology

(Inaugurated on 29 April 1989. reg. No. 889 Wilayah Persekutuan)

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MESSAGE FROM THE PRESIDENT

Malaysian Society of Plant Physiology after 15 years!

Assalamualaikum wm wb and Salam Sejahtera to all Members of the Malaysian Society of Plant Physiology

Alhamdulillah, as I enter the second term in office as the President of the MSPP, I am happy to note that MSPP in the last 15 years has managed to sustain her very role as a professional scientific body dedicated towards fostering the advancement and promotion of research and development in tropical plant biology. This has been successfully accomplished in two ways. Firstly, by the continuous annual gathering of the scientists, plant biologists and physiologists in particular. In undertaking this role, the Society has team-worked with many R&D and higher learning institutions highlighting themes both the national and global interests. Thus, ensuring her to evolve with time and relevance to the trend of changes and to the scientists. Since her inauguration in 1989, the Society has successfully conducted 14 conferences, including two at international level. The themes of discussions have always reflected the temporal

importance ranging from physiological tools in the early This year, MSPP will again set an important platform of discussion 'Advances in Plant Science'. It is aimed at reviewing the status of R&D and achievements made in plant science relating to plant productivity, production system and improving plant efficiency and resource use. It is hoped that the findings thus discussed can throw some directions for a more organized research particularly in plant physiology, and promoting inter-disiplinary and inter-agency networking for further improvement and sustenance of plant production.

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This progress in science, technology and innovation is very vital for enhancing the transformation of agriculture into modern and money spinning enterprise, as dictated by the government; and for accelerating the emergence of many new crops and crop related economics and industries. For next year, we are targeting another International Congress in Agroforestry, and planning has been underway.

In promoting the ST&I culture and enhancing the development of knowledge, the role MSPP has been entrusted with, I am again happy to note that in her 15 years, MSPP has successfully published 12 going to 13 Transactions of the proceedings papers this year; 8 of them were consistently produced every year since 1997. These transactions have been on the shelves of many libraries in Malaysia and also USDA. To further enhance the ST&I culture, MSPP is going on journal publication very soon, called the Journal of Tropical Plant Physiology (JTPP). We have come up with the guidelines, the editors and reviewers, national and international scientists. We have also identified some potentials papers to be published. When the first volume of JTPP is finally printed out in June 2005, I will be happy to pronounce that MSPP's mission to become a relevant scientific body in enhancing the development of knowledge and ST&I-culture in Malaysia, particularly among the plant biologists, has finally succeeded. I hope the Journal will serve to be yet another vehicle to enhanced professionalism among the scientists; and it will be well

made use of by members and non-members.

Meantime MSPP is also looking at ways to enhance the promotion of plant biology among young scientists or researchers. So far we have introduced the poster presentation awards for both scientists and students during the annual conference. Now MSPP has completed another proposal for the Best Plant Science Student Award for university level. We hope to introduce this scheme in the coming graduation season. The EXCO is also looking into the establishment of education loan. The purpose is to keep the members active by advancing some form of soft loan to active members in their quest to acquire knowledge. This project can only take off when there is sufficient fund to initiate and support such a scheme.

Finally, I hope my tenure in office has brought some advantage to the MSPP and the members. I must thank all the EXCO for their great efforts put into this voluntary professional body and I appreciate their good teamwork. I would also like to take this opportunity to invite the many young plant scientists out there to join us, contribute to and reap the goodness from the Society that can give uphold your own interests, Insyah-Allah.

DR. HAWA JAAFAR

MSPP BEST PLANT SCIENCE STUDENT AWARD

MSPP believes that the young generations are the strength of the nation. Agriculture has been declared as the third engine of growth for Malaysia and as such young scientist should be encouraged to venture into agriculture. In this direction MSPP would like to offer an award annually to one best plant science student. Currently, this award is for undergraduate only. Nomination should be based of his or her achievements as follows:

1. Excel in plant science courses.
2. Have a Cumulative Great Point Average of 3.5 and above.
3. Has carried out a notable project on plant sciences in particular plant physiology.

The award would comprise of a maximum of RM 1,000 and a certificate of merit. MSPP is determined to give away its inaugural award in MARCH 2005.

JUST FOR LAUGHS

A motorist drove through a red light on a road. When stopped by a policemen, he was asked, "didn't you see the red light?" "Yes, I did," he replied. "Then why didn't you stop?" "Because I didn't see you".

HIGHLIGHTS OF THE UPCOMING

MSPPC 2004

The 15th Malaysian Society of Plant Physiology Conference will be on the 14 - 16th September 2004 at Bayu Beach Resort, Port Dickson. The theme of the conference this year will be *Advances in Plant Science*.

The objective of the conference are:

1. To review the status of R & D in the field of Plant Science relating to plant productivity and production systems.
2. To deliberate on the current research findings and relate their relevance to improving plant efficiency and resource use.
3. To provide direction for an organized research in plant physiology and promote inter-disciplinary and inter-agency networking for sustainable plant production and improvement.

TENTATIVE SCIENTIFIC PROGRAMME

Areas covered during the conference include:

- ❖ Ecophysiological processes and environmental technology.
- ❖ Assimilate plant production, critical stages of plant growth and development.
- ❖ Plant nutrition, biofertilizer and pesticides.
- ❖ Food quality, safety and regulation.
- ❖ Plant biochemistry and molecular physiology.
- ❖ Postharvest physiology and technology.
- ❖ Plant growth and development and tissue culture.
- ❖ Precision agriculture and modeling.
- ❖ Crop production in controlled environment
- ❖ Plant mechanization and robotics.

The conference also feature two other main events namely a post-tour conference to an organic farm and tissue culture center in Negeri Sembilan and a dinner talk by the Menteri Besar of Negeri Sembilan.

AWARDS

It is a tradition of MSPP to judge and award best posters. There will be two categories of award:

1. Students category
2. Researches category

Three awards for each category are available for you to snatch away!!!

LOOK OUT FOR THE UPCOMING

INTERNATIONAL AGROFORESTRY CONFERENCE

This conference is to be held in Kuala Lumpur tentatively in September 2005. The conference is to be organized by MSPP, FRIM and UPM in collaboration with MPOB, LGM, MARDI and other International Bodies to be identified soon.

Thumbs up for Agriculture

The agriculture sector has seen a good head start in the year 2004. It is in the mindset of the newly appointed Prime Minister and Minister of Agriculture to boost the agriculture, agro-based industries and biotechnology in a move towards self-sufficiency in food production and exports. Some interesting eye-openers include transformation of agriculture into a viable e-marketplace of resources, high-tech farming and the launching of RM 100 million Premier Agriculture Project for large-scale integrated modern agriculture project. Let's keep our fingers crossed that the agriculture sector will enjoy more benefits and opportunities in leaps and bounds in the Year of the Monkey!

Muhyiddin spells out agenda

'I will focus on increasing country's food production'

BY WANI MUTHIAH

KUALA LUMPUR: Tan Sri Muhyiddin Yassin, who took over as Agriculture Minister in a minor Cabinet reshuffle last week, said his priority now is to increase the country's food production.

He said it was also time that agriculture takes its rightful place, as a large number of Malaysians depend on the sector for their livelihood.

"I will obviously focus on increasing domestic food production and uplifting the living standard of farmers and fishermen," he told reporters at the Domestic Trade and Consumer Affairs Ministry after handing over his former portfolio to Datuk Dr Jamaluddin Jarjis yesterday.

Muhyiddin takes over from Datuk Seri Dr Effendi Norwawi, who has been

appointed Minister with Special Functions in the Prime Minister's Department. Dr Jamaluddin was formerly Finance Minister II.

Muhyiddin said he had met Dr Effendi for a discussion and was given an outline of what had already been done to stoke the agriculture sector.

Muhyiddin said he had also briefed Dr Jamaluddin about consumer-related legislation pending in Parliament as well as the status on the development of patenting, protection of intellectual properties and prevention of product piracy.

"I am confident that he will effectively continue with what has already been done," he said, adding that Dr Jamaluddin's experience in the Finance Ministry would be useful in handling the affairs of the Domestic Trade and Consumer Affairs Ministry.

Dr Jamaluddin congratulated Muhyiddin on his new appointment and said it was reflective of the confidence placed by Prime Minister Datuk Seri Abdullah Ahmad Badawi that he could upgrade the nation's agriculture sector.

On his new appointment, Dr Jamaluddin said the foundation set by Muhyiddin promised to make his ministerial task an easy one.

"Everything from infrastructure to enforcement is well in place and the work initiated by Tan Sri (Muhyiddin), such as the protection of intellectual property, is important and in line with the new economy," he said.

He said that Muhyiddin had also suggested that he look into the pricing of car spare parts and vehicle maintenance, as it was an issue relevant to consumers.



TAKING OVER: Muhyiddin handing over his former portfolio to Dr Jamaluddin yesterday.

The Star, 13 Jan 2004

Sik to pioneer agro industries

High yield farming among others under study

KUALA LUMPUR: Sik in Kedah will be the pioneer location in the Government's plans to implement programmes to develop small agro-based industries throughout the country.

Agriculture and Agro-Based Industry Minister Tan Sri Muhyiddin Yassin said the programmes would be carried out

to increase the income of agriculturally dependent individuals there.

"It is the Prime Minister Datuk Seri Abdullah Ahmad Badawi's wish for Sik to be developed quickly, as it is the

most backward place in the country.

"My ministry will set up a committee comprising federal and state officials to study the area," he told reporters at his monthly staff meeting here

yesterday.

Muhyiddin said the programmes would include introducing a farming method for higher yield, poultry rearing and making delicacies for sale.

On another matter, Muhyid-

din said Abdullah had agreed to his request for certain functions in the Drainage and Irrigation Department to remain in his ministry.

"I have explained to the Prime Minister that the devel-

opment of the agriculture sector is interlinked to drainage and irrigation.

"The PM has agreed and asked Chief Secretary to the Government to look into it," he said. Citing an example, Muhyiddin said irrigation and adequate water supply were important to increase the production of padi to 10 tonnes per hectare.

Farming Going Hi-Tech Way

SWEATING and toiling under the sun comes with the job of farmers. But in the near future, our farming community may well be spending a portion of their time in air-conditioned comfort, clicking away on the computer. The computer will be used as a means to gather information on the latest farming techniques, weather conditions, soil types, etc, or to communicate via e-mail with their counterparts or farming experts in other parts of the world for information and tips related to their work.

(Computimes, 15 Jan 2004)

The Star, 13 April 2004

The Star, 10 April 2004

Pineapple industry set for revival

BY MAZWIN NIK ANIS

PONTIAN: Incentive packages to revive pineapple planting will be designed to turn the sector into a profitable industry, said Agriculture and Agro-based Industry Minister Tan Sri Muhyiddin Yassin.

He said immediate measures would be in the form of "specially designed incentive packages" to encourage smallholders to plant the fruits and redevelop the industry.

As for long-term measures, he said the ministry was looking into plans to use the concept of Felda schemes.

This would involve mass cul-

tivation of pineapples and getting a buyer, preferably a cannery, he said after meeting about 100 pineapple growers in Parit Datuk Onn yesterday.

This would resolve the ongoing demand and supply problem faced by farmers and the cannery and they would have to work together to ensure all parties benefited from the scheme, he added.

The moves were necessary to turn the sunset industry into the profitable venture it was about 30 years ago, he said.

"In the 1970s and 1980s, Malaysia was the leading pineapple grower and exporter in the world but now our position has

dropped," he said.

Currently, about 5,000 families are involved in cultivating pineapples on 15,000ha of land.

This is in sharp contrast with the 1970s where about 20,000 families grew pineapples on 60,000ha of land.

Muhyiddin also said the ministry would consider reverting the decision to dissolve the Pineapple Industry Board.

He added that a special section might be set up within the ministry to oversee the sector.

"The ministry will also look into new marketing strategies and export areas to create a bigger market for the produce," he added.

Unified Front Needed To Boost Agriculture Sector

Officers in agriculture agencies welcome the exciting news about agriculture, agro-based industries and bio-technology being accorded priority together with tourism, Islamic funding and healthcare (NST, Jan 14). Prime Minister Datuk Seri Abdullah Ahmad Badawi's favourable perception towards agriculture was felt even as he served as Deputy Prime Minister. Previously the attention was skewed towards Foreign Direct Investments and the manufacturing sectors.

(New Straits Times, 16 Jan 2004)

Agriculture sector may get tax relief

BY ZARINAH DAUD

KEPALA BATAS: Incentives and tax relief to spur the agro-based industry may be included in the 2005 Budget, Agriculture and Agro-based Industry Minister Tan Sri Muhyiddin Yassin said.

He said a special committee had been set up to look into how tax incentives, similar to those given to multi-national corporations in the manufacturing sector, could be introduced.

He said the ministry would introduce a special package to encourage these corporations to invest in agro-based activities and the incentives would be included in the 2005 Budget.

"The ministry will submit a proposal on this package to Prime Minister Datuk Seri Abdullah Ahmad Badawi so that it can be incorporated into the 2005

Budget.

"We want to attract big players like Japan, Taiwan and China to participate in our aquaculture industry but we must have attractive incentives for them to come in," said Muhyiddin.

"The Government hopes to reduce foreign exchange as our food imports have reached RM13bil, compared to the exports value of about RM7bil.

"We have to attract big players to help spur the agriculture sector so that we could achieve trade surplus of RM1.2bil on food alone in 2010," he said after closing the seminar on Sustaining Economic and Social Growth at Dewan Miletium here yesterday.

The seminar is held in conjunction with the Unit Trust Week organised by Permodalan Nasional Berhad. Muhyiddin said the ministry would

ask the International Trade and Industry Ministry for help so that the best package could be introduced to attract investors.

He said his ministry was embarking on programmes to promote the livestock sector.

He added that there was huge potential in the deep-sea fishing industry as well as in herbal pharmaceuticals and in bio-technology.

"The ministry is also planning to upgrade the existing agricultural training institutes to college-level to produce more skilled human resources in the sector.

"The purpose of these colleges is to create a new generation of agro-workers and entrepreneurs and provide them with knowledge and technical expertise to succeed in agriculture," he said.

Virtual market opened for agricultural community

BY STEVEN PATRICK

PUTRAJAYA: Prime Minister Datuk Seri Abdullah Ahmad Badawi launched a portal for the agricultural community last week. Called AgriBazaar, it enables farmers, retailers, wholesalers as well as small and medium scale industries to conduct online trading of their products.

Badawi said the portal (www.agribazaar.com.my) would make it easier for those groups to market agricultural products in the country. The other advantages that AgriBazaar would provide include better pricing, as well as reduced administration and inventory costs.

Players in the agricultural sector can perform online transactions using AgriBazaar modules, such as e-plan (for market forecasting), e-buysell (to post offers or respond to offers), e-stock (for inventory management, as well as product and warehousing information) and e-logistic (to set up a logistics company to provide online services, access lists of logistics service providers and to manage online bookings of logistics facilities).

Agriculture and Agro-based Industry Minister Muhyiddin Yassin claimed that 1,800 members had begun using AgriBazaar since the start of the pilot project in Batu Pahat, Johor, in July last year.

He said India, Hong Kong, Thailand and Indonesia, had launched similar initiatives.

There is no charge to register at the AgriBazaar portal. Once registered, members get access to announcements and alerts, a summary of products offered, a business directory and search engine, information on the availability of seasonal fruits, news reports, weather forecasts, and market analyses.

AgriBazaar is a joint initiative between Mimos Bhd and the Agricultural Department.

Mimos president and CEO Dr Tengku Mohd Azzman Shariffadeen said the AgriBazaar initiative was inspired by the success that Mimos had enjoyed with its supply chain management scheme for the electronics and electrical sectors. It was called the Technology Industry Government For e-Revolution (TIGeR) e-Logistics project.

TIGeR E&E provides the e-business application and e-Hub services to integrate Malaysian suppliers into local and global supply chains.

The Star, 24 April 2004

The Star, 29 June 2004

Planting Another Green Revolution

The modernisation of agriculture is a continuous, long-term process. But it has taken a significant step forward with the country's first large-scale integrated project in Kluang, Johor. The RM100 million Premier Agriculture Project, launched by Prime Minister Datuk Seri Abdullah Ahmad Badawi, brings together the benefits of technology, private sector investment and Government support to produce quality food products. If this pioneer project succeeds, more of them will be set up in the country. This new initiative cannot only reduce imports and Malaysia's huge food deficit bill of RM6 billion, it can also lift our food exports. There is no reason why we cannot become self-sufficient in food since the conditions are favourable, such as ample fertile land and abundant water resources.

(New Sunday Times, 15 Feb 2004)

The Star, 11 August 2004

'Have eye-catching labels'

Famed D24 durians being exported to Australia
Thanks to new packaging methods, the famed D24 durians have made their way to Australia, which is known for its strict rules against imported agricultural items. More than 9000kg of the durian from Kampung Sungai Klau have been exported, which is supplied by Thai Zi Fruit Trading. Only those fruits weighing between 1.2kg to 1.8kg should be supplied, as that was the standard for good ones.
(The Star, 31 August 2004)

KUALA LUMPUR: Manufacturers of fruit-based products should make it a priority to provide attractive and self-explanatory packaging to increase the marketability of their produce locally and internationally, said Agriculture and Agro-Based Industries Minister Tan Sri Muhyiddin Yassin.

"Our aim is to improve the quality of the product as well as the labelling," he said, adding that many of these products were labelled only in Malay.

"This would not be suitable for export as foreigners would not be able to read the information.

"Even non-Muslims or non-Malay consumers will pick up the products if they are labelled to meet their needs," said Muhyiddin, citing the example of Roselle products, which are labelled in Arabic to capture the West Asia market.

This was part of the ministry's plan to reach out to the global market as well as the local professionals and the "elite" communities in the country, he told reporters after launching the Agriculture Department's local fruits and fruit-based products promotion and mega sale at the Mall here, yesterday.

Muhyiddin said fruit-based products like candy, fruit juice and jam were of high quality but lacked the support of the elite and professionals who thought locally-made products were of low quality.

He also said the ministry had noted that many young people did not take to durians and it was stepping up its drive to encourage more youths to eat the King of Fruits.

"Our youths are more like foreigners. They can't stand the smell of the durian. They prefer to eat apples and other imported fruits," he said.



Malaysian Society of Plant Physiology Conference (MSPPC) 2003, was held on 23-25 September 2003, at Awana Gold and Country Resort, Genting Highlands, Pahang. The conference was on

Challenges In Plant Productivity & Food Security In A Changing Environment

This conference was co-organized by three institutions, namely; Malaysian Agricultural Research and Development Institute (MARDI), Ministry of Agriculture (MOA) and Ministry of Science Technology AND Environment (MOSTE).

There were 85 participants at this conference and a total of 50 papers were presented both as oral and posters. Papers were divided into six sessions, as follows:

Sessions 1: *Eco-Physiological Processes* (respiration, transpiration, photorespiration, photoinhibition, water relations, postharvest, biotechnology)

MSPP Transaction Vol 12

Sessions 2: *Assimilate Production* (photosynthesis, photorespiration, photoinhibition)

Sessions 3: *Critical Stages of Plant Growth and Development*

Sessions 4: *Weather and Crop Production* (crop improvement, breeding, resource management, pests and diseases, ecosystem, biodiversity)

Sessions 5: *Modeling And Stimulation*

The Transaction is in the final stages of editing and those who attended the conference can look forward to getting a copy. For members who could not attend the conference we hereby provide the titles of the papers presented for your perusal.

Three keynote addresses were given:

1. **Increased crop productivity in a changing**

2. **Challenges in plant productivity and food security in a changing environment** by Y. Bhg Dato' Dr. Hashim Hassan, Deputy Secretary General, MOSTE.
2. **Challenges in plant productivity and food security in a changing environment** by Dr. Mohd. Hashim bin Tajudin, Golden Hope Research Sdn. Bhd.
3. **Impact of environmental and climatic changes on crop production** by Y. Bhg. Dato' Embi Yusoff, Deputy Director General, MARDI.

Realizing the importance of the production environment and how it can affect productivity is vital in today's agriculture. The keynote addresses given by the various authorities covers large aspects such as those

related to policy issue and in relation to various crops.

ORAL PRESENTATIONS

1. Fluorescence Measurement – A Diagnostic tool for environmental stress in plants by Dr. Elizabeth Philips, FRIM.
2. Interactive effect of soil water potential and temperature on wood decomposition by *Risinicium bicolor* by Dr. Abd. Jamil Zakaria, MARDI.
3. Physiological performance of urban tree (*Mesua ferrea* L. Clusiaceae) to atmospheric pollutant SO₂ and NO₂ by Nurul Azzura binte Shahadan, UPM.
4. Environmental stress on rice with special reference to O₃ and stimulated haze by Dr. Ahmad Maksom Abdullah, UPM.
5. The effect of jasmonic acid on development of oil palm cultures by Dr. Ahmad Tarmizi Hashim, MPOB.
6. Effect of partial rootzone drying (PRD) on growth, yield and water use efficiency (WUE) of tomatoes on soilless culture by Hassan Ibrahim Ali, UPM.
7. Heat tolerance and improvement of flowering and fruit set of tomatoes under high temperature growing condition by Ismail Iberahim, UPM.
8. SEM of the mangosteen leaf: a probable explanation to the slow plant

development by Dr. Zakaria Wahab.

9. Light interception and leaf area index measurements under three oil palm planting systems by Dr. Mohd. Haniff Harun, MPOB.
10. Effects of pineapple green wastes compost on growth and yield of *Capsicum annum* by Siti Zaharah Sakimin, UPM.
11. BAC – based physical mapping of the yield related QTL in *Oryza rufipogon* by Song Beng Kah, UKM.
12. Versatility of low vacuum scanning electron microscope in the study of plant microstructures by Prof. Dr. Abdul Rahman Razak.

POSTER PRESENTATIONS (Only paper titles are listed - for further information please refer to the transaction vol 12 or contact the secretary)

1. Somatic embryo formation and germination from male flower cluster-derived suspensions of banana cultivar Rastali.
2. Construction of Capsanthin-Capsorubin Synthase (CCS) - Antisense Gene.
3. Shoot Induction from Hypocotyl Explant of Cabbage Cultivars 88 and KY Cross as affected by BAP.

4. Effect of Rice Straw Compost and Water Deficit on Physiological parameters, Yield and Water Use in Production of Tomatoes with different Growing Media Under Protected Environment.
5. PCR and GUS Histochemical Analysis Reveal Variability in T-DNA Expression and Possible Gene Silencing in Progenies of Chimeric Transgenic *C. annum*.
6. Rapid PRC Screening of Transgenic Pineapple Using FTA Cards.
7. Determination of Antioxidant Activities in Various Organic Extracts from Different Parts of Local *Citrus Grandis*.
8. Effect of High Temperature on the Epicuticular Wax of Local Fresh Dessert Bananas Var. Berangan Ripened by Calcium Carbide.
9. Quality Characteristics of Musa AAA "Berangan" and "Cavendish" During Ripening.
10. Construction of A Plant Expression Vector for Suppression Subtractive Hybridization CDNA Library Application.
11. Softening of Musa AAA "Cavendish"

- Banana During Ripening.
12. Preliminary Transformation Study of Pomelo (*Citrus grandis*).
13. A Fruit Specific and Ripening Related Endopolygalacturonase Gene from Papaya (*Carica papaya* L.).
14. Changes in Colour and Chlorophyll Contents during ripening of Musa AAA "Cavendish" and "Berangan" with different concentrations of Calcium Carbide.
15. Maintaining Landscape Plants of *Acalypha Siamensis*, *Ficus Microcarpa* and *Syzygium oleina* by the Application of Paclobutrazol: A Non-Mechanical Approach.
16. Physico-Chemical Characteristics of Pisang Mas with peel/pulp Splitting Disorder.
17. Effect of Methyl Oleate on the Efficacy of Glyphosate on *Mikania micrantha* and *Diodia ocimifolia*.
18. The volatile composition of essential oil in different parts of *Michelia alba* (cempaka putih).
19. Potential use of Chitosan in extending the vase life of *Chrysanthemum* and controlling microorganisms in the vase solution.
20. Anthocyanin content in flower petals of scented orchid, *Phalaenopsis violacea*.
21. Effect of shade on growth characteristics of mint (*Mentha arvensis* L.).
22. Biochemical analyses of seeds of selected rice cultivars.
23. Potential of *Trichoderma viride* in degradation of lignocellulose for humic acid production.
24. Assessment of growth of bamboos planted on acid sulphate soil.
25. A study on the development of quiescent mangosteen shoot.
26. Effects of environmental factors on germination of glyphosate-resistant and susceptible biotypes of goosegrass from Temerloh.
27. Survival of Micropropagated jelutong at acclimatization stage.
28. Effects of water stress on anthesis and flower abscission in the glasshouse sweet pepper.
29. Callus proliferation in woody plant of *Michelia alba* young flower and leaf explants.
30. Growth and photosynthetic rate responses of nitrogen fertilized *shorea platyclados* seedlings.
31. The effect of physical and nutritional factors of growth performance of *Michelia alba* callus cultures.
32. Effects of different water regime on water relations, flowering and fruiting of mango (*Mangifera indica* cv chokanan).
33. Direct shoot regeneration on petiole and leaf explants of papaya cv. eksotika using BAP and NAA.
34. Effect of farmyard manure on the physiology and nutritive quality of *Stylosanthes-panicum* mixed pasture.
35. Pectin methyl esterase in relation to seed quality of soybean.
36. Application of plant growth regulators (PGR) for improvement of tomato fruit set under high temperature growing conditions.
37. Growth and development of selected spices.
38. Effects of water regimes and root restriction on growth and yield of tomato under high temperature conditions.
39. Tree planting among small farmers in Malaysia.
40. Mutation induction and propagation of *Asplenium nidus*, a fern species from spores.

41. Regulation of flowering for staggered production of carambola by using growth retardant paclobutrazol.
42. Pesticides residues analysis in Chinese mustard grown under netted structure versus open field planting system.
43. The effects of different cytokinins in combination or alone on shoot proliferation on plant micropropagation in mangosteen (*Garcinia mangostana* L.)
44. An innovative method of production of planting stock of *hopea odorata*, *hopea helferi* and *hopea wightiana* in the shade houses.
45. Quality and shelf-life of fresh cut cucumber slices as influenced by slicing methods.
46. The effect of GA and AVG on Mauritius pineapple.

If you find the papers of interest to you, the transaction can be purchased at the price of RM50.00 from the secretary.

Local Conferences

14 – 16 Sept 2004

National Public Awareness Seminar on "Convention on Biodiversity and International Treaty on Plant Genetic Resources for Food and Agriculture". Seri Kembangan, Selangor. Organised by MARDI

14 – 16 Sept 2004

15th Malaysian Plant Physiology 'Advances In Plant Sciences'. Port Dickson, Negeri Sembilan. Organised by Malaysian Society of Plant Physiology (MSPP). (<http://www.mspp.gov.my>)

21 – 22 Sept 2004

National Food Technology Seminar 2004 (NFTS). Kota Kinabalu, Sabah. Organized by: MARDI. (<http://www.mardi.my>)

21– 22 Sept 2004

'Agroforestry the Way Forward'. FRIM, Kepong. Organised by FRIM. (<http://www.frim.gov.my>)

28 – 29 Sept 2004

National Seminar On The Environment 'Environment 2020: Urban Environment'. Seri Kembangan, Selangor. Organised by Department of Environment Science, UPM. (wannor@fsas.upm.edu.my)

28 - 30 Sept 2004

4th National Seminar on Wood-Based Panel Products. Pan Pacific Hotel, Kuala Lumpur. Organised by FRIM. (<http://www.frim.gov.my>)

28– 30 Sept 2004

'Invitation To The International Seminar On Halal Food and Products: Challenges and Prospects In Global Market'. Marriott Hotel, Putrajaya. Organised by Kolej Universiti Islam Malaysia (KUIM). (www.kuim.edu.my)

29 Sept. - 2 Oct 2004:

Oils and Fats International Congress and Exhibition

2004 "New Vistas in the Science and Technology of Oils and Fats". Putra World Trade Centre, Kuala Lumpur. Organised by Malaysian Oil Scientists' and Technologists' Association (MOSTA). (<http://www.mosta.org.my/events/default.shtml>)

4 - 5 Oct 2004

Malaysian International Cocoa Conference 2004. Kuala Lumpur.

5 – 8 Oct 2004

Sustainable Management of Matang Mangroves - 100 years and beyond. Ipoh, Perak. Organised by Department of Forestry Peninsular Malaysia. (mailto: razni@forestry.gov.my)

5 – 10 Oct 2004

MAHA 'Technology the Forefront Of Agrocommercialisation'. Mines Exhibition Center, Seri Kembangan, Selangor. Organised by Ministry of Agriculture. (<http://www.maha2004.com.my>)

25 – 28 Nov 2004

Symposium of 26th Malaysian Society and Microbiology 'Microbes the Gateway to Biotechnology'. Langkawi, Kedah. Organised by Malaysian Society and Microbiology and UKM. (www.ukm.my/26thMSM)

11 Dec 2004

International Conference on Biomedical Engineering 2004. Organised by Universiti Malaya, Kuala Lumpur.

13 – 15 Dec 2004

15th National
Biotechnology Seminar:
Biotechnology For
Sustainable Development.
Riviera Bay Resort,
Malacca. Organised by
MOSTE.
(<http://www.sirim.my/nbs15/>)

Local Workshop

15 Sept 2004

Join Workshop on How to
Improve Nature
Interpretation Skills For
Forest Staff In Malaysia.
FRIM Kepong, Kuala
Lumpur. Organised by
FRIM.
(<http://www.frim.gov.my>)

12 – 13 Oct 2004

Integrated Farming. MRB
Rubber Training Centre, Sg.
Buloh. Organised by
Malaysian Rubber Board.
<mailto:arapa@lgm.gov.my>

14 –17 Dec 2004

Forest Biotechnology
Workshop 'Biotechnology
Towards Rainforest
Conservation'. FRIM
Kepong. Organised by
FRIM.
(<http://www.frim.gov.my>)

International Conferences

20 - 24 Sep 2004

8th Conference on the
International Society Plant
Anaerobiosis. Australia.

26 Sept – 1 Oct 2004

4th International Crop
Science Congress. Brisbane
Convention & Exhibition
Centre, Queensland.
(<http://www.cropscience2004.com/>)

4 – 7 Oct 2004

Agriculture Congress.
"Innovations Towards
Modernized Agriculture".
(www.agri.upm.edu.my/congress).

11 - 14 Oct 2004

Information Technology for
Agriculture) in conjunction
with the 1st Technical
Symposium of CIGR
Section VII. China.
Organised by Laboratory of
Modern Precision
Agriculture System
Integration Research,
Ministry of Education,
China Agricultural
University.
(<http://www.2004cigr.org/infoagro/index.html>)

12 – 16 Oct 2004

Nitrogen, 3rd International
Conference. Nanjing, China.
Organised by Chinese
Academy of Sciences.

17 – 20 Oct 2004

Aquaculture Canada 2004.
Quebec City, Canada.
Organised by Aquaculture
Association of Canada.
(<http://www.aquacultureassociation.ca/>)

2 – 4 Nov 2004

International Conference On
Agricultural Statistics
(ICAS II). Cancun, Italy.
(<http://www.sagarpa.gob.mx/mexsai>)

7 - 11 Dec 2004

6th International Congress
on Cell Biology/36th
American Society for Cell
Biology Annual Meeting.
San Francisco, California,
USA.

14 – 17 Dec 2004

International Conference on
Emerging Technologies in
Agricultural & Food
Engineering 2004. West

Bengal, India. Organised by
Department of Agricultural
and Food Engineering IIT
Kharagpur.
(<http://www.iitkgp.ernet.in/news/showannouncedescrip?newsid=33>)

LIST OF MSPP PUBLICATIONS

Transactions, **Volume 11**
(2002): Towards sustainable
development in Agroforestry:
New paradigm for plant
physiologists. **Editor** by
Hawa Z.E.J. et al.

Transactions, **Volume 10**
(2001): Tropical plant
biology: Interfacing the
basics and applied aspects of
research. **Editor** by Hamid
L. et al.

Transactions, **Volume 9**
(2000): Tropical plant biology
research in Malaysia:
Strategies and vegetables.
Editor by Syed Mohd S.I et
al.

Transactions, **Volume**
8(1999): Food crop
production in Malaysia :
Strategies and advancements.
Editor by Abd Karim A.G.
et al.

Transactions, **Volume**
7(1998): National food
production and security:
Issues, strategies and
advancement. **Editor** by Abd
Karim A.G. et al

Transactions, **Volume**
7(1998):
National food production
and security: Issues, strategies

Some of you may wonder what is JTPP.

JTPP stands for Journal

and advancement. **Editor** by Abd Karim A.G. et al. **Supplement**

Transactions, **Volume 6** (1997): Referred. **Editor** by Helen N & Tung H.F.

Transactions, **Volume 5**(1996): Improving productivity through plant physiology. **Editor** by Mohd. Ridzwan A.h. et al.

Transactions, **Volume 4**(1995): Techniques and instrumentation for plant physiology. **Editor** by Liew K.L.

Transactions, **Volume 3**(1994): Environmental and physiological approaches to plant improvement. **Editor** by Ahmad Zamzam M. et al

Transactions (1991): Pembangunan fisiologi tanaman tropika: Kekangan-kekangan fisiologi dan persekitaran. **Editor** by Hamid. et al

Transactions, **Volume 1** (1990). **Editor** by Hamid L. et al

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- * Transactions, **Volume 8**(1999): Food crop production in Malaysia : Strategies and advancements. **RM50**
- * Transactions, **Volume 7**(1998): National food production and security: Issues, strategies and advancement. **RM50**
- * Transactions, **Volume 7**(1998): National food production and security: Issues, strategies and advancement.. **Supplement RM 20**
- * Transactions, **Volume 6** (1997): Referred. **RM50**

FOR SALES AND PURCHASE ENQUIRY CONTACT:

REQUEST

Dear members!! We would like to hear from you. If you have anything to say or comment about the society or on any of the articles published in the newsletter, or if you think you have some views that you would like to share with other members, you are welcome to direct it to me at umarani@agri.upm.edu.my. In fact I am looking for interesting research articles or a summary of it to be highlighted. You can promote yourself and it can be an opportunity for further research and collaboration to keep interacting.

Looking hearing

MSPP would like to thank Dr. Tsan Fui Ying for helping out with the preparation of the Newsletter.
