



# Newsletter BERITA ISOPB

THE INTERNATIONAL SOCIETY FOR OIL PALM BREEDERS  
PERSATUAN AHLI-AHLI PEMBIAK BAIK KELAPA SAWIT ANTARA BANGSA

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MEMBERS ONLY

NO. 1

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## EDITORIAL

This is the third and last of three special issues of the ISOPB newsletter; special for their record of the society's honorary members - Mr. Charles Hartley C.B.E., Tan Sri Dato Dr Anuwar Mahmud and, in this issue, Mr. Eric Rosenquist.

Those reading his biography, written by Dr R.H.V..Corley for this issue, may be fortunate to meet him in person at the PORIM/ISP International Oil Palm Conference and the ISOPB/PORIM Workshop on G x E Studies Perennial Tree Crops. Perhaps he can tell us if he has found the 1924 "A guide to the FES" and invaluable publication on early work on oil palms at Serdang.

The G x E workshop is another milestone in the Society's interest in promoting scientific oil palm breeding. I thought the occasion of the Oil Palm Conference and G x E workshop would provide time for readers to pause, and have provided an index of feature articles that appeared in our newsletters between 1984 and 1990 to make it a profitable pause.

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ERIC ROSENQUIST, M.A., Dip. Agric. Sci. (Cantab)

Eric Rosenquist was born in the north of England in 1921, the son of an executive of the Danish Bacon Company. Living in a country house with a large garden, he was interested in gardening, and in due course decided to study agriculture. He went to Cambridge in 1939, and took Part I of the Natural Sciences Tripos, but further education was interrupted by the war.

After training in radar, he was posted to South India with responsibility for radar installations there. In 1945, he volunteered to join the British Military Administration in Malaya, after the defeat of the Japanese. He was posted to the Department of Agriculture, and was the second European Officer to arrive in the Department after the war. During this period, among other things, he organised a fleet of 7-ton lorries to move padi seed from Kedah to Melaka and Negeri Sembilan, where the padi planters had been forced to eat most of their seed, and had nothing to plant. This experience stimulated him to join the Colonial Agricultural Service, and in 1946, he returned to Cambridge to take a Diploma in Agriculture. On this journey he met Marie, whom he later married.

After a year studying wheat at the Plant Breeding Institute, Eric was posted to Malaya in 1948, arriving with his wife and young daughter in January 1949. He joined the Federal Experiment Station at Serdang, as oil palm botanist, with additional responsibilities for cocoa, ramie and various other crops. Many people now in senior positions in Malaysia will remember that he also lectured once a week at the School of Agriculture.

The work at Serdang on Trinitario and Amelando cocoa was not very successful, because of susceptibility to vascular streak dieback, but while Eric was there the first Upper Amazon clones were imported, and were later used to produce the hybrids which are now widely planted.

The Serdang oil palm programme included a number of selfings of the Serdang Avenue palms, selected by Robert Jagoe before the war, together with material derived from E206, the dumpy palm. Serdang produced oil palm seed for sale, and both Serdang Avenue and dumpy seed were distributed to a number of stations, and are still used in many programmes. By 1953, Eric had selected promising palms for further trials, but no land was available for planting, except at Jerangau in Trengganu. As this was separated from Kuala Lumpur by 13 ferries, and was outside the oil palm growing area, it was not at all satisfactory.

In response to a request from the Prison Department to provide palm oil with high carotene content, Eric was able to show significant variation in carotene content, and some high carotene tenera x tenera crosses, derived from African introductions in the twenties, were produced and planted at Serdang.

As interest developed in the work of Beirnat and Vanderweyen, on the shell thickness gene, some D x P progenies were produced at Serdang, but, again, there were difficulties in finding land to test the material. Frustrated, Eric therefore accepted an offer to join Chemara Research Station as oil palm botanist, moving to Layang Layang in 1954.

Oil Palms of Malaya (OPM) had developed an extensive Deli dura breeding programme in the thirties, and after the war Chapman and Gray imported pisifera pollen from Zaire which was crossed onto Deli duras to produce tenera progenies. Eric was convinced that the future lay with the D x P cross, but there were few pisiferas available in Malaysia, and his employers were not convinced of the value of the D x P. However, Chemara were advisers to Pamol, whose African associate companies had been closely involved in development of the D x P cross, and had already planted hundreds of hectares of D x P

material. The two companies agreed to import pisifera pollen from Nigeria; this was used to make D x P crosses, which were planted by both Pamol and OPM. Meanwhile, Eric intercrossed the best of Chapman and Gray's teneras. In due course, the pisiferas from these crosses came into production, and the import of pollen ceased. This population provided the source of pisiferas which were used by Guthrie Research Chemara for seed production until very recently.

Eric maintains that the foresight of OPM in starting a breeding programme in the thirties gave Chemara an advantage over most of its rivals. Their seed built up a good reputation, and the Chemara dura population is the base for current seed production by Guthrie Research Chemara, Golden Hope Plantations and Dami Research Station in Papua New Guinea.

While at Serdang, Eric had been intrigued by the large differences in the nutrient levels between progenies in the Jagoe trials (Coulter and Rosenquist, 1955). On joining Chemara, where Chapman and Gray had already done much basic work on leaf sampling, he persuaded the company to establish a leaf analysis laboratory, and a commercial leaf analysis service was eventually added to the already very profitable seed production business. At that time, nutrient deficiencies were widespread, and were swiftly diagnosed and corrected using leaf analysis. Chapman and Gray had also laid down fertiliser trials, and Eric published a paper describing the very large responses obtained (Rosenquist, 1962).

In collaboration with Piet de Jong, Eric did some highly successful experiments with upward tapping of rubber, but the technique was not widely adopted until 30 years later.

In 1964, Eric and Marie moved to Cameroun, joining the Cameroun Development Corporation (Camdev), partly to allow them to see more of their daughters, who were by then at boarding school in Britain. As Agricultural Research Adviser, Eric was involved not only with oil palm but also with rubber, tea, cocoa and pepper. While with Camdev, he was closely involved in negotiating loans from the World Bank and the European Development Fund, and was awarded the "Chevalier d'Honneur" by the President of Cameroun, in recognition of his contribution. To provide seed for the expansion which these loans were to finance, the IRHO were invited to set up an oil palm breeding sub-station on Camdev property, giving Eric an understanding of the IRHO breeding programme.

In 1972, Eric left Cameroun, and joined Harrisons Fleming Advisory Services (HFAS). His first task was to organise seed production at Dami Oil Palm Research Station, in Papua New Guinea. This was required because the Malaysian Government had just banned the export of seed, disrupting oil palm projects in PNG and elsewhere. The same progenies had been planted both at Dami and Banting in the late sixties, and Eric later published a comparison of these progenies (Rosenquist, 1981). In collaboration with Kees Breure, Eric was involved in the introduction of physiological selection criteria (bunch index, leaf area ratio, magnesium status) into the Dami programme (Breure *et al*, 1982). When London Sumatra established a research station, at Bah Lias in 1976, Eric also planned the breeding work there.

In 1976, while continuing to work with HFAS, Eric became part time Agricultural Research Adviser to Unilever Plantations, with responsibility for the oil palm breeding programmes in Cameroun, Zaire and Malaysia, for the recently developed clonal propagation work, and for cocoa and coconut research in the Solomon Islands. Descriptions of the Cameroun and Zaire programmes have recently been published (Rosenquist *et al*, 1990).

By 1979, this became too much for a part time job, and Eric handed over to Brian Gray, but continued some involvement as Planting Material Consultant to Unifield T.C. Ltd., the Unilever/H & C tissue culture joint venture. He also continued to advise Unilever

Plantations on oil palm breeding. He has been closely involved with ortet selection in PNG, Zaire and Cameroun, and with planning clone trials in Colombia, Indonesia, Thailand, Malaysia and PNG.

In 1982, following a research meeting at Frasers Hill in Malaysia, Unilever Plantations and Harrisons & Crosfield agreed to pool their oil palm genetic resources in a Combined Breeding Programme (Rosenquist *et al*, 1990). This programme, largely planned by Eric, has resulted in the planting of over 700 ha of trials over the last seven years, in Zaire, PNG, Colombia, Indonesia and Thailand.

Eric has also advised United Brands in Costa Rica, one of the major seed producers in Latin America, so he has been involved in oil palm breeding programmes in Asia, Africa, Latin America and the Pacific. What better qualifications could anyone have for honorary membership of the ISOPB?

For several years, Eric has been threatening to retire, and he has greatly reduced the amount of consultancy work he is doing; at one stage, he was travelling for up to six months a year. No one will grudge him time to enjoy his garden, but we hope he will also continue to record his encyclopaedic knowledge of oil palm breeding programmes in further papers, such as the excellent review of oil palm breeding populations which he contributed to the 1985 ISOPB Workshop (Rosenquist, 1986).

Hereward Corley  
August 1991

REFERENCES (not a complete bibliography)

Breure, C.J., Rosenquist, E.A. & Konimor, J., 1982. Oil palm selection and seed production at Dami Oil Palm Research Station, Papua New Guinea. *Oil Palm News* 26:2-17

Coulter, J.K. & Rosenquist, E.A., 1955. Mineral nutrition of the oil palm. *Malay. agric. J.* 38:214-236

Rosenquist, E.A., 1962. Fertiliser experiments on oil palms in Malaysia. *J. West Afr. Inst. Oil Palm Res.* 3:291-301

Rosenquist, E.A., 1981. Performance of identical oil palm progenies in contrasting environments. In: *The oil palm in agriculture in the eighties*, Eds. E.Pushparajah & Chew P.S., Inc. Soc. Planters, Kuala Lumpur, vol 1, pp 131-143

Rosenquist, E.A., 1986. The genetic base of oil palm breeding populations. In: *Proc. Workshop Oil palm germplasm and utilisation*, Palm Oil Res. Inst. Malaysia, pp 27-56

Rosenquist, E.A., Corley, R.H.V. & de Greef, W., 1990. Improvement of tenera populations using germplasm from breeding programmes in Cameroun and Zaire. In: *Proc. Workshop Progress of oil palm breeding populations*, Palm Oil Res. Inst. Malaysia, pp 37-69

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Rao.V	Oil Palm Breeding and Genetics Research at the Palm Oil Research Institute of Malaysia (PORIM)	1	1	July 1984
Ngui, Mary	Oil Palm Breeding at Department of Agriculture Sabah	"	"	"
Rajanaidu.N	PORIM's Oil Palm Prospection in Zaire and Camerouns	1	2	Dec. 1984
Lee, C.H. et al	Oil Palm Genetics Laboratory and Technical Liaison Committee	"	"	"
Squire,G.	Principles for Selecting Oil Palm Ideotypes	2	2	June 1985
Chin, C.W.	Oil Palm Breeding at Pusat Penelitian Marihat	"	"	"
Rajanaidu.N	Oil Palm Planting Materials - World Seed Production	2	4	Dec. 1985
Rao.V	A Malaysian Oil Palm Diary	"	"	"
Soh, A.C.	Plant Variety Protection and Breeders' Rights	3	1	March 1986
Marcio de Mirando Santos	Urubu River Experimental Station (URES) Manaus	"	"	"
Ahmad Kushairi & N.Rajanaidu	Pedigree and Sibs of 43/27B i.e. S27B	"	"	"
Soh, A.C.	African Oil Palm Development Association (AFODA)	3	2	June 1986
PORIM	The Versatile Oil Palm	4	1	March 1987
Soh, A.C.	Prospects of Oleifera x Guineenis Hybrids for Commercial Plantations	4	2	June 1987
IRHO	Bunch Analysis Procedures for E. Melanococca and E. Melanococca x E. guineensis hybrids	4	3	Sept. 1983

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Rajanaidu.N	National Plant Genetic Resources Committee	4	3	Sept. 1983
Cheah, S.C.	World Conference on Biotechnology for the fats and oil industry	4	4	Dec. 1987
Cheah, S.C.	Development of DNA Probes for the Oil Palm Industry. (reproduction of paper presented at 1987 Int. Oil Palm Conf.)	"	"	"
Rao.V	Recombinant Inbred Lines of Oil Palm ?	5	1	March 1988
Chan, K.W. and Aminuddin Rouse	Thrust of future efforts in Breeding and Genetic Engineering (reproduction of paper presented at a PORIM Workshop on 21st August 1988)	5	3	Sept. 1988
Yap, T.C.	Breeding Strategies of Oil Palm to face the challenge in the year 2,000	"	"	"
Rao.V	Visit to Oil Palm Research Stations in Indonesia. Some Observations and Notes.	5	4	Dec. 1988
Soh, A.C.	Clonal propagation of Oil Palm; current experiences and their implications to Breeding and Cloning (reproduction of paper presented at the Moet Hennesy - Louis Vuitton Colloquium on Advanced Technology and Plant Breeding Strategy)	"	"	"
Henson, I.E.	Report of PORIM Workshop on "Productivity of Oil Palm"	6	2	June 1989
Rajanaidu.N et al	Jessenia - Oenocarpus Collection In Colombia	6	3	Sept. 1989
Rosenquist.E	C.W.S. Hartley C.B.E. , M.A , Dip. Agri. Sci. (Cantab), A.I.C.T.A. - Biographical Notes	7	1	June 1990
Chang, K.C.	Tan Sri Datuk Dr Anuwar Mahmud - a biography	7	2	Dec.1990
Donough .C	Some Observation on Abnormally Flowering Clones	7	2	Dec. 1990

# SOCIETY NEWS

## SYMPOSIUM ON THE SCIENCE OF OIL PALM BREEDING

### SECOND ANNOUNCEMENT

■ ROND POINT AGROPOLIS  
MONTPELLIER, FRANCE  
1 - 3 JULY 1992

Organised by: International Society for Oil Palm Breeders (ISOPB) & Institut de Recherches pour les Huiles et Oleagineux (IRHO) / CIRAD

Sponsored by: Palm Oil Research Institute of Malaysia (PORIM) & Bureau for the Development of Research on Tropical Perennial Oil Crops (BUROTROP)

### THE SYMPOSIUM

This is the first gathering of leading oil palm researchers to review all aspects of oil palm breeding.

The proceedings of this Symposium will be an invaluable reference material for oil palm breeders.

Montpellier, the venue of the Symposium, is the French centre for research on tropical crops. IRHO, one of the leading oil palm research institutes in the world, has laboratories for biotechnology research here.

### SCIENTIFIC PROGRAMME

The scientific programme consists of two days of invited papers and one day visit to leading biotechnology laboratories.

The following topics will be reviewed and discussed:-

- \* Oil Palm Genetic Resources
- \* Variation and Inheritance
- \* Breeding Techniques
- \* Breeding for Yield and Quality
- \* Breeding for Resistance (Pest & Diseases)
- \* Breeding for Stress and Adaptation (Genotype x Environment Interaction, drought tolerance, physiological traits)

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- \* Planting Material (seeds, clones)
  - \* Regional Oil Palm Breeding Programmes  
(Asia, Africa, Latin America)

#### LABORATORY VISITS

The programme includes visits to IRHO/CIRAD laboratories involved in research on RFLP, isoenzyme, mitochondrial activity etc. [REDACTED]

Visits to Tropiclone will provide opportunities to view progress in oil palm tissue culture techniques and methods to avoid clonal abnormalities.

#### PRE-CONFERENCE FIELD VISIT

Pre-conference scientific field visits to La Mé and Dabou oil palm research stations in Ivory Coast are available.

#### EUCARPIA . CONGRESS

XIIIth Eucarpia Congress will be held on 6-11th July 1992 at Angers, France immediately after the ISOPB Symposium at Montpellier.

For details please contact:-

XIII<sup>e</sup> Congrès d' EUCARPIA  
Secrétariat du Congrès  
G.E.V.E.S la Minière  
78285 GUYANCOURT  
FRANCE

#### CALL FOR PAPERS

Only invited papers will be presented at the Symposium. Poster papers related to the Symposium are welcome.

#### REGISTRATION FEES

The registration fees includes a copy of proceedings, refreshments, lunches, transport to laboratory visits and abstracts of papers.

Registration before 31st March 1992 is US \$150 (or \$420 Malaysian ringgit) or US \$200 (or \$560 Malaysian ringgit) after 31st March 1991.



TRAVEL AND ACCOMMODATION

Please contact the hotel directly for accommodation. The address is:-

Ront Point Agropolis (Venue of Symposium)  
34980 Montferrier Sur Lez,  
Montpellier, France.

Telephone : 67599091  
Fax : 67599104

Following travel agencies can also arrange your travel and hotel accommodation plans.

(i) MESRA Travel and Tours Sdn.Bhd  
22-1 Jalan Kovil Hilir  
Off Jalan Ipoh  
51100 Kuala Lumpur, Malaysia

Tel : 03-4415936/7  
Fax : 03-4424346

(ii) Geo Voyages : Parc Scientifique  
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ERRATA: The last issue should be Vol.7 No. 2 not Vol.8.

# OTHER NEWS

(Contributed by C. Donough)

=====*Personal comment*=====

## The plant's view

'Environmentalism', 'green issues', and 'biofriendly behaviour' ... what a load of poppycock and hot air. When have you ever shown any real concern for the life forms that could truly claim jurisdiction over the Earth? It was we, the plants, that conquered the lands and oceans; we, the plants, that converted a hostile atmosphere to its present form; and we, the plants, that provided the opportunity for you to arise. And what thanks do we receive?

From your beginning you have taken us for granted, used us, and abused us. We have been killed, dismembered, and mutilated to build and furnish your homes; cut and burned to keep you warm; eaten alive by you and your animals; and exploited ruthlessly for food and clothing.

Our bodies have been shaped, bent, and stunted by cutting, by forcing upon us unnatural unions in grafts, and latterly through chemical control.

Plant breeders, knowing what is best for us, have interfered in our sex lives in a most intimate way, and forced upon us bizarre incestuous and unnatural habits.

In recent years your global wastes have brought mixed fortunes to us. Eutrophic lakes and seas have helped our watery relatives, but toxic wastes and acid rain exact a heavy toll.

Now, just for once, we sense a real improvement in our lot: a rise in atmospheric carbon dioxide and increased global temperature. Perhaps you do care after all, for these two changes should enable us to photosynthesize with greater speed, increase our growth, and set more seed.

So, what of all these 'green initiatives'? Are they out of real concern for mother Earth, and all its inhabitants, or are they just a selfish stopgap, to permit continued rape, pillage, and plunder of the planet, and defer the radical rethink that is overdue?

Flora

=====*No comment*=====

‘Eating appears to be a risk factor for cancer.’  
*AGE News*, Vol. 21, Winter 1991

‘Ostriches and emus have long hind legs designed for running but are usually kept in small pens.’  
*Independent on Sunday*, 10 February 1991

‘Phallic morphology of the Australian species of *Antechinus* (Dasyuridae, Marsupialia): A new taxonomic tool?’  
Title of paper in Archer, M. (1982) *Carnivorous marsupials*. Royal Zool. Soc. New South Wales.

‘Taxonomy, which will be one of the major areas involved, is in fact declining as a discipline.’  
*Lifewatch* (London Zoo), Spring 1990

‘The world's most dangerous animals (excluding man) are the malarial mosquitoes of the genus *Plasmodium* which, excluding wars and accidents, have probably been responsible for 50 per cent of all human deaths since the Stone Age.’  
*Daily Mail*, 21 February 1990

‘7.15 *The Natural World* - Emas Park, situated in the High Plains of Brazil, contains such creatures as a rat the size of a pig and an antenter with a tongue as long as a human arm. To think campaigners actually want to save these revolting animals from the slings and arrows of outrageous hunters.’  
TV notice in *The Independent*, 16 June 1990

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