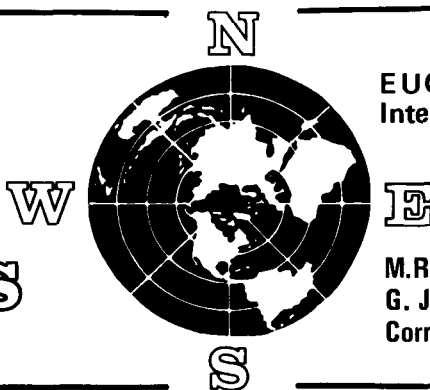


Four

Corners



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International Relations Committee**

**M.R. SAHASRABUDHE, K.S. KRISHNAN,
G. JACINI, T. ASAHARA, and E. VIOQUE,
Corresponding Secretaries**

Canada Madhu R. Sahasrabudhe

Rapeseed in Canada

Production of rapeseed in 1975, estimated at 71.6 million Bu (1.6 million metric tons), reached a new high in excess of 50.4 million Bu in 1974 and from an average of 45.4 million Bu over a period of 10 years (1965-1974).

A major development in the rapeseed industry in recent years has been the development of new low erucic acid (<1%), low glucosinolate varieties (double-zero). This development was the result of plant breeding carried out in response to the concern expressed a few years ago regarding the high erucic acid levels in then commercially available varieties of rapeseed oil.

Canadian production of rapeseed oil in 1975 was almost exclusively of low erucic acid varieties (Acreage percent: 'Torch', 42%; 'Midas', 30.2%; and the new double-zero variety, 'Tower', 11.9%).

The oil content of the 1975 crop as reported by the Canadian Grain Commission averaged 41.3% (1974 average, 40.8%; 1965-1974 average, 40.2%), while the protein content of the defatted rapeseed meal averaged 36.9% (1974 average, 35.6%; 1965-1974 average, 36.2%). The erucic acid content of the oil averaged 3.1%. High erucic acid oils are no longer used in foods or feeds in Canada.

In recent years, rapeseed oil has received extensive evaluation because of the concern over the nutritional and myocardial effects of erucic acid. Research is continuing under the Rapeseed Utilization Assistance Program, which is funded by the Government of Canada and administered by the Rapeseed Association of Canada.

Canadian Committee on Fats and Oils

The Canadian Committee on Fats and Oils is an associate committee of the National Research Council of Canada, concerned with research in fats and oils, and serves in a liaison capacity between governmental and other organizations and agencies engaged in or concerned with research in related fields. Meetings are held annually to review lipid-related research in Canada (Chairman: R.G. Ackman).

The December 1975 meeting featured a seminar on "Lipid-related Research in Agriculture Canada" (Convenor: M.R. Sahasrabudhe) and a FORUM on "Nutrition and Long Chain Fatty Acids" (Chairman: K.K. Carroll).

At the FORUM, reports were presented on the nutritional significance and physiological effects of rapeseed oil (RSO) with low and high erucic acid contents, and partially hydrogenated herring oil (HHO), in diets of rats, pigs, monkeys, hens, and turkeys. The research papers presented indicated that the incidence of myocardial lesions observed in experimental animals receiving high fat diets containing rapeseed oil from double-zero varieties was no higher than that observed in control groups receiving diets with fats from other sources. Much of the research reported was concerned with high fat diet problems. Speakers at the FORUM were B.G. Procter (Bio-Research Laboratories);

F.M. Loew and H.B. Schiefer (University of Saskatchewan); A.H. Corner, J.W. Hulan, and J.K.G. Kramer (Agriculture Canada); Joyce Beare-Rogers (Health and Welfare Canada); R.G. Ackman (Environment Canada); S.J. Slinger (University of Guelph); B. Walker (University of Guelph); B.J. Holub, S. Hung, and S.J. Slinger (University of Guelph); M.K. Bhatnagar (Ontario Veterinary College); and S. Yamashiro (Ontario Veterinary College).

Fats and Oils in Canada

The Grain Marketing Office of the Department of Industry, Trade and Commerce—Canada prepares annual reviews of the fats and oil situation in Canada. Copies of these publications can be obtained by writing to the Grain Marketing Office, Industry, Trade and Commerce, 112 Kent Street, Ottawa, Ontario, K1A 0H6, Canada.

India K.S. Krishnan

Oil Technologists' Association of India

The 31st annual convention of the Oil Technologists' Association of India was held on February 7 and 8, 1976, at AIFACS hall in New Delhi. Prof. Dr. M.M. Chakravarty, president of OTAI, delivered the presidential address. The convention attracted about 300 delegates from all over India as well as abroad. Included among them were 15 delegates from developing countries who had then been touring India as part of a UNIDO-OTAI cooperation program. A technical symposium was held covering the following subjects: analytical technique of oils and fats, production of oil-bearing materials, characteristics and composition of oils and fats, production and processing of oils and fats, non-oily products from oils and oil-bearing materials, and developments in surfactants and surface coatings.

Three popular lectures were also delivered during the course of the convention: "Refining of Vegetable Oils," by Dr. Ben Braae; "Recent Trends in Crop Pattern," by Dr. M.S. Swaminathan; and "The Role of Technologists in Checking Food Adulteration," by Dr. J.B. Shrivastava.

D.C.M. Chemical Works' Ramaswamy Memorial lecture was delivered by Dr. D.R. Dhingra. The subject covered was "Hydrogenation of Fixed Oils."

UNIDO-OTAI Cooperation Program

At the request of the United Nations Industrial Development Organization, OTAI arranged a cooperation program from January 25 to February 9, 1976. Fourteen delegates from thirteen developing countries participated: Bekir Aksogan (Turkey), K.E. Beyali (Egypt), A. Gaffar (Indonesia), A.B. Husin (Malaysia), B. Krishnakan (Thailand), E. Kinyanjui (Kenya), K. Khangy (Syria), A.T. Lorenzo (Philippines), J. Lucero (Philippines), S. Mataic (Yugoslavia), S. Metaferia (Ethiopia), C. Selva (Singapore), M. Schneider (Venezuela), and Wong Meow Fong (Singapore).

Dr. H. Koenig, industrial development officer of the Industrial Technology Division, UNIDO, Austria, led the delegation, and Dr. H.G.R. Reddy, UNIDO's regional industrial adviser at Bangkok, accompanied the delegates.

Dr. C.B. Khanpara, chairman of OTAI's International Coordination Council, and Dr. G. Lakshminarayana, of Regional Research Laboratory, Hyderabad, accompanied the team on behalf of OTAI.

The delegates were received by OTAI Western Zone at the Taj Mahal Hotel, Bombay. Thereafter, they visited various centers of oils and oilseed processing and workshops of oil mill machinery and solvent extraction plants. They also visited technical and research establishments in Bombay, Akola, Hyderabad, Bangalore, Mysore, Madras, Calcutta, Kanpur, Agra, and Delhi.

The program, which was well organized by Dr. C.B. Khanpara and by the various zones of OTAI, proved beneficial.

Seminars and Refresher Course

- A seminar entitled "Analytical Techniques and Problems of Adulteration of Oils and Fats" was held by OTAI Western Zone in Bombay on November 8, 1975.
- Another seminar, "Technological Problems and Recent Trends in Surface Coatings," was held by OTAI Central Zone in Kanpur on January 10, 1976.
- A workshop on synthetic detergents was held by OTAI Eastern Zone in Calcutta on December 18, 1975.
- A refresher course on synthetic detergents was conducted by OTAI Western Zone at Gulita, Worli, Bombay, from November 9 to 15, 1975, under the guidance of Dr. C.B. Khanpara.

Participation in AOCS World Conference

Dr. K.T. Achaya, executive director of the Protein Foods and Nutrition Development Association of India, Bombay, participated as OTAI's official delegate at the AOCS World Conference on Oilseed and Vegetable Oil Technology held in Amsterdam. He read an invited paper entitled "Standards for Protein-based Foods in Developing Countries."

Cost Reduction and Marketing Seminar

A seminar entitled "Cost Reduction and Marketing Strategy for Soaps, Detergents, Cosmetics, and Perfumery" was organized by Wadhwa Publications at the Oberoi Sheraton Hotel, Bombay, on March 26, 1976. Products from the soap, detergent, and allied industries were also exhibited.

Symposium

The symposium on "Fats and Oils in Relation to Food Products and Their Preparations" was held the first week of June, 1976, at Central Food Technological Research Institute, Mysore, under the joint auspices of the Association of Food Scientists and Technologists (India) and the Oil Technologists' Association of India (Southern Zone).

Italy G. Jacini

13th Congress of the Italian Oil Chemists' Society

The 13th Congress of the Italian Oil Chemists' Society will be held at Rapallo near Genoa, on the Mediterranean coast, on October 28-30, 1976. To avoid interfering with this year's major international congresses (ISF in Marseille and CID in Moscow), the IOCS Congress will be essentially devoted to the problems of olive growing and olive oil from the chemical, biological, and forensic standpoints. Among

the subjects that will probably be discussed will be those problems associated with olive oil analysis and international trade regulations. The biennial S. Fachini Prize will be awarded during the congress.

Italian Society of Nutritional Science Holds 5th National Congress

The 5th National Congress of the Italian Society of Nutritional Science, entitled "Chemical and Nutritional Significance of Changes Induced in Foodstuffs by Modern Commercial Technologies and Preservation Methods," was held during the 30th International Food Preserve Industry Show, which took place in Parma from September 20 to 28, 1975.

Fatty substances were one of the main topics discussed at the congress, under the direction of Prof. Enrico Tiscornia of Genoa University. Chemical problems were debated by Prof. Enzo Fedeli of Milan's Oil and Fat Research Station and Prof. Pompeo Capella of Bologna University, while nutritional aspects were illustrated by Prof. Ludovico Arrigo of Genoa University's Institute of Physiology.

Also discussed were vegetable proteins, whose chemical aspects were dealt with by Prof. Pierpaolo Resmini of Milan University, while Prof. Francesco Di Lorenzo of Naples University spoke on their nutritional significance.

The last subject on the agenda, preservation methods and fruit juices, under the direction of Prof. Raffaele Giuliano of Parma University's Chemical and Pharmaceutical Institute, was debated by Prof. Rodolfo Andreotti of the Parma Research Station on Food Preserving Industries and Prof. Angelo Stacchini of the Italian Public Health Institute.

The proceedings were concluded with a round-table discussion on validity and trends in today's foodstuff advertising approaches. Messrs. Renato Piccinino, chairman of Bruxelles's Food Law Association; Aldo Tartarelli, Motta's managing director; and Andrea Kluzer, of the Young and Rubicam Italia Company, joined the debate, with the Public Health Institute's general director, Antonio Bagnulo, acting as moderator.

Japan T. Asahara

Chemical Societies Hold Annual Meetings

On April 1-5, 1976, the 34th Spring Meeting of the Chemical Society of Japan was held at the Shyonan campus of Tokai University in Hiratsuka. Voluminous papers were presented here by JOCS members in the sections on fat, oil and derivatives, surface active agents, and colloid science.

The 22nd Annual Meeting of the Japan Oil Chemists' Society was held in Tokyo on April 1, 1976. It was acknowledged that T. Asahara of Shibaura Institute of Technology continue the presidential term for its remaining year. Prof. S. Friberg of the Swedish Institute for Surface Chemistry, a visiting professor at Yokohama National University from March 13 to April 16, 1976, was invited to the banquet that followed the meeting. Prof. Friberg's stay at Yokohama National University was sponsored by the Japan Society for the Promotion of Science.

Japan To Adopt the Testing Method for Detergency of Synthetic Detergents for Fabrics

A draft work on the reduction of the phosphorus content of synthetic detergents for fabrics and the testing method for their detergency, conducted over two years, by the JOCS Detergent Committee with the cooperation of the Japan Soap and Detergent Association from the standpoint of environmental protection, was completed this April. The draft will be submitted to the government to make it the Japanese Industrial Standard (JIS). According to the draft,

the phosphorus content was reduced to a lower level than before; moreover, it is remarkable that Japan has taken the initiative in adopting the method of testing detergency as the industrial standard.

Spain E. Vioque

Meeting of the IUPAC Commission of Fats in Madrid

On September 3-5, 1975, a meeting of the Commission of Fats was held during the 28th Conference of the International Union of Pure and Applied Chemistry (IUPAC) in Madrid under president Dr. H.J. Vos and conference secretary Dr. Paquot. Present were representatives of 16 countries, totalling 33 persons. The Commission examined two very important general points.

The first point concerned the reorganizational proposal of the president of the Division of Applied Chemistry. The proposal called for the division to be renamed the "Division of Health and Environmental Chemistry" and for its new scope to be the study of those problems growing in importance to the society for which IUPAC has not named working groups to develop adequate solutions. It was suggested that eight working commissions be established. The activities of one of these, to be named "Oils and Fats," will be similar to those of the Commission of Fats.

The second point of general interest concerns the publication of the methods of analysis adopted and redacted by the Commission. IUPAC's Commission of Publications has resolved the issuance of 19 methods in the journal *Pure and Applied Chemistry*.

Development of the Working Program

At the last meeting, held in Jablona, Poland, a work system was established which was considered most efficient for the study and development of the wider programs: reduced groups of specialists, each containing 10 members, would be set up. Representatives of each group presented reports on the subjects assigned to them, including the results of their analyses and their proposals with respect to the problems involved. The following reports were presented:

Determination of the melting point range: The statistical study of the results obtained on the samples submitted by the participating laboratories was not satisfactory, and it was recommended that use of the method be discontinued. (Report presented by Prof. Naudet.)

Determination of total oxidized fatty acids: The results, although promising, were not totally satisfactory, and the group agreed to continue the studies, improving the operative procedures. (Report presented by Prof. Naudet.)

Tocopherol determination: A review of the proposed method and a critical study have been made. Dr. Hendrikse, who presented the report, indicated which methods should be submitted to experimentation.

Determination of pesticide residues in oils: The methods of Mills and of Noren and Westöo have been applied to the analyses of circular samples. The results obtained by the latter method have a much smaller dispersion than those obtained by the former. According to the reporter, this is due to the difficulty of getting a good quality Floridin. It was decided to repeat the experiments next year following the method of Noren and Westöo and another quick method used in the German laboratories which seems to give similar results. (Report presented by Prof. Delvaux.)

Determination of cis,cis-linoleic acid: Report presented by Dr. Levin.

Determination of fat in seeds by NMR of low resolution: The results obtained by six analysts with two samples of rapeseed were included and were compared with those obtained with the IUPAC method. The study will be continued. (Report of Dr. Wolf in absentia.)

Methods to study heated oils and criteria for judging the alteration state: Report of Dr. Wessels.

Emulsifiers: Report of Dr. Wöller.

Next Year's Program

The problems mentioned above will be studied, and two new groups have been organized to study (a) solvent residues in fats and oils and (b) plastic materials residues.

The Commission will also study a method proposed by Prof. Naudet for the direct determination of fat in margarine and the development of a standard method of sampling soaps.

The next meeting will take place in Copenhagen.

Symposium on Phytosanitary Products

Organized by the professional group Organic and Pharmaceutical Chemistry of the Chemists' Association of the Institute of Chemistry of Sarriá, a symposium on Phytosanitary Products was held in the Institute on November 5-7, 1975.

The topics included were Development of New Pesticides (Dr. C. Barbera), Synthesis of Active Principles (Dr. R. Sales), Analysis of Active and Formulated Principles: Residue Analysis (Dr. G. Baluja), Analysis of Contamination (Dr. R. Matas), Formulation of Phytosanitary Products (Dr. C. Peón), Methods of Study of the Metabolism of Pesticides in Plants (Dr. J. Iwan), Agricultural Applications: Herbicides (Dr. J. Gostinchar), Agricultural Applications: Insecticides (Dr. J.M. del Rivero), Agricultural Applications: Fungicides (Dr. J.J. Tuset). Toxicology and Therapy of Phytosanitary Products (Dr. S. Qver), Environmental Contamination (Dr. A. Ruperech), and New Prospects in Phytosanitary Products (Dr. F. Güell).

General Ordinary Assembly of the Spanish Committee of Detergency, Tensioactifs, and Related Products (CED)

The assembly, held the 3rd of March, 1976, in Barcelona, was presided over by Camp Puigdomenech. The main point was the approval, by the Advisory Commission of Scientific and Technical Research, of the presidency of the government and of the constitution of the Association for Research of the Spanish Industry of Detergents, Tensioactifs, and Related Compounds.

The new managing board of the CED was nominated as follows: President—Dr. J. Camp; Assessors—S. Anglada, J. Bachs, L. Lascaray, D.M. Martinez Moreno, P. Miró, P. Misol, J.M. Mustiales, J. Rafoles, and L. Salleras; Secretary—J. Sanchez Leal; Presidents of Commissions—J.J. García Dominguez (Analysis), L. Martinez de Carvajal (Ensayos), J.O. Pascual Calveres (Terminology), and A. Rosas (Ecology).

The numerous members of the above-mentioned association are Aiscondel-Monsanto Ibérica S.A., Alcedia S.A., Antonio Puig S.A., Basf Espanola S.A., Bayer Hispania Commercial S.A., Benckiser Ibérica S.A., Bilore S.A., Candina S.A., Ciba-Geigy S.A., Crimidesa, Colgate-Palmolive S.A.E., Dersa, Dertesa, Destilerias Adrián & Klein S.A., Dragoco S.A., Dosli Productos Cosumo Shell, Eytasa S.A., Félix Lascaray y Cía, Foret S.A., Gasull S.A., Givaudan Ibérica S.A., Haarmann & Reimer, S.A.E., Henkel Ibérica S.A., Hoechst Ibérica S.A., Hispano Química Houghton S.A., IER S.A., Industrias Aceiteras Casanovas S.A., Industrias Callao S.A., Industrias Saponif S.A., Interox Química S.A., La Superquímica S.A., Lever Ibérica S.A., Los tres sietes S.A., Lucta S.A., Marchon Espanola S.A., Massó y Carol S.A., Medeca-Vinas S.A., Molins y Puigarnau S.A., Naarden Ibérica S.A., Odiel Química S.A., Perfumería Gal, Pesan, Petroquímica Espanola S.A., Procter & Gamble Espanola S.A., Pulcra S.A., Pymag S.A., Rewo Química S.A., Roig S.A., S.A. Camp, S.A. Cros, S.A. Derivan, S.A. Rovira, Bachs y Maciá, Sandoz, S.A.E., Sinor-

Kao, Tapia y Campañia S.A., Tensia-Surfac S.A., Turégano S.A., and Unión Salinera de Espana S.A.

Collaborating members are Comercial Th. Goldschmidt, Cyanamid Ibérica S.A., Laboratorios Belseg, Productos Nenuco S.A., and Tenycol S.A.

The Asociación de Fabricantes de Productos Tensioactivos is a protecting member.

VIIth Meeting of the Spanish Committee of Detergency, Tensioactifs, and Related Products (CED)

The meeting, held March 3-5 in Barcelona, was attended by nearly five hundred Spanish and 42 foreign technical specialists. Dr. E. Primo Yúfera, president of the High Council of Scientific Research, presided and lectured on "Industrial Innovation and Research in the High Council of Scientific Research." Dr. L. Lascaray, president of the Commission of Technology of the CED, gave a lecture on "The Life, as Surface Phenomenon."

In recognition of his vast and profitable achievements in the detergency field, the CED Medal was presented to Dr. L. Lascaray.

The VIth Jorge Camp Prize was granted to Drs. Ballester and Fernandez (Institute of Fishery, Barcelona) for their work entitled "Assay of the Potential Toxicity of Some Tensioactifs Using the Mobility Test." An accessit was given to the work presented by Hueso Onate entitled "Contribution to the Knowledge on the Mechanism of Action of the Cationic Tensioactifs in the Process of Dyeing Acrylic Fibers."

The papers presented at the meeting were:

- "Behavior of the SAS, AOS, and LAS in Detergent Formulation," A. Moreno Danvila and J. Bravo Fernandez (Petroquímica Española, S. Roque, Cadiz)
- "Development in the Detergent Field," E. Spitzer (Shell-Konshellhellat-Amsterdam, The Netherlands)
- "Linear Internal Olefins: A Commercial Intermediate for Detergents," R.C. Berg (UOP Process Division, Des Plaines, IL, USA)

- "Incorporation of Optical Bleaching Agents and Colorants into Liquid Detergents; Incorporation of Other Additives in Concentrate Detergents," W. Gasser (Ciba-Geigy, S.A. Basilea, Switzerland)
- "Determination of the Irritation Potential of Tensioactifs in Human Skin: In Vitro Methods," F. Balaguer (A. Puig S.A.)
- "Role of Experiments and Surfactants in the Percutaneous Absorption of Chemical Substances," I. Wepierre and J.P. Marty (Laboratoire de Pharmacodynamic, Centre Pharmaceutique, Chetenay Malabry)
- "Evaluation of the Irritancy of Surfactants on Human Volunteers," J.D. Middleton (Investesk Research-International)
- "Surfactants and Detergent Toxicology," M. Liget and S. Kynoch (Huntingdon Research Centre)
- "The Elaboration of the Spanish Standard on Detergent UNE: Actual Situation," C. Gomez Herrera (Instituto de la Grasa, Sevilla)
- "Secondary Alkane Sulfonate: Properties and Use in Cosmetics," J.M. Qvack and A.K. Reng (Hoechst A.G.)
- "Tensioactif-Resin Interaction: A New Procedure to Avoid the Wool Fiber Shrinkage)," Jr. J. Garcia Dominguez and co-workers (Institute of Chemical and Textile Technology)
- "Influence of Surfactants on the Substantivity of a Water Soluble Cationic Polymer to Keratins Substrates, A. Campus (Union Carbide)
- Use of Amino Oxides in Cosmetics and Detergency," R. Hüttinger (Commercial Th. Goldsmidt S.A.)
- "Research on the Substantivity of Perfumes on Textile Fibers," W. Sturn and G. Mansfeld (Haarmann and Reimer S.A.)
- "Alkylamine Ethoxylates as Antiseptics for Cosmetics Use," F. Masuda and S. Inque (Kao Soap Co.)

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