Meetings

IFT to meet in New Orleans

The Institute of Food Technologists will hold its 1983 annual meeting at a food exposition June 19-22, 1983, in New Orleans, Louisiana, at the New Orleans Superbowl. A two-day symposium on "Modern Methods of Food Analysis" June 17-18 will precede the annual meeting. For more information, contact Dan E. Weber, Director of Marketing/Administration, Institute of Food Technologists, 221 N. LaSalle St., Chicago, Illinois 60601.

NRA announces topics

The 49th annual meeting of the National Renderers Association, a cruise aboard the Norwegian ship Sun Viking, is being held Oct. 24-31. The ship is to leave Miami, with stops at Montego Bay, Jamaica; Georgetown, Grand Cayman; Cozumel, Mexico.

The theme of the convention is "Management: Focus and Perspective." Topics include a speed-reading workshop, stress management, computers and the renderer, approaches to problem solving and decision making, Reaganomics and rendering, tax shelters and perspectives on interpersonal style.

Marcos to address IASC

The International Association of Seed Crushers 59th World Congress is scheduled for Feb. 21-24, 1983, in Manila, The Philippines.

Ceremonies Tuesday, Feb. 22, at 9 a.m. will include a welcome from First Lady Imelda Romualdez-Marcos, minister of Human Settlements and governor of Metro Manila, and a keynote address by Ferdinand E. Marcos, president of the Republic of The Philippines.

For more information, contact I.A.S.C. Congress '83, Business Resource Center Inc., Room 511, Doña Narcisa Building, Paseo de Roxas, Makati, Metro Manila, Philippines.

Nutrition meeting in Tel Aviv

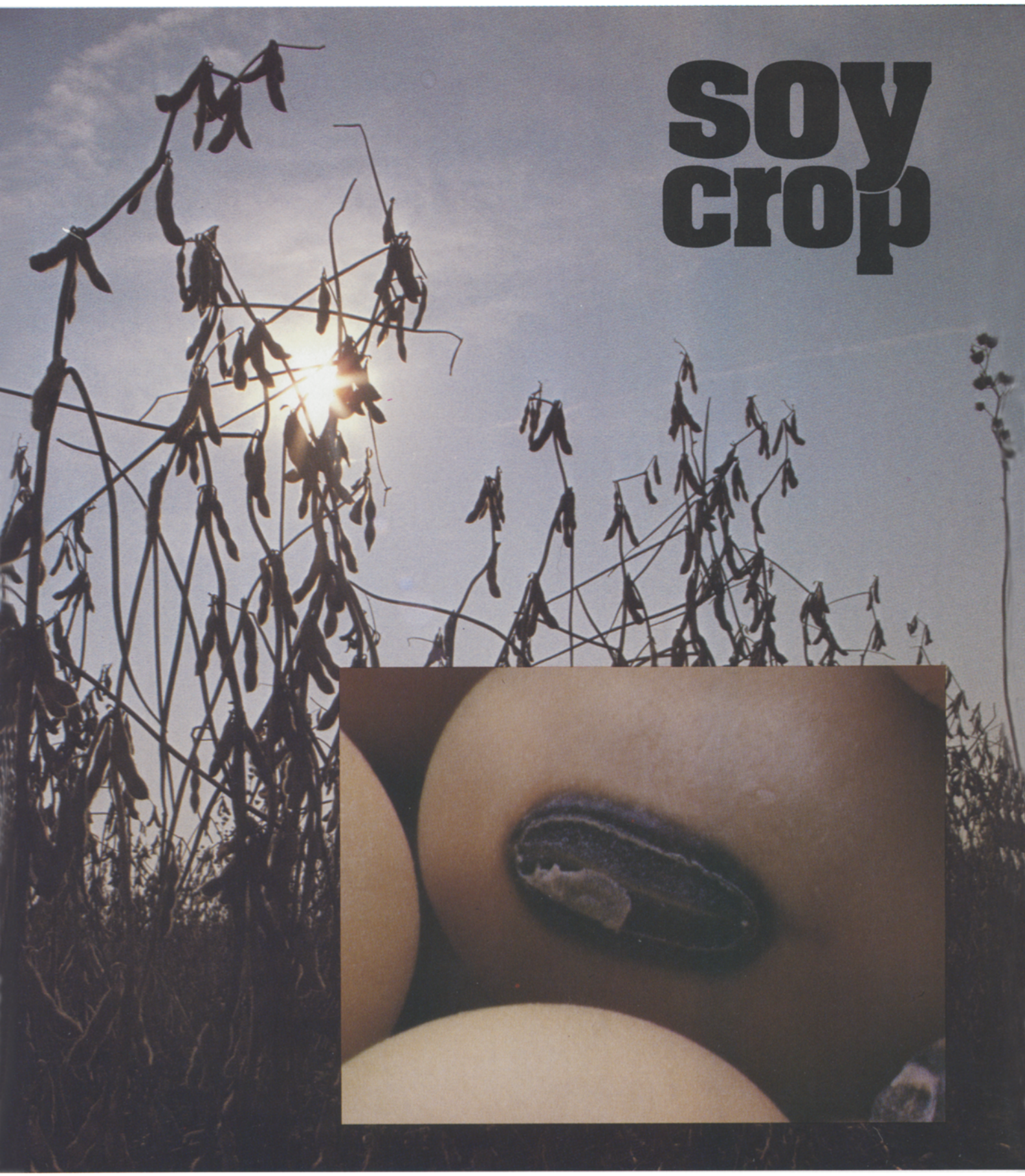
An International Conference on Diet and Nutrition has been announced for Feb. 21-23, 1983, in Tel Aviv, Israel, under the sponsorship of five Israeli agencies and educational institutions. Among the major topics listed in the preliminary announcement are fish oils, cancer and food and pediatric nutrition. Further information is available from the conference organizing committee at PO Box 29784, Tel Aviv 61297, Israel.

ASTM pesticide unit to meet

The technical aspects of pesticide applications and formulations were to be the focus of the Third Annual Symposium on Pesticide Applications and Formulations Systems, sponsored by ASTM Committee E-35 on Pesticides, Oct. 12, 1982, in Fort Mitchell, Kentucky.

Themes scheduled at the symposium included formulatins and applications, spray equipment and techniques, and pesticide storage and delivery. ASTM anticipates publishing a technical publication following the conference.

For additional information, contact Anne McKlindon, ASTM Standards Development Division, 1916 Race St., Philadelphia, PA 19103.


soy
crop

U.S. farmers are beginning to harvest what the U.S. Department of Agriculture says will be a record 2.29-billion bushel soybean crop.

Private forecasters did not anticipate such a large crop. The question now is what will happen to all those beans, if the final harvest total is that high.

During the American Soybean Association's annual meeting in August, two private forecasters were estimating the U.S. would export a billion bushels of the 1982/83 crop. That estimate came from Robert Lindon of Dean Witter, Reynolds, in Chicago, and from Alan Kluis who heads Ag-Marketing Services in Mankato, Minnesota. Annual exports already are above the 900-million bushel mark. Several persons at the conference said cracking the one-billion-bushel export level would depend on several factors. Among the factors mentioned was Europe's need for soybeans to crush. Europe's rapeseed production has been rising in recent years and the resultant meal competes with soybean meal for feed markets. Another oft-mentioned factor was the strength of the U.S. dollar relative to European currencies. If U.S. interest rates decline, that would weaken the dollar and make U.S. soybeans less expensive to buyers around the world.

U.S. domestic crush for 1982/83 was estimated at 1.05 billion bushels by Kluis and 1.15 billion bushels by Lindon. The mid-August U.S. department of Agriculture forecast was about 1.10 billion bushels. Cargill's Don Leavenworth said at the ASA meeting that he hoped the 1.1-billion bushel figure would prove to be low. A larger crush would require increased demand for soy meal and soy oil, both in domestic and foreign markets.

The volume of U.S. soybeans available for the 1982/83 marketing year will be large. There were approximately 250 million bushels remaining from the 1981 crop. If the 2.29-billion bushel crop develops, it would mean total supplies of more than 2.5 billion bushels. Lindon and Kluis were estimating 1982/83 usage at 2.1 billion to 2.2 billion bushels, which would leave 300 million to 400 million bushels at the end of the marketing year. A Heinhold Commodities Inc. specialist told

Photograph courtesy of the American Soybean Association. Photographer - Bob Elbert.

the Wall Street Journal in mid-August that the 1982/83 carryover could be 420 million bushels. That would represent between two and three months' supply.

At the ASA meeting, farmers already were dismayed at the relatively low prices they had received during the past year for their soybeans. News of the large crop was expected to push prices even lower. Market analysts at the ASA meeting generally declined to guess what prices would be during the coming year. Most of the analysts were chart specialists. One said it appeared that $5.30 would be the floor for soybean prices. Another noted a 90-week cycle in soybean prices which would forecast a low price for soybeans either in mid-August or mid-November, followed by rising prices.

Striking a more optimistic note was Cargill President Pete McVay who told a plenary session that a domestic crush of more than one billion bushels and 900+ million bushels in exports had provided an outlet for more than two billion bushels of soybeans this past marketing year, which he termed an "exceptional performance."

The rate of increase for demand may slow, but demand will continue to grow, McVay said. The Soviet Union, Mexico and developing nations all are growing markets, he said, particularly nations seeking to increase poultry feeding operations.

McVay drew applause when he called for a government guarantee to the "sanctity of contracts." ASA members who have participated in foreign trade missions invariably report that potential overseas buyers mention the 1973 embargo on soybean exports and the Carter embargo of grain exports to the Soviet Union. Foreign buyers do not regard the United States as a reliable trading partner, they report, and therefore seek to diversify their sources of soybeans. ASA and other farm groups have sought some kind of government assurance barring embargoes except in the most drastic situations.

McVay told the ASA audience that within five years, the United States must be ready to market a crop of 2.5 billion bushels a year. His speech preceded the USDA's announcement Aug. 11 of a 2.29 billion bushel crop.

McVay cited what he termed favorable signs in the U.S. economy for improved conditions. Among those were a reduction in the annual inflation rate to about 5%, increased interest in balancing federal revenue and expenditures, more people working, wage rates increasing more rapidly than inflation, and increased use of soybean meal and a record use of soybean oil.

The impact of a strong U.S. dollar on overseas markets was illustrated by Robert M. Book, group vice president for agricultural products of Elanco Products Inc. Book noted that agricultural goods that cost $292 per metric ton in September 1980 would have cost a Japanese importer 61,000 yen. U.S. prices for those goods declined to $247 per metric ton by the summer of 1982, but the stronger dollar meant the Japanese importer would still pay 61,000 yen, he said.

"The export markets are there," Book said. "Turkey, Korea—the next Japan of the Orient, Algeria—all have growing populations. Mexico eventually will be equal to Japan's current population; China is equal to eight Japans." JAOCS

New use for vegetable oils

Soybean oil has several advantages over water as a carrier for herbicides and pesticides, Jim Bone of ICI Americas said during the American Soybean Association's annual meeting earlier this year.

First, oil has biological activity, which water does not. That activity aids its affinity to plants, also reducing plant burn from chemicals, Bone said. Insecticides are oil soluble, but hydrophobic, he said, so that using oil as a carrier reduces the need for emulsifiers and wetting agents used to make insecticides mixable with water.

Second, the volume of carrier needed is reduced. In aerial spraying, one quart of soybean oil per acre is needed compared to three gallons of water. The reduced weight reduces fuel costs and also enables a plane to cover more acreage on each trip. For farmers, the switch would mean using 4.5 gallons of soybean oil per acre compared to 20 gallons of water, a significant reduction in weight (thus reducing compaction) enabling a farmer to cover more ground per trip.

In water mixtures, a droplet from a sprayer reduces to 0.01 its original size in one-half second, Bone said. With oil, a droplet reaches that size 56 seconds after application. That means oil-carried mixes stay liquid longer and spread more, up to eight or 12 times a water mix, he said.

ICI has developed an electrostatic sprayer that may be trial marketed in 1984, he said. The electrostatic sprayer produces a finer mist, which means more droplets. The firm's research has indicated the more droplets, the better the control, Bone said, adding that the electrostatic sprayer disperses one-half pint per acre for adequate control.

Researchers throughout the nation have begun work on oil-based herbicide and pesticide sprays. At the 1982 AOCS annual meeting in Toronto, reports were presented on use of linseed oil as a carrier. At the 1982 National Cottonseed Products Association meeting there were reports on work with cottonseed oil. Some research indicates better results when a crop is sprayed with an oil derived from that crop—soybean oil on soybeans, cottonseed oil on cottonseed.

Spratling heads ASA

B.B. Spratling of Roba, Alabama, was installed as president of the American Soybean Association during its annual meeting in August. Spratling has been active in the organization for many years, serving this past years as first vice president and chairman of the Government Relations Committee.

During the meeting, outgoing president Charles Hamon announced expansion of the ASA's market promotion activity. ASA will open new export promotion offices in Africa and in South America, Hamon said. South America has been served by ASA's office in Mexico City.

ASA also plans to build more human nutrition information centers similar to the one in Mexico City. The centers are aimed at the Caribbean and South America, Indonesia and the Philippines, as well as Africa and Egypt.

ASA also hopes to expand domestic soybean oil demand by expanding domestic soy oil information and education programs.

Research projects aimed at improving soybean oil quality also are planned. Yukio Sakaguchi, head of Japan's Vegetable Protein Association, presented a check for $10,000 to ASA for research efforts, specifically for ways to reduce linolenic content of soybean oil and to improve the amino acid profile of soy meal.

Which comes first

Two hundred and fifty people from 16 countries and 38 states took part in the first International Conference on Plant and Vegetable Oils as Fuels held August 2-4 in Fargo, North Dakota. The conference was sponsored by the American Society of Agricultural Engineers and 21 cooperating associations and agencies, including AOCS.

The conference brought together leading researchers from around the world to discuss production and use of fuels from plant and vegetable oils. Although these oils hold promise as alternative fuels, they are not economically competitive with diesel fuel. Historically, plant and vegetable oils have cost two to three times as much as diesel fuel on a BTU basis.

Figures compiled by Kenton R. Kaufman, assistant professor, Department of Agricultural Engineering at North Dakota State University, and published in the *North Dakota Farm Research May-June 1982* bulletin, show that in April, No. 2 diesel fuel cost $1.11 a gallon, compared to 1.65 a gallon for 200-proof ethanol and $2.07 a gallon for sunflower oil. Kaufman, however, added that a BTU comparison shows sunflower oil provides 100,000 BTUs for $1.58 whereas ethanol provides the same energy for $1.96.

Researchers at Battelle's Columbus, Ohio laboratory have calculated that it would cost $1.60 a gallon to produce a sunflower oil fuel on the farm, $2.06 cooperatively and $1.52 commercially, in an emergency no-profit situation. Battelle's Edward Lipinsky said this is based on the assumption that the BTUs of the sunflower oil are equivalent to the energy produced by the diesel fuel. Assuming there are 10% fewer BTUs in sunflower oil, it would cost $1.85 to produce the equivalent of a gallon of diesel fuel on-farm, $2.20 cooperatively, and $1.63 commercially.

Despite the cost differences, speakers warned that world oil crises may be far from over, and that it is imperative to have alternative or substitute fuels available in the near future. Some predicted a major gasoline and diesel fuel price hike by 1985, but warned that a Middle East crisis could make the U.S. vulnerable at any time.

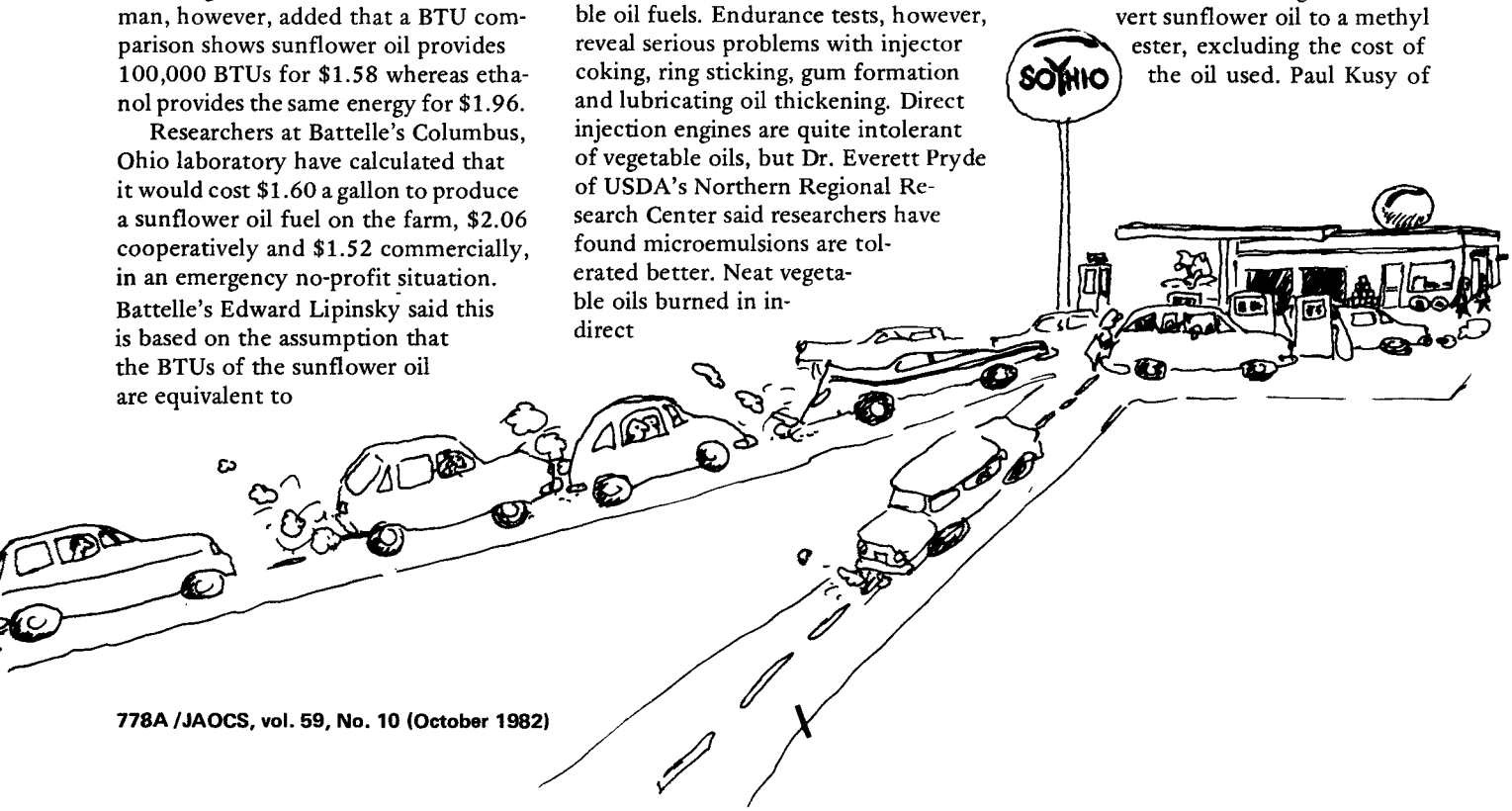
Technical sessions centered on engine tests and the effect of vegetable oil fuels on engine performance and durability; fuel preparation, specifications and additives; and oil production, oilseed processing and extraction.

The primary concern cited besides cost was durability. Speakers said that to be practical, vegetable oil fuels must be able to be used for long periods of time without adversely affecting engine durability and performance.

Short-term engine tests have indicated good potential for whole vegetable oil fuels. Endurance tests, however, reveal serious problems with injector coking, ring sticking, gum formation and lubricating oil thickening. Direct injection engines are quite intolerant of vegetable oils, but Dr. Everett Pryde of USDA's Northern Regional Research Center said researchers have found microemulsions are tolerated better. Neat vegetable oils burned in indirect injector engines produce less adverse effects than they do when burned in direct injection engines. Speakers agreed that vegetable oil modification, such as transesterification, or engine design modification might make vegetable oil fuels a more practical alternative. The recurrent question, however, was whether to modify the engine to fit the fuel or modify the fuel to fit the engine.

Speakers agreed that more research is needed on the cause of carbon build-up: whether it is the higher viscosity of vegetable oils as some claim, or possibly the chemical properties of the fuel itself. Findings by the Chemical Engineering Department at the University of Idaho, for instance, showed that carbon coking is reduced with a low degree of oil unsaturation and with better atomization.

Other studies on using modified plant and vegetable oils concluded that they are potentially good fuels but more cost analysis is needed. Dave Hassett of the Engineering Experiment Station, North Dakota, said his study estimated it would cost $1 a gallon to convert sunflower oil to a methyl ester, excluding the cost of the oil used. Paul Kusy of



THE ENGINE OR THE FUEL?

Deere & Company, Moline, Illinois, said neat ethyl esters are unsuitable for use at temperatures below 8 C without dilution or additives. Although not addressing cost considerations, engineer J. Fuls from South Africa reaffirmed that sunflower oil esters are a good substitute fuel in direct injection engines.

One suggestion was that the chemistry of the emissions be studied to help understand the problems associated with vegetable oil fuel use. A number of speakers asked that additives be specifically developed for use with vegetable oils, for instance to reduce cloud and pour points.

There was much optimism about the use of blends. Eric Johansson, director of the National Machinery Testing Institute in Uppsala, Sweden, predicted that a multi-fuel diesel engine would be commercially viable in the next 10 years.

Some progress toward this is already happening. A case in point: Caterpillar this year approved warranties on diesel engines in Brazil run on blends with up to 30% crude degummed or better grade soybean, sunflower, rapeseed and peanut oil. According to Caterpillar spokesman John Bailey, precombustion chamber engines have the potential to use neat vegetable oils and esters, while direct injection diesels can use neat esters. Prefitting is required and fuel heating may be needed in colder climates.

North Dakota State University's "Flower Power" experiment last year began field testing farm tractors using blends of up to 50% sunflower oil and 50% diesel fuel in cooperation with tractor manufacturers and local farmers. Findings showed continued use may cause premature engine problems. Research associate John Walter suggested further investigation of engine modifications, fuel and lubrication oil additives, refinement procedures, and genetic modifications of sunflower plants.

Talks on economics explored the impact of using vegetable oils to replace U.S. agricultural diesel needs. Glenn Collins said his study at Texas A & M University concluded that replacing 5% and 10% of agricultural diesel fuel with plant oils would cost a half billion to over one billion dollars in "social well-being."

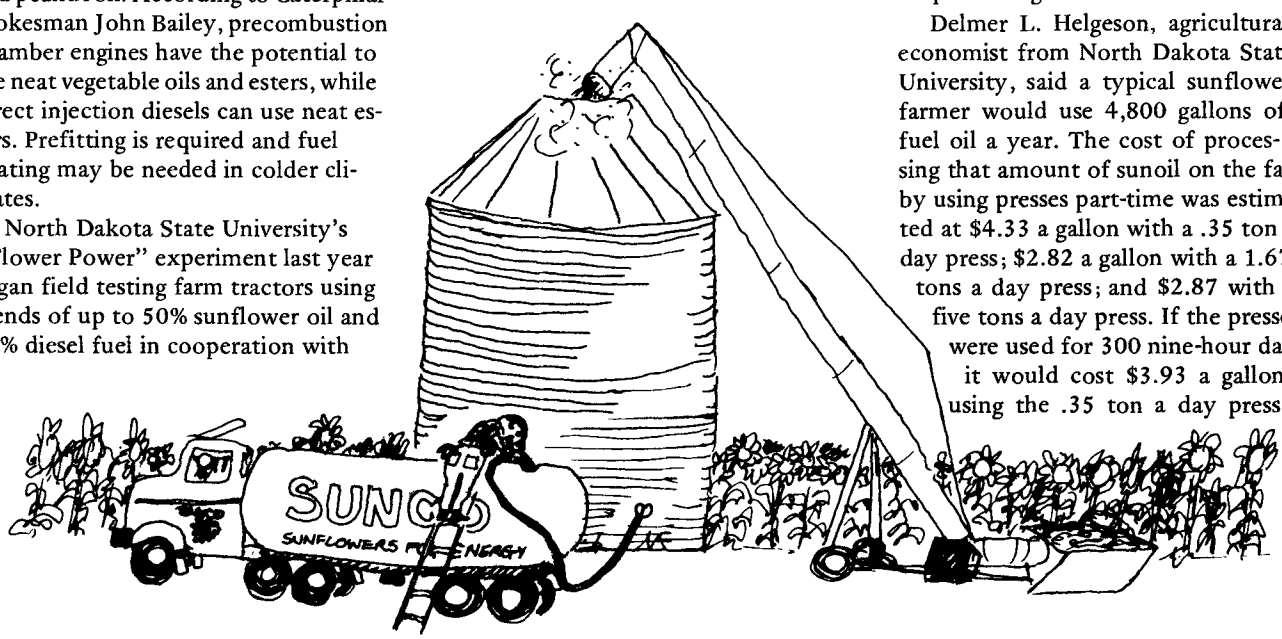
Meanwhile, Kenneth Schneeberger, agricultural economics professor at the University of Missouri, cited the Levin-Meyers study showing that converting 10% of U.S. agricultural diesel use to a 15%-75% vegetable oil-diesel mix would bring a 30-cents a bushel price increase for soybeans the first year, a one-cent a bushel increase the seventh year; and no price increase the eighth year.

In another study, David Bjornstad of the Oak Ridge National Laboratory, Tennessee, said meeting all agricultural diesel demand in 1990 would require using the entire soybean crop projected plus an additional 14%, or 77% of the projected sunflower crop. Filling only 25% of the demand would require 25% of the soybean crop.

Chris McIntosh at the University of Idaho said winter rape oil becomes a feasible alternative to diesel when the price of diesel reaches 84 cents a liter, while a diesel price of 85 cents a liter is necessary before a farm would choose to produce fuel from sunflowers. In other words, diesel oil prices would have to triple.

Other research explored vegetable oil processing on the farm.

Delmer L. Helgeson, agricultural economist from North Dakota State University, said a typical sunflower farmer would use 4,800 gallons of fuel oil a year. The cost of processing that amount of sunoil on the farm by using presses part-time was estimated at $4.33 a gallon with a .35 ton a day press; $2.82 a gallon with a 1.67 tons a day press; and $2.87 with a five tons a day press. If the presses were used for 300 nine-hour days, it would cost $3.93 a gallon using the .35 ton a day press;



$2.03 a gallon with the 1.67 tons a day press; and $1.74 a gallon with the five tons a day press.

Other research on oilseed presses and extraction procedures for use on farms concluded that such operations are feasible although costs are unknown. Scientific aide Joseph Thompson of the University of Idaho said a workable system adaptable to most farm operations in the Pacific Northwest had been devised there. Initial investment costs were estimated at $10,000, with production costs per liter of oil ranging from 50 cents to $1.

At the conclusion of the conference, organizers agreed to hold a second international conference on plant and vegetable oils as fuels in three years, at a site to be determined. The American Society of Agricultural Engineers will again sponsor the conference, now envisioned as a three-day meeting.

Proceedings available

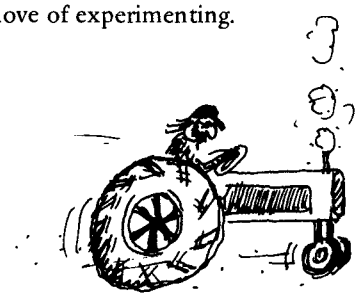
Proceedings from the first International Conference on Plant and Vegetable Oils as Fuels held August 2-4, 1982, in Fargo, North Dakota, are now available. Included in the 400-page book entitled *Vegetable Oil Fuels* are 44 papers presented at the conference. Copies may be obtained from the American Society of Agricultural Engineers, 2950 Niles Rd., St. Joseph, Michigan 49085 (telephone 616-429-0300). Cost is $23.50, or $18.50 for ASAE members.

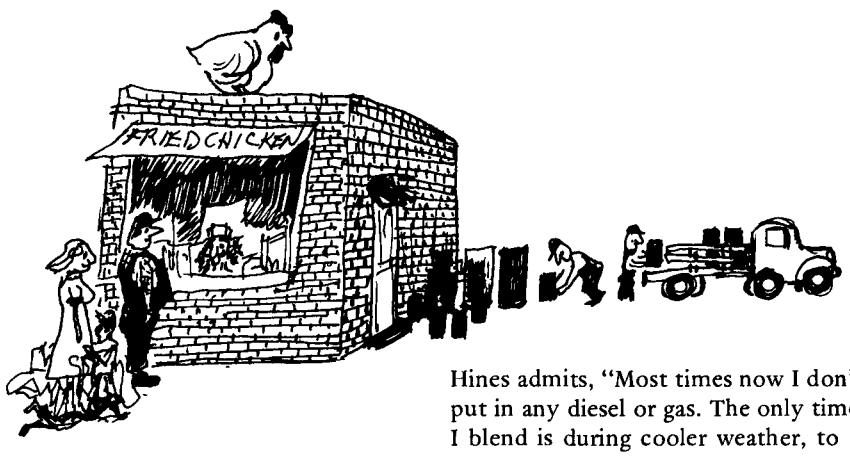
Filtered used frying fat powers diesel fleet

Forty-seven-year old businessman James Hines of South Carolina isn't worried about a fuel oil crisis. He has stored 4,000 to 4,500 gallons of used cooking oil which he says will keep his vehicles on the road.

For the past two years, Hines, owner of Hines Nursery in Moncks Corner, South Carolina, has powered his business and personal fleet with used cooking oil. Currently he has seven vehicles powered this way – a 1980 Scottsdale diesel pick-up, a 1980 GMC diesel pick-up converted into a delivery truck with camper shell, a 1974 Chevrolet panel van, a 1965 190-D Mercedes diesel, a 1966 200-D Mercedes diesel, a Ford 1000 diesel tractor and Ford 4000 diesel tractor. The tractors have direct injection engines; the others have pre-combustion chamber engines. This fall he is in the process of pulling out the gasoline engine from a 1977 Dodge maxi-van and replacing it with a 5.7 Oldsmobile diesel engine.

Hines doesn't have degrees in chemistry or engineering. What he does have is 18 years' experience as a journeyman-pipefitter for Westvaco, including four years in research, and a love of experimenting.



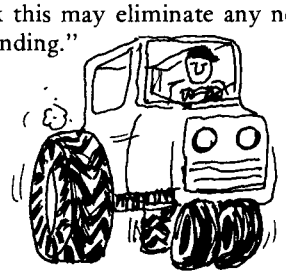


"I have my own research program," he says, adding that his has no outside funding.

Hines' experiments with used cooking oil as a fuel began in 1980 after he and a friend read a **Progressive Farmer** article about buying Crisco oil and putting it in fuel tanks. The friend owned a fried chicken establishment – Holly's Fried Chicken Place in Moncks Corner – and had been discarding his used cooking oil. The two decided to try using the oil in Hines' Ford 1000 tractor. "It worked so well I started changing everything over," Hines recalls.

Hines modified his vehicles by replacing the engines with Oldsmobile Division 5.7 diesel models. The 1974 Chevrolet panel van, which Hines had previously "retired" since it was averaging 11 miles to a gallon of gasoline, was reworked as well. "And now it get 26 miles to the gallon," Hines says.

While he has used blends of 95% used cooking oil and 5% diesel fuel, Hines admits, "Most times now I don't put in any diesel or gas. The only time I blend is during cooler weather, to thin out the oil which has a higher viscosity. Last March, I installed preheaters right on the engines to preheat the fuel coming from the tank. I think this may eliminate any need for blending."



Hines says he has tried "all kinds" of vegetable oil. "You can use any of them and they will burn in the diesel engine with no problems. The only thing is, when you start up, it smells like you're cooking french fries or frying chicken."

How has he avoided coking and carbon build-up? Hines says filters are the key.

"On the two 1980 vehicles and on the 1974 panel van, I bypassed the seven-micron filter, which was too fine, and

put in a 12-micron canister type filter near the engine. In the Scottsdale pick-up, I took out the six-micron filter from the fuel tank; it was too fine for the thicker oil."

Between May 1980 and August 1982 Hines says he put 35,000 miles on one vehicle, 34,000 miles on another and 500 hours on the Ford 1000.

Hines says he has nine to ten sources, or "wells" as he calls them, for used cooking oil " and I have others I haven't even tapped yet."

"Most of them would just throw it out otherwise," he says. Some "wells" are fried chicken establishments or delicatessens at local grocery stores. Most give used oil away; one sells Hines the oil at 30 cents a gallon.

Hines estimates he uses 50 to 80 gallons of cooking oil a week. He says he gets the same mileage per gallon of cooking oil that he would with diesel fuel. "The Scottsdale gets 24 to 25 miles a gallon, the 1980 GMC delivery truck gets 16 miles a gallon, the Mercedes, 34 miles to the gallon and the tractors have the same running times as with diesel."

Hines says the used cooking oil is filtered once before he gets it. He collects weekly and puts the oil in his storage tank, then refilters it through two 12-micron filters when he pumps it out for use. Hines says the $4 filters can be cleaned with gasoline and reused.

Hines' trucks and the Mercedes have precombustion chamber engines while the tractors have direct injection engines. "It doesn't make any difference. The trick is the filters," says Hines, claiming, "We could be energy independent as a country in two to three years if vegetable oils were used large scale in diesel engines."

Hines has experimented with mixing used cooking oil with gasoline at a 15:85 ratio to burn in a gasoline engine. In addition, he says he has successfully used cooking oil as a lubricant. "I use it as a lubricant in my chain saw to cut wood, as a lubricating oil for my daughter's little Honda Express." This year he substituted cooking oil for motor oil in one of the Mercedes. In August, after three months' use, he reported no problems. Hines says he has also taken an engine apart after using used cooking oil as fuel to check its condition. "It was cleaner than if I'd used diesel fuel."

There is one precaution Hines offers for those burning used cooking oil in diesel engines: make sure to change the lubricating oil no later than 4,000 to 4,500 miles. "If you don't, your crankcase oil will start to solidify," he warns. With tractors, he says, crankcase oil should be changed every 100 to 150 hours, as recommended by the manufacturer.

Hines doesn't quite understand why others haven't followed his lead. But there is one thing he is sure about "If Saudi Arabia or the other petroleum producing countries cut off our supply, I'm all set. After all, people'll still be cooking fried chicken."

Racers fueled by veg oil, tallow

Racers fueled by veg oil, tallow

Thirty-one drivers and their vehicles competed July 4 in a 150-mile Alternate Fuels Classic road rally from Lincoln, Nebraska, to Aurora and back. The rally, sponsored by the Nebraska Energy Office, was held to promote independence.

Contestants were judged on fuel consumption, based on the miles traveled, vehicle weight and heating value of the fuel used.

Finishing first in the diesel category was a 1981 Volkswagen Rabbit engineered by Walter Kruse and driven by George Terra-Nova, both of New Kensington, Pennsylvania. The car, powered by waste vegetable oil and ethanol, got 75 miles to the gallon.

Kruse himself drove the third place winner in the diesel category, a 1972 MG Midget also fueled by vegetable oil and ethanol. His sponsor, Freedom Oil of Clarksburg, New Jersey, distills waste vegetable oil from a variety of sources, including a nearby Kentucky Fried Chicken franchise. Second place in the diesel category was captured by a 1977 Gremlin powered by a mixture of lard, tallow and chicken and turkey fat. The car was driven by Karry Kuecher of Palos Hills, Illinois, who redesigned it with his father, Robert. The Kuechers procurred their fuel from the Kaluzny Brothers animal fat rendering company of Joliet, Illinois.

Meanwhile, the spark ignition category was won by Don Kunau of Simla, Colorado, who used ethanol in his 1966 Chevrolet station wagon to get more than 27 miles to the gallon. JAOCS

AOCS to hear Kraft CEO

Arthur W. Woelfle, president and chief operating officer of Kraft Inc., will be the keynote speaker for the American Oil Chemists' Society's 74th annual meeting to be held May 8-12, 1983, in Chicago's Marriott Hotel.

Mr. Woefle will speak to a plenary session to be held Monday morning, May 9, in the Marriott. Kraft Inc., with headquarters in the Chicago suburb of Glenview, is one of the nation's major food processing firms. Its products include margarines, salad dressings and many other foods based on fats and oils.

The meeting in Chicago will feature more than 300 technical papers on all aspects of fats and oils, inedible as well as edible. Abstracts for technical program presentations must be submitted by Nov. 1, 1982, to be considered for the meeting.

AOCS/Americana special

Chairman Arnold Gavin's committee is planning many innovations to attract AOCS members, their spouses, and their colleagues to the Windy City. The activity will begin before the first registrant appears for the meeting itself which is scheduled for May 8-12, 1983 at the Chicago Marriott Hotel on Michigan Avenue.

The Americana Resort in Lake Geneva, Wisconsin, will be the site for a variety of pre-meeting programs. The resort, a 90-minute drive from Chicago's Loop, was formerly a Playboy resort, and Americana management has turned the property's 1,400 acres into a family-oriented resort. The resort provides restaurants, a fitness center, two well-known golf courses, horseback riding, boating, indoor and outdoor tennis, skeet shooting and many other leisure activities.

Two short courses open the AOCS Americana programs. Both will begin with an informal reception on Wednesday, May 4, and will conclude at noon Saturday, May 7. Registration fees will include social events, coffee and rolls each morning and coffee breaks.

The short course on processing and quality control of edible oils is being organized by AOCS past president Frank Norris. Lecture presentations will be followed by questions and discussions. Among the topics being considered for the program are solvent extraction, refining and degumming, bleaching, by-products, lecithins, deodorization, margarine and shortening, specialty fats and finished oil handling.

Autoxidation, selenium, vitamin E and cancer will be discussed in a short course being planned by John Milner and E.G. Perkins of the University of Illinois. Perkins is immediate past-president of AOCS. The program will follow the same general format of the oil processing short course. More program details will be available soon.

The AOCS golf tournament will be held before the annual meeting begins. The date is Saturday, May 7, with the tee times beginning at 1 p.m. Both Americana courses will be used. The Briar Patch, designed by Pete Dye in consultation with Jack Nicklau, is patterned after the old Scottish links. Its name is ample description of its perplexity. The Brute offers a different golfing challenge with its length, large greens and water holes. Bill Zievers, tournament chairman, is planning several on-the-course games and prizes for participants.

A tennis tournament will be held also on Saturday, May 7. Chairman Bob Husch is planning a tournament for players of all skill levels. The tournament will be played on the Americana's new outdoor courts unless poor weather forces a move to the indoor facilities.

To cap off the sports fest, the committees are planning an awards party at the end of the day.

The Americana, is offering all AOCS registrants a special rate, even those who do not register for a short course or a sport tournament. The rate is $59 per night (plus applicable taxes) for single or double occupancy and is available for Sunday, May 1, 1983, to departure on Sunday May 8, 1983. To qualify for these rates, registrant must make room payment to AOCS at the time of reservations. Since limited rooms at the Americana are available, space will be assigned first to short course registrants, and then to sports tournament participants before other requests are filled.

Charter bus service will be scheduled for Sunday morning, May 8 at a fee to the AOCS meeting in Chicago.

Information about all these programs will be available on request from the Executive Director, the American Oil Chemists' Society, 508 South Sixth Street, Champaign, IL 61820.