of the Kansas findings.

Reports by two staff members of the University of Iowa School of Medicine differed somewhat. Dr. Donald P. Morgan opposed the study, and Dr. Leon Burmeister's report was inconclusive. A third report, from Dr. Martha Linet of Johns Hopkins University, was in favor of the Kansas study.

When the Kansas study was released in September, the EPA commented "the study is well thought out and that the conclusions are supported by the data."

Or were they? Since the EPA had no staff epidemiologist, it commissioned the four studies. MacMahon didn't finish his study until September 29, a full week after the EPA warned of the possibility of a special review of 2,4-D. A special review is the first step toward a possible revision of a product's user status.

When MacMahon finally finished his report, the EPA decided not to release it, maybe because MacMahon said in his report: "In my opinion, the weight of evidence does not support the conclusion that there is an association between exposure to 2,4-D and non-Hodgkin's lymphoma."

MacMahon believes that the weight of the evidence does not support the Kansas study's claims sufficiently, and therefore the 2,4-D-cancer link remains a hypothesis.

ATHLETIC TURF

Joe Torre keynoter at STMA conference

Sports broadcaster Joe Torre will be the keynote speaker at the Sports Turf Manager's Association annual meeting to be held Jan. 31 in Phoenix.

The STMA conference, in conjunction with the GCSAA show, will be held at the Hyatt Regency. Kick-off time for the program is 8 a.m.

Torre, the former major league baseball player and manager who is a broadcaster with the California Angels, will speak at the STMA awards dinner beginning at 7:30 p.m. Price of the dinner is $30.

Harry Gill, director of grounds at Milwaukee County Stadium, and Jeff Wishard, who was paralyzed in a football accident, will receive awards at the dinner.

The STMA daytime program runs from 8 a.m. to 5 p.m. Topics on the program include talks by Dr. Fred Grau on the future of athletic turf; attorney Dan Holland on developing a standard for turf surfaces; and Dr. Eliot Roberts on the steps for achieving safer athletic turf.

Afternoon concurrent sessions include detailed seminars on baseball fields, soccer and football fields, specialized sports turf and drainage, equestrian surfaces and athletic turf herbicides.

For more information on attending the conference, contact Dr. Kent Kurtz at (714) 984-4677 or (714) 869-2176.

CONVENTIONS

Landscape Expo deadline approaching

The 1987 edition of the Landscape Expo position will feature an expanded continued on page 14

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**SHORT CUTS**

**SPORTS MANIA...** Charlie Racusin of Environmental Landscape Services, Houston, is a sports nut. But he's also a good businessman. The result? A booming landscape company and plenty of tickets to athletic events. Racusin, besides taking in the games themselves, gives out freebie tickets to his best clients. For instance, last fall, he bought 42 tickets to each of the Houston Astros' NL Playoff Series games against the New York Mets. "There's not a week that goes by that we don't give a client something for free," Racusin reports. And it apparently works.

**CHARGE IT...** Landscape managers will soon be able to purchase equipment by whipping a piece of plastic out of their back pocket and saying "charge it." Bob Brophy, new landscape product manager at Cushman Ryan, says the company might be instituting a credit card program for the green industry. The credit cards could be used for any line of Cushman equipment.

**FUTURE SHOCK...** A system being developed by Electrofac Corp., Kansas City, Mo., could add a new dimension to the battle against insects: electrocution. The system, which fries insects without toasting leaves, is possible because most plants can shrug off enough electricity to get rid of the pests. A diesel-powered generator moves through fields, carrying a tunnel of charged metal plates over rows of plants. A current moves through the plant when the leaf touches the metal, killing insects on the plant and in the earth near the roots.

**PESTICIDE PICTURE SHOW...** A video series teaching landscape pesticide safety has been developed by Idea Bank for employees of organizations handling landscape chemicals. The two videos in the series, entitled "Working With Pesticides," deal with in-field safety and meeting OSHA requirements for handling hazardous substances. Cost is $149.95 postage paid. Contact The Idea Bank (800) 621-1136. In Arizona, call (602) 829-1233. By mail, send payment or purchase order to The Idea Bank, Pesticide Videos, 1000 E. Apache Blvd., Suite 211, Tempe, AZ 85281.

**COLOR CALENDAR...** Brouwer Turf Equipment is offering a free four-color 1987 year-at-a-glance turfgrass industrial calendar that includes turf industry shows and convention dates. Contact Brouwer at Woodbine Ave., Keswick, Ontario L4P 3E9.

**FERTILIZER FRENZY...** There's a movement in the green industry to try to convince fertilizer companies to express pure phosphorous and pure potassium content on the bags. The three numbers on the bag are nitrogen, phosphate and potash. Phosphate and potash are the oxidized forms of phosphorous and potassium, respectively. Dr. Larry Leuthold of Kansas State University says, as things stand now, these conversion formulas must be used: to convert \( P_2O_5 \) to \( P \) multiply by .44; to convert \( K_2O \) to \( K \) multiply by .83.

**CONVENTIONS from page 11**

Show from last year's. In all, 225 exhibitors will show their stuff at the Expo, Tuesday through Thursday, March 3-5 at the O'Hare Exposition Center in Rosemont, Ill.

In addition, a greatly expanded conference program will run the full gamut of topics: from the business side to the legal side to the field side. Joining last year's standout speakers, industry experts Dr. Rudd McGary and Ed Wandtke of All-Green Management Associates, will be Dr. Marty Petrovic of Cornell, James Leatzow of Leatzow Agency/Financial Guardian, attorney Richard Lehr and Dr. Ray Freeborg of Purdue.

Deadline for attendee pre-registration is Feb. 10. Conference hours run from 8 a.m. to 5 p.m. all three days. The Expo hours are 9:30 a.m. to 4 p.m. Tuesday and Wednesday and, 9:30 a.m. to 3 p.m. Thursday.

If traveling by air to the Expo, call Travel Planners, Inc., the official travel agency of the Landscape Expo. They are guaranteeing up to 45 percent savings on full coach fares on American Airlines, though some restrictions may apply. If your airport is not serviced by American, call anyway. Travel Planners can still provide discounted fares on most carriers. Seats will be going fast, so call (800) 221-3531 or in New York, call (212) 473-4688.

**LEGISLATION**

**Restrictive law is passed in California**

Commercial pesticide users in California are waiting for the governor to tell them which pesticides they can't use. On Nov. 4, voters approved Proposition 65, the Safe Drinking Water and Toxics Enforcement Act.

Businesses with 10 or more employees will not be allowed to use any chemical defined as carcinogenic or potentially carcinogenic if there is any possibility that it could contaminate groundwater.

Government entities are exempt.

A citizen right-of-action clause enables anyone to bring action to enforce the law. It also includes a "bounty hunter" proposition: private citizens who bring enforcement will receive 25 percent of any penalties collected by the state.

Steve Hardymon of ChemLawn said a preliminary list of carcinogenic chemicals supplied by the state included only two chemicals his company uses. And those are not critical to operations.

continued on page 18
There's no better value for crabgrass control than Balan. And none with more experience. It's been used more years by more golf course superintendents than any other granular preemergence herbicide.

Its easy-to-spread clay carrier is one reason why. It makes application more uniform, reduces the dust common in other carriers and also increases your equipment calibration accuracy.

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Balan. The better spreader. Talk to your Elanco distributor soon. Or write:

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If your greens aerator is taking its time instead of making time, Toro has great news for you.

Now you can aerate your greens faster than ever before. Powered by a 16 hp engine—twice the horsepower of the leading competitor—Toro's new Greens Aerator can aerate up to 13,000 square feet per hour. That's almost double the territory the other machine can cover!

Greater forward speed. Toro out-distances the competition with a faster coring ground speed and a greater coring width. But that's only the beginning. Toro is also way out in front with these performance and durability features:
Better penetration.

Heavy-duty construction gives you a deep, 3" coring depth and more uniform penetration of the tines. Toro's design also assures clean removal of the core without damaging the lip of the core hole or the playing surface.

Easy operation.

Electric starting gets you moving fast. Large floatation tires glide easily over the turf and make the aerator easier to control. And a reverse gear—another Toro exclusive—gives you added maneuverability.

Maintenance is easy.

Tines can be changed in less than five minutes with an ordinary socket wrench. And with Toro's unique modular design, you can remove the coring head within minutes.

If you'd like to speed up your game, take a look at the revolutionary new Toro Greens Aerator. Just contact your local Toro distributor or write to: The Toro Company, Commercial Marketing/AA, 8111 Lyndale Avenue South, Minneapolis, MN 55420.

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TORO

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"As we see Proposition 65 right now, we don't anticipate it affecting us," he says.

However, the final list of chemicals had not been released at presestime.

"It's going to wind up in court before anything happens," says Sharon McGuire, executive director of the California Landscape Contractors Association. She said her organization is investigating its legal options.

The initiative was sponsored by a coalition including the Sierra Club and the National Resources Defense Council.

**PESTICIDES**

**Label expected for Acclaim! herbicide**

The Environmental Protection Agency will approve a label for Acclaim!, a non-phenoxy, post-emergence herbicide, for use on grassy weeds early this year. Active ingredient in the Hoechst-Roussel product is fenoxaprop-ethyl.

Carole Gray of the EPA's office of pesticide programs said use will probably be approved soon for sod farms, rights-of-way and commercial and residential turf.

Acclaim! is for control of smooth crabgrass, hairy crabgrass, barnyardgrass, foxtail species, Panicum species, Johnsongrass, goosegrass and silver crabgrass.

**ASSOCIATIONS**

**Green Team event a successful venture**

The "Green Team" conference and trade show, the first joint venture by the Associated Landscape Contractors of America's Landscape Management Division and the Professional Grounds Management Society, drew more than 800 attendees to Milwaukee's Marc Plaza Hotel.

"The combination, I hope, will set the tone for the whole green industry," notes Jeffrey A. Bourne, new president of the PGMS. "It was very positive. We have to think in terms of industry-wide benefit. ... There's a coming of age going on in our industry," he says. "We have to promote what all the associations are about in terms of benefits. We have to get people into organizations that give them a sense of professional work."

Show chairperson Ron Kujawa of KEI Enterprises is also complimentary.

"For our first attempt, it was outstanding," he says. "We had overflow attendance at almost all the sessions. They wanted more of everything they got."

The trade show had 89 exhibitors at 118 booths. "We were really surprised how much interaction there was between contractors and PGMS people," Kujawa notes.

The joint effort will be repeated in 1987 in Washington, D.C.

**CONFERENCES**

**Nassau Coliseum hosts landscapers**

Nassau Veterans Memorial Coliseum is the site of this year's Professional Turf and Plant Conference on Wednesday, March 11.