A candidate sets bricks in a running bond pattern according to specifications in the brick-on-sand portion of the CLCA’s certification test. The exam took place last October at Football College, Los Altos.

ASSOCIATIONS

California leading the way in certifying its contractors

Landscape contractors in California are among the most organized in the country. Twice each year, the California Landscape Contractors Association conducts a two-day test to certify qualified contractors.

The exam consists of 15 hours of timed, hands-on work on 30 problems in eight major skill areas. The skills are: plan reading, irrigation installation, plant installation, concrete installation, grading and drainage, brick-on-sand construction, sand box construction and sod installation.

Seventy-one contractors have earned the “Certified Landscape Technician” title by passing the test since it was first administered in 1984. It is open to any landscape worker or contractor who meets certain experience, age and education requirements.

The next test is being given next month in southern California. Application information is available from CLCA headquarters, 2226 K Street, Sacramento, CA 95816. Phone number is (916) 448-CLCA.

LITERATURE

Bats in the attic? Woodchuck woes?

Are raccoons or moles ruining the turf of one of your most valued clients? Don’t know what to do? Now there’s an answer to your problems.

Rich Patterson, a professional naturalist and director of the Indian Creek Nature Center in Cedar Rapids, Ia., has written a booklet called There’s a Bat in the Attic and a Woodchuck in the Garden. He describes the life history and suitable control methods for 12 types of wildlife that commonly occur in suburbia. Research and writing of the booklet was sponsored by the Iowa Science Foundation.

The solutions Patterson suggests are designed to be long lasting and non-violent to individual animals, since they generally involve altering the animal’s environment.

Animals covered in the booklet include snakes, squirrels, raccoons, woodchucks, cottontails, moles, gophers, mice, woodpeckers and bats.

“When people discover damage,” Patterson says, “they are often annoyed or afraid. Their first reaction is usually to kill the offending animal, even though this often does not solve the problem for long.”

To effectively reduce pest damage it is necessary to understand the life history of the animal causing a problem and choose control methods that are suitable, Patterson says.

The booklet is available at cost. To order, send $5 to the Indian Creek Nature Center, 6665 Otis Rd., SE, Cedar Rapids, IA 52401.
PESTICIDES

On communicating product safety

Dr. Terry Witt, manager of public relations for North American products at Dow Chemical USA, predicts the future of communicating product safety to the customer. Here is what he says:

First, there will be pressure at all governmental levels, from local to federal.

Second, there will be an increased emphasis on right-to-know from workers, the community and customers.

Third, there will be an increased number of liability lawsuits, more health surveys, and groundwater concerns.

Dr. Witt also outlined lessons that landscape managers who deal with pesticides should have learned by now:

- It is everybody's problem in the landscape industry.
- Science is not the problem—public opinion and politics are the name of the game.
- Benefits must be explained.
- Coalitions at all levels are a necessity.
- The public's concerns must be addressed.
- Media is not the enemy; the industry must learn to work with the media.
- There is also a need to work with public interest groups.

CONFERENCES

Warning: be ready to anticipate problems

Because of the drought conditions that prevailed in much of the country last year, landscape managers are going to have to anticipate problems with some of the plantings they did on projects last year, says Ethyl Dutky of the University of Maryland.

"Suspect problems with plants that were transplanted," she says. "Die-backs and declines from borers and root diseases will point out plants that will be problems. You should be anticipating buying some replacements."

Dutky offered her comments at Maryland's Turfgrass '87.

CULTIVARS

National Arboretum develops new cultivars

The United States National Arboretum has introduced several new cultivars, including four species of Crape-Myrtle.

The Shoshni is a dwarf viburnum more suited for residential landscaping than its larger relatives. It produces smaller flowers, a longer-lasting scarlet-red fruit and purple-red foliage along its distinctive horizontal branches. A dense growth habit makes it adaptable to varied landscape uses.

The four new varieties of Crape-Myrtle are Acoma, Hopi, Pecos and Zuni. All four are semi-dwarf cultivars combining mildew resistance, dark green summer foliage and autumn coloration. Their flowers range in color from white to lavender, making them excellent for landscaping, as the larger varieties are in the South.

Another introduction from the Arboretum is a triploid cultivar of hibiscus called Minerva. They are tolerant to pollution and light frost, have a compact growth habit, are sterile and will bloom for four months or more.

continued on page 16
"Someone put a cart in the 7th fairway pond. My next-door neighbor bought his kid a set of drums. And I just found out my mother-in-law is moving in. But what really concerns me is Pythium."

There's one sure way to avoid worrying about Pythium. Use Subdue fungicide. Subdue stops Pythium on contact. Once absorbed by grass roots, Subdue protects your turf against further attack for up to three weeks. So don't let Pythium get you down. Get Subdue. Because you've got other things to worry about. CIBA-GEIGY

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SHORT CUTS

HURRY-UP ... OR LEAVE... Not long ago, the Los Angeles Recreation and Parks Department proposed a rule that would limit golfers to 4 1/2 hours to play 18 holes on municipal courses. According to the department, some golfers take as long as six hours. Martin Tregman, president of the L.A. Municipal Golf Association foresees troubles, though. "I don't think they (golfers) can be put off forcibly without real problems," he observes. One golfer who was asked to leave a course (for not having proof he paid his greens fee) clobbered the course employee with a golf club, fracturing the employee's skull. "We don't want people getting killed," Tregman says.

THANKS TO FRED... Upon recommendation of its turfgrass division, the Crop Science Society of America's board of directors has approved as a C.S.S.A. award the Fred V. Grau Turfgrass Science Award. The award will be presented in recognition of significant career contributions in turfgrass science. Grau, 85, has devoted most of his life to turf and is presently executive director of the Musser International Turfgrass Foundation.

WINTERTIME BLUES... Many portions of the country had particularly cold winters, especially in the mid-South. Horticulturists know that if there's wind and low humidity, there's little danger of frost. But in 40-degree temperatures with no wind and high humidity, there's a good chance of frost that can result in damage to delicate ornamentals. "It's an art and a science to escape cold-weather damage," says Norm Freel of Florida's Cypress Gardens. "We work closely with the National Weather Service. Wind direction, cloud formations, humidity and air pressure are also taken into consideration." As guard against loss of plant materials, the Gardens have installed a series of ground pipes to which heaters can be attached and raised as high as the treetops, if necessary.

'THAT'S A BIG TWINKIE!'... In just one year, American industry produces between 70 billion and 90 billion pounds of hazardous waste, according to information from Georgia Tech. That's 300 to 400 pounds for every person living in the U.S. And by the year 2000, Georgia Tech says, that number could double. It's no wonder the EPA has taken a hard look at the problem of disposal.

NEVER TOO LATE... An event which escaped these pages was the presentation of the first "Excellence in Turf Grass Research Award" at the 1986 GCSAA show. It went to Dr. C. Reed Funk of Rutgers University. In making the presentation, Mike Robinson of Seed Research of Oregon said, "His tireless and unselfish dedication to the improvement of turfgrasses has produced the tremendous array of outstanding varieties available for the demanding needs of today's turf manager." WT&T apologizes for the oversight. We'll have announcement of the second annual award next month.

NEW VARIETY... To honor the memory of Peter Selmer Loft, a new tall fescue variety, "Tribute," will be introduced by Lofis, Inc. late in 1987. The company also honors its former president with annual scholarship presentations.

CULTIVARS from page 12

Naragansett is a variety of crabapple introduced by the Arboretum. It has multiple disease resistance and excellent landscape characteristics.

For further information on these and other cultivars, contact horticulturist Donald Egolf at the U.S. National Arboretum, Agricultural Research Service, USDA, Washington, DC 20002.

ATHLETIC TURF

Don't throw away those valuable blue tags!

Blue tags from some named varieties of certified turfseeds are worth money. The Mussser International Turfgrass Foundation (MITF) and National Sports Turf Council (NSTC) are collecting the blue tags to raise money for turfgrass research.

Dr. Fred Grau, executive director of MITF, says the money raised from donated tags will train students in turfgrass science or be used for research and education for better turf and safer sports turf.

Don't throw the tags away. Donate them to the MITF/NSTC.

Send tags to: MITF/NSTC, 4604 Amherst Rd. (for UPS), P.O. Box AA (for mail), College Park, MD 20740.

ACQUISITION

Barefoot Lawn acquires Tempo 21

Worthington, Ohio-based Barefoot Grass Lawn Service has acquired two branches of Tempo 21, based in Wheeling, Ill. By merging Barefoot's three Chicago-area branches with the two from Tempo 21, the company will increase its national customer base to about 150,000.

According to Barefoot's Don Nichols, the Tempo 21 merger nearly doubles the market share and customer base in the Chicago area, adding 15,000 customers. This makes Barefoot the second largest lawn care company in the area, Nichols said.

He added that the acquisition brings a number of services that Tempo was performing that Barefoot has not done in the past. Included in this is Tempo's mower repair service. Nichols said the company is still considering whether to continue this service. One service Barefoot is continuing is the telemarketing functions brought with Tempo, Nichols said.

Barefoot has branches serving 23 states, and made Inc. Magazine's 1986 list of the nation's fastest growing pri-
Wouldn't it be great if your old standby broadcast herbicide could also handle early-emerging HTCs?

*Hard-to-control weeds like oxalis, ground ivy, prostrate spurge and wild violet.
private corporations. Nichols adds that while no more acquisitions are planned, "should the right match come along, we'll certainly take a look at it."

**RESEARCH**

**Certain ornamentals resist salt water**

Certain varieties of popular landscape plants are more tolerant to saltier irrigation water than previously believed. This according to research done by water management scientist George Fitzpatrick of the Institute of Food and Agricultural Sciences' Research and Education Center in Ft. Lauderdale, Fla.

The research was prompted by conditions in Florida at certain times of the year resulting in freshwater shortages and saltwater intrusion.

Fitzpatrick's research was done on areca and paurotis palms, buttonwood and orange jasmine using varying saline levels in the water. Levels ranged in concentration up to 10,000 milligrams per liter. (Tap water on the average has 100 mpl.)

Buttonwood showed no adverse effects up to the highest saline level. Paurotis showed effects at 5,000, while arecas made it to 2,400. Orange jasmine had the lowest tolerance, dying at 1,200 mpl.

Fitzpatrick is continuing tests on other varieties of ornamentals in hopes of providing some guidelines for landscapers in the lucrative Florida market.

**GOLF COURSES**

**Calesthenics do the trick here**

The golf course that does calesthenics together suffers fewer accidents together. At least that's what D.J. Pakkala says.

Pakkala has had the employees of The Vintage Club in Indian Wells, Calif., doing calesthenics together first thing in the morning, and he reports a notable decrease in on-the-job accidents.

"You do it after they punch in—on company time," Pakkala told visitors to the GCSAA conference and trade show in Phoenix, Ariz. "It's also a good time for a pep rally. "It really gets the blood and juices flowing. They leave at 6:10 and they're ready for the day."

**AWARDS**

**NRVMA award series presented for first time**

The National Roadside Vegetation Management Association presented its first annual excellence awards to individuals from academia and the government. The Excellence in Roadside Vegetation Management awards for 1986, presented in conjunction with Monsanto, went to nominees from state transportation departments, county highway departments, university researchers and custom applicators nationwide.

Indiana Department of Highways director John Isenberg won in the state category, and Jim Erwin, Douglas County (Oregon) Road Department, won in the county category. North Carolina State University professors Joseph DiPaola, William Gilbert and William Lewis shared the academic honors.

A five-person committee representing management, academia, media, government and industry evaluated all nominations with respect to innovation, environmental impact, economics, safety and aesthetics.

Nomination forms for the second...
Introducing your new old standby.

That old standby broadcast amine turf herbicide of yours has just been made obsolete with new TURFLON* II Amine Herbicide from Dow.

Stops HTCs in the broadcast round
You see, TURFLON II does everything your old standby does, and a whole lot more. Like control those hard-to-control weeds that can emerge early and sneak through your old standby. Weeds like oxalis, ground ivy, prostrate spurge and wild violet. Weeds that keep your phone ringing and your cash register quiet.

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Safety tested
The low volatility of the TURFLON II activated amine formulation gives you less odor to worry about. It has a proven safety record and won’t migrate in the soil to the roots of ornamental plants.

So if you’re tired of being let down in the broadcast round by your old standby, turn to TURFLON II this year.

*Tm trademark of the Dow Chemical Company

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TOURNAMENTS

John Deere sponsoring pro/super tournament

The Golf Course Superintendents Association of America and John Deere & Co., have combined to participate in a golf tournament created by Deere.

The John Deere/PGA Professional-Superintendent Championship will feature four-man teams composed of a club's PGA professional, the course superintendent, club president and manager.

Teams will compete in a scramble format beginning with qualifying rounds held regionally from June until September at 41 PGA sections nationwide, and ending with a two-day, 36-hole championship set for November. Exact dates and locations will be announced later.

"This program provides an opportunity for the club pro and superintendent to play together on a team with other club officials," said Gary Gottschalk, golf and turf manager for Deere.

"This will be a tremendous impetus in bringing together the key people who run the nation's golf clubs," added Micky Powell, 1986 PGA president.

INDUSTRY

Industry Task Force questions 2,4-D study

An interim report summarizing research by the Industry Task Force on 2,4-D has thrown doubt on the National Cancer Institute's study on possible links between 2,4-D and increased risks to certain forms of cancer.

The report questions the validity of figures presented in the Kansas Study, as the NCI report has become known.

In an effort to distribute information from the Task Force study, the Pesticide Public Policy Foundation (3PF), headed by Dave Dietz, has been distributing copies of the Task Force summary to foundation members and other interested parties.

continued on page 22