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DIRECTORY

Insecticide Directory

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aspon	Aspon	Stauffer	251
Bt	Thuricide	Sandoz	252
	Dipel	Abbott Labs	253
	SOK Bt	Tuco/Upjohn	254
bendiocarb	Turcam	Nor-Am	255
carbaryl	Sevin	Union Carbide	256
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RANSOMES

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Earl Crane, 50 Years of Equipment

by George L. Zeis



Crane combines product lines, like this Steiner tractor and Dedoes drum aerator, to provide his customers with efficient equipment. Crane (left) shows customer the hydraulic lift system of the tractor.

It is 7:00 in the morning and Earl J. Crane is already at his desk working. This is not too unusual for a golf course superintendent or landscape contractor, but Earl is 78-years-old and a manufacturer's representative for Dedoes, Buckner, Lawn Genie, Deines, Roseman, Locke, and Steiner in Tiffin, OH, a small farming community south of Toledo.

Crane sold his first turf product, a Locke Tri-Plex reel mower, in the 1930's in the Detroit area. Orphaned at the age of three, Crane learned early that selling was his ticket to success.

While attending a turf field day in Michigan in the late 30's, Crane met H.M. Cooper, developer of the first self-propelled reel mower, and took on the Cooper Champion Greens mower. In those days, it cost \$295 and weighed 120 pounds. Crane sold 3,000 Cooper mowers to Firestone in 1940 for its dealer network. Things looked

rosy for turf equipment markets.

After a stint in the Army, Crane responded to an urge to get into the golf course business and bought Chippewa Golf Course, near Toledo. He and his partner paid \$52,000 for the 177-acres, to be paid off over 20 years. "After working our tails off for three years, we sold the place," Crane said thankfully. The land today, Crane estimates, would be worth more than \$3 million.

While part owner and superintendent of Chippewa Golf Course, Crane began to compare equipment. He became especially interested in turf aerators. "The Terferator, developed in the 20's, drilled holes in the ground. Only a few greens could be done per day, compared to today's equipment which can do 18 greens in less than four hours," Crane observes.

"Aeration of golf courses before World War II was a luxury. Golf course maintenance didn't really

become a must until President Dwight Eisenhower popularized the sport."

Crane's interest in aerators grew when he met Arnold Dedoes in 1969. "My brother-in-law in Michigan had used a Dedoes and spoke highly of it. I decided to try to add the line to other turf products I sold." Arnold Dedoes reluctantly provided Crane with a demonstration model which he quickly sold to the Cleveland Country Club. Today, Crane supervises 40 U.S. Dedoes dealers and 16 other dealers outside the country.

Crane notes that up to now, golf courses have been the big market for aerators. "But," he said, "we are now going after lawn care companies, industrial parks, and even the homeowner."

Crane travels more than 60,000 miles each year visiting dealers, giving demonstrations, and servicing customers. "A good demonstration is a very convincing sales tool," he adds.

One of Crane's specialties is combining products from various equipment lines to provide the turf manager with more flexibility. One recent example is his combination of a Steiner center-pivot, four-wheel-drive tractor with Dedoes drum aerators. The speed and maneuverability of the small tractor speeds up aerating of large, curved turf areas.

Crane tried to retire in 1971 to Arizona at the normal age of 65. After four years of observing the person managing his business, he decided to get reinvolved and hasn't let up since. "I'm taking it day by day, month by month," Crane cheerfully answers. "But one thing is for sure, I'm going to keep busy. It keeps a fellow young."

WT&T



New Du Pont Landscape Fabric. It lets water through to give you healthier beds with less work.

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Call 800-441-7517 for the name of the nearest distributor and more information about DuPont Landscape Fabric. Or write DuPont Company, Room G-40955, Wilmington, DE 19898.



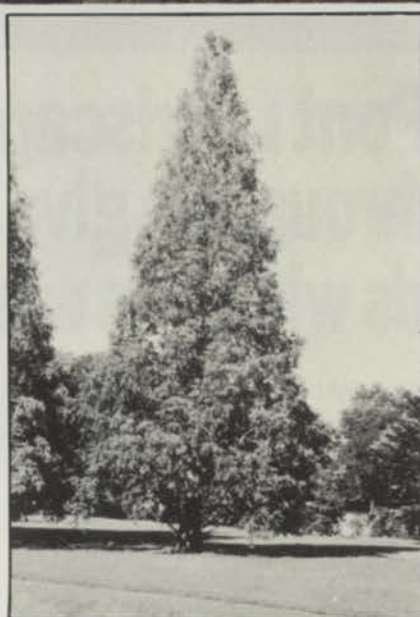
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Dawn redwood and baldcypress

by Michael A. Dirr, Associate Professor, Horticulture, The University of Georgia, Athens



Baldcypress and dawn redwood appear very similar from a distance, but have certain distinct differences. Baldcypress in the color photo and dawn redwood is the black and white photo.



The purpose of this new monthly mini-section on characteristics of plants is to help landscape managers correctly identify and care for specific plants. It will include tips on diseases, insects, and physiological problems of specific plants of interest to the professional plant manager.

An effort will be made to keep technical jargon to a minimum and emphasize key characteristics used to identify common landscape plants. Often, several closely related species will be presented to reduce confusion.

Most diseases and physiological problems are correctly identified

based on the host plant. Scale insects are numerous and rather indistinct. When identified as willow scale, pine scale, or *Euonymus* scale, we can logically and accurately recommend the best control measures.

Leaf spots are another rather ambiguous problem. Almost every plant contracts leaf spots but rarely are they serious. However, if the leaf spot is identified as *Entomosporium* leaf spot or *Photinia x fraseri*, Fraser photinia, then it is imperative that control measures are implemented. Identification separates serious from nonserious pests.

This first column will cover two oft-confused trees, *Taxodium distichum*, common baldcypress, and *Metasequoia glyptostroboides*, dawn redwood. Common baldcypress is native to low wet areas from Delaware to Florida and Texas. Dawn redwood was thought extinct until re-discovered in China and introduced to cultivation through the efforts of the Arnold Arboretum in the mid-40's.

Both species have a feathery, conical to pyramidal outline and may assume the appearance of an inverted ice-cream cone. Baldcypress has alternately arranged branches. Dawn redwood branches oppose each other and drop off along with the needles in the fall.

Dawn redwood requires a moist, well-drained acid soil and does not tolerate swampy conditions. Baldcypress is found in swamps in the wild, but makes its best growth in moist, well-drained, acid soils.

Dawn redwood does not appear as susceptible as baldcypress to chlorosis. I have observed horrible chlorosis on baldcypress in the Midwest. Iron capsules implanted in the trunk corrected the problem temporarily.

Both have rich green leaves and excellent rusty-red to orange-brown fall color. The bark is reddish-brown and offers winter interest.

In the Midwest, galls caused by a mite may form on baldcypress, but there is considerable variance from tree to tree. These are not serious but are rather unsightly.

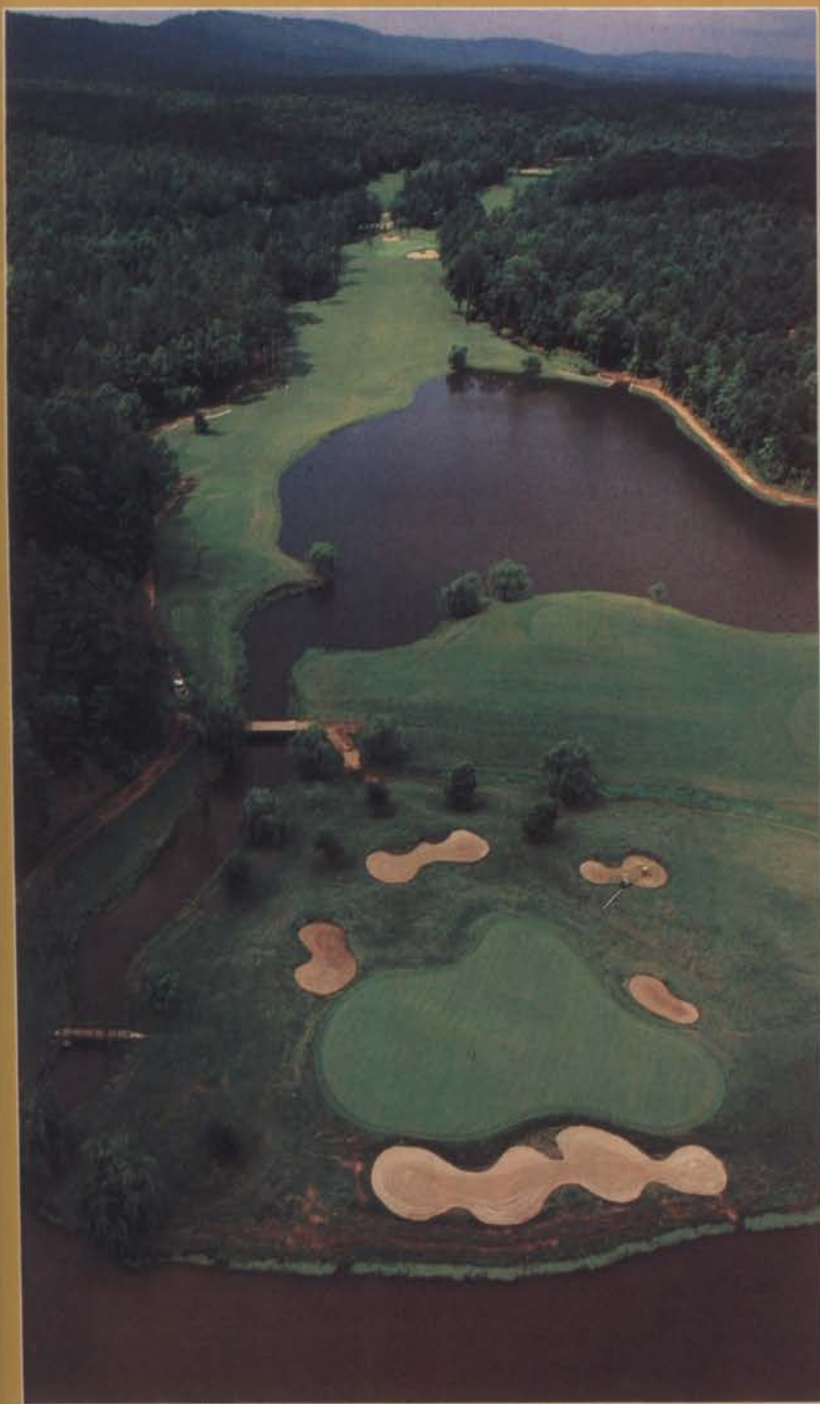
Both species can be grown from Zone 5 to Zone 8, with baldcypress native into Florida (Zone 9). I have seen dawn redwood on the University of Maine campus in a protected courtyard where the top had been killed back. Temperatures may reach -30 degrees F. in Orono, ME. Baldcypress is slightly more cold tolerant and also more heat tolerant.

Interestingly, 'knees' are not produced on baldcypress unless they are located in or near water. I have never observed knees under normal landscape conditions.

Pond cypress, *Taxodium ascendens* is similar to baldcypress. The primary difference is the needles of pond cypress are more flattened and point toward the end of the stem.

WT&T

1984 PGA putts on PENNCROSS



18th green at Shoal Creek, Shoal Creek, Alabama

Shoal Creek, Alabama

At the rugged Shoal Creek course, host of the 1984 PGA Championship August 16-19, 1984, the touring professionals will again be putting on Penncross creeping bentgrass. Penncross and Penneagle, the Penn Pals, are no strangers to the pros. Most of the recent major championships have been played on one or the other. The Western open at Butler was played on Penneagle fairways and greens. The 1983 US Open at Oakmont was played on Penneagle tees, fairways and greens. Maybe you saw the sixty-foot putt on Penneagle.

So, when the Shoal Creek course was designed, it's no wonder Penncross was specified for the putting surface. It was a 'natural' to choose Penncross bentgrass, with its glorious history, for a course with a sparkling future!

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PROBLEM SOLVERS

by Balakrishna Rao, Ph.D and Thomas Mog, Ph.D

Preemergents questioned

Problem: Last fall we seeded a number of lawns with a Kentucky bluegrass, fine fescue and ryegrass mixture using an aeroseeder. Now we are concerned with the use of preemergent materials like Betasan for crabgrass in spring. Will it hurt the seedlings? Should I skip or delay the preemergent application? (Wisconsin)

Solution: If the lawns were seeded early in the fall and the conditions were favorable for germination and proper establishment, then the application should not be harmful. However, if the seeding was done later and/or seedlings did not have a chance to establish, they will be susceptible to injury from the application.

If the seedlings have not established and the lawns have a potential for crabgrass infestation, instead of skipping, you should delay the application for two to three mowing periods or consider using Tupersan, a safer preemergent material. Although expensive, Tupersan can be safely applied onto seedlings, even during the establishment period.

If you are going to delay the application, you should monitor the soil temperature. Crabgrass seeds germinate when the soil temperature reaches about 55 degrees Fahrenheit. You can also monitor indicator plants like forsythia for its petal fall stage which coincides with the crabgrass germination. Based on our experience in the Wisconsin area, the preemergent materials should be applied no later than mid-May to get adequate crabgrass control.

Mowing frost-covered grass

Problem: What is the major problem and solution for mowing cool-season grasses covered with early morning frost? (Arizona)

Solution: Mowing frost-covered turfgrass will result in the crushing of brittle plant cells. Leaves which are damaged will be replaced as new leaves emerge from the turfgrass crown. The best solution is to mow after the frost has melted or lightly syringe with water to speed up melting.

Biological control for chinch bugs

Problem: Is it true that there is a biological control fungus which kills chinch bugs in the lawn? Can we purchase it like milky spore? Would you please mention the source where it can be purchased and also give your comments. (Missouri)

Solution: Yes, there is a fungal species known as *Beauveria* spp which can infest and kill chinch bugs at any stage of development. This biological control agent flourishes well in lawns which are kept moist. Reports also suggest that a well-irrigated lawn will have less chinch bug problems. This is a soil-borne fungus which survives in soil and, under ideal conditions, can infect chinch bugs and kill them. Although these biocontrol agents are present in nature, usually their

activity is not sufficient enough to keep the insect population under an acceptable level where severe chinch bug infestation occurs.

I do not know of any sources where the fungal organism is either being produced commercially or can be purchased for lawn care use. During periods of chinch bug activity, maintain adequate soil moisture which will help the fungal growth (if it is present in the soil) as well as turfgrass recovery from injury.

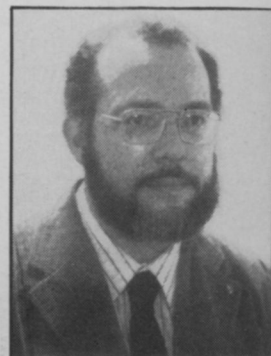
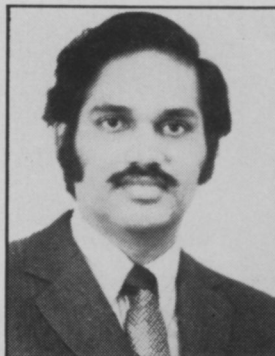
Weed control under tree grates

Problem: We have small linden trees planted within heavy metal grates along walkways. Control of weeds growing through the grates from the planting beds has been a constant problem. Can season-long chemical control be obtained with only one application? (Michigan)

Solution: Any prolonged use of herbicides near confined tree root systems will be difficult. Foliar distortion may occur with lindens because of some herbicide absorption by the stem of thin-barked trees. The choice of herbicides is limited since lindens are highly sensitive to paraquat and simazine.

An application of Surflan should be made in late April. This will give postemergent control of most broadleaf weeds and preemergent control of many grasses. A follow-up application of Surflan plus Roundup should be made near the end of June to control escapes. Extreme care should be taken to avoid drifting of material on the bark or suckers.

A more permanent type of weed control entails covering the planting bed with perforated black plastic topped with shredded bark mulch. Air and gas exchange will occur and moisture will reach the soil.



Balakrishna Rao is plant pathologist and Thomas Mog is pest management specialist for Davey Tree Expert Co., Kent, OH.

Questions should be mailed to Problem Solver, Weeds Trees & Turf, 7500 Old Oak Boulevard, Cleveland, Ohio 44130. Please allow 2-3 months for an answer to appear in the magazine.



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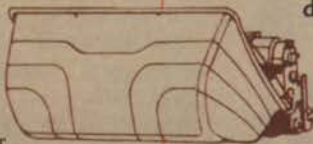
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Stopping ocean erosion dead in its tracks

Following years of wind and water erosion courtesy of the Atlantic Ocean, the owners of a high rise condominium decided to halt the loss of soil from the 200-foot slope adjacent to their building.

The slope that overlooks the Sandy Hook Bay in Monmouth County, NJ, is on the highest coastal elevation point along the East Coast. One hundred-fifty feet wide on a 1:1 gradient, the slope was protected by a management program that involved dressing the slope from the top, compacting fill areas, installing slope boards and Enkamat erosion control matting, and seeding and planting its entire length.



Enkamat pegged into Jersey Shore slows the Atlantic's erosion of the 200-ft. slope.

Preparation

The slope was so steep that workers had to be "tied off" with safety lines while installing the slope boards that were used to prevent surface shear. After rocks and exposed roots were removed, topsoil was added, raked and compacted with rollers attached to cables that were raised and lowered by draglines.

Next, the crew installed 18,900 square feet of Enkamat 7020 matting, a three-dimensional nylon monofilament structure that leaves 90 percent of its volume open for soil, gravel or other material. The matting was anchored using 1 x 3 x 24-inch rough-cut oak stakes placed on 3-foot centers. Stakes were placed every two feet on

the Enkamat seams.

After installing the matting, which took 20 manhours and about 5,000 stakes, the crew planted a grass mixture and multiflora roses on the three-foot centers. Soon the entire slope was covered with vegetation and Mother Nature's handiwork effectively stopped.

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