

**FOR
MICKEY MANTLE
AND
WHITEY FORD,**

Adelphi
KENTUCKY BLUEGRASS

(U.S. Plant Patent No. 3150)

**IS "A WHOLE NEW
BALL GAME"**



Photography at McGOVERN SOD FARMS, Melville, N.Y.

**RATED OUTSTANDING FOR OVERALL PERFORMANCE
...IN YEARS OF UNIVERSITY TESTING
...IN ACTUAL USE BY PEOPLE WHO KNOW GREAT GRASS,
GROW GREAT GRASS and DEMAND GREAT GRASS.**

Nowadays it's more golf than baseball but Mickey Mantle and Whitey Ford know great grass. Whatever the game, "Adelphi" is the answer for them and it may be for you.

- **DARKER GREEN COLOR THE ENTIRE GROWING SEASON**
- **EXCELLENT DENSITY** • **GOOD DISEASE RESISTANCE**
- **TOLERANCE TO MODERATELY CLOSE MOWING**

**JOIN THE "ADELPHI" TEAM.
IT'S "A WHOLE NEW BALL GAME" IN TURF.**



"ADELPHI" HAS BEEN CHOSEN by the Plant Variety Protection Office, U.S.D.A., AS A STANDARD FOR DARK GREEN COLOR to which all bluegrasses applying for plant protection will be compared for color classification.

(Use of this statement does not indicate any approval or recommendation of Adelphi by the U.S.D.A.)

Canadian Inquiries: **National-NK Seeds Ltd.**, Box 485, Kitchener, Ont. • **Rothwell Seeds Ltd.**, Box 511, Lindsay, Ont.
Other International Inquiries: **Northrup, King & Co., Inc.**, Minneapolis, Minn. 55413

FOR INFORMATION, CONTACT:

J & L ADIKES, Inc.
Jamaica, N.Y. 11423

JONATHAN GREEN & SONS
Farmingdale, N.J. 07727

NORTHRUP KING CO.
Minneapolis, Minn. 55413

VAUGHAN-JACKLIN CORP.
Bound Brook, N.J. 08805 • Downers Grove, Ill. 60515
Spokane, Wa. 99213

People on the Move

Billy Lee Harrison and J. George Shoemaker have been appointed as technical sales representatives in the agricultural chemicals division of ICI Americas, Inc. Located in Forrest City, Arkansas, Harrison is responsible for sales in that state. Shoemaker has sales responsibility for Montana; Minnesota, Wisconsin, Iowa, North Dakota, South Dakota, and northern Michigan. He is based in New Richmond, Wisconsin.

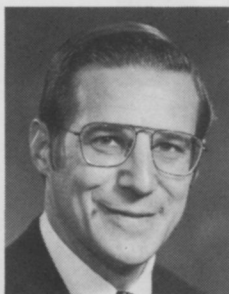
Howard L. Eckel, Jr., Vice President-Utility Services, has been elected to the board of directors of the Davey Tree Expert Company. He joined Davey Tree in 1963 as a sales representative and has served as regional manager of Utility Sales for its southeast region and as vice president — Atlantic Coast region. Donald J. Shope has been named sales manager — Tree Care Services of Davey Tree. He will be responsible for improving service, sales, and profits of the company's tree care service operations. Shope joined Davey Tree in 1955 and was most recently division manager for the company's mid-Atlantic division.

Velsicol Chemical Corporation has promoted Tom L. Sawyer to district manager of the Northwest Central District, Agricultural Business Group. He was formerly a sales representative for the corporation's agricultural group.

Joan Zeldes Bernstein has been named as general counsel of EPA. She was most recently a partner with the Washington firm of Baker, Hostetler, Frost and Towers where she specialized in anti-trust and trade regulation.

William T. McShea III has been appointed Commercial Department manager in the petro process department of Engelhard Industries. He will be responsible for development worldwide coordination of the Selectoxo® process, an Engelhard process for increasing the yield of ammonia producers. McShea has been senior marketing engineer with Engelhard's systems department in Union for three and one-half years.

Target Chemical Company has recently added Fred L. Eckert and Nancy Coleson to its headquarters staff. Eckert will serve as a licensed pest management coordinator. Coleson joins Target's staff as a pest management coordinator.



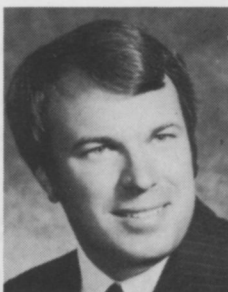
Buckland



Coleson



Malsbary



Sawyer



Shope

Ben F. Suter has been promoted to Western regional manager of U.S. Borax. He will be located in the Memphis, Tennessee, Selective Herbicides office.

The specialty chemicals division of ICI United States, Inc. has named Thomas J. Kashi as its technical correspondent for the southeast region. He is based at the regional office in Atlantic, Georgia. N. Lee Randolph has been appointed vice president and general manager of the newly established petrochemicals division of ICI Americas. The new unit will handle activities related directly to Corpus Christi Petrochemical Company and future petrochemicals developments. Randolph is based at corporate headquarters near Wilmington, Delaware.

Monsanto Agricultural Products Company has named Bruce S. Buckland, director, products — Avadex and Machete herbicides, Polaris plant growth regulator and parathion insecticide; and G. David Malsbary, director, products — Roundup herbicide.

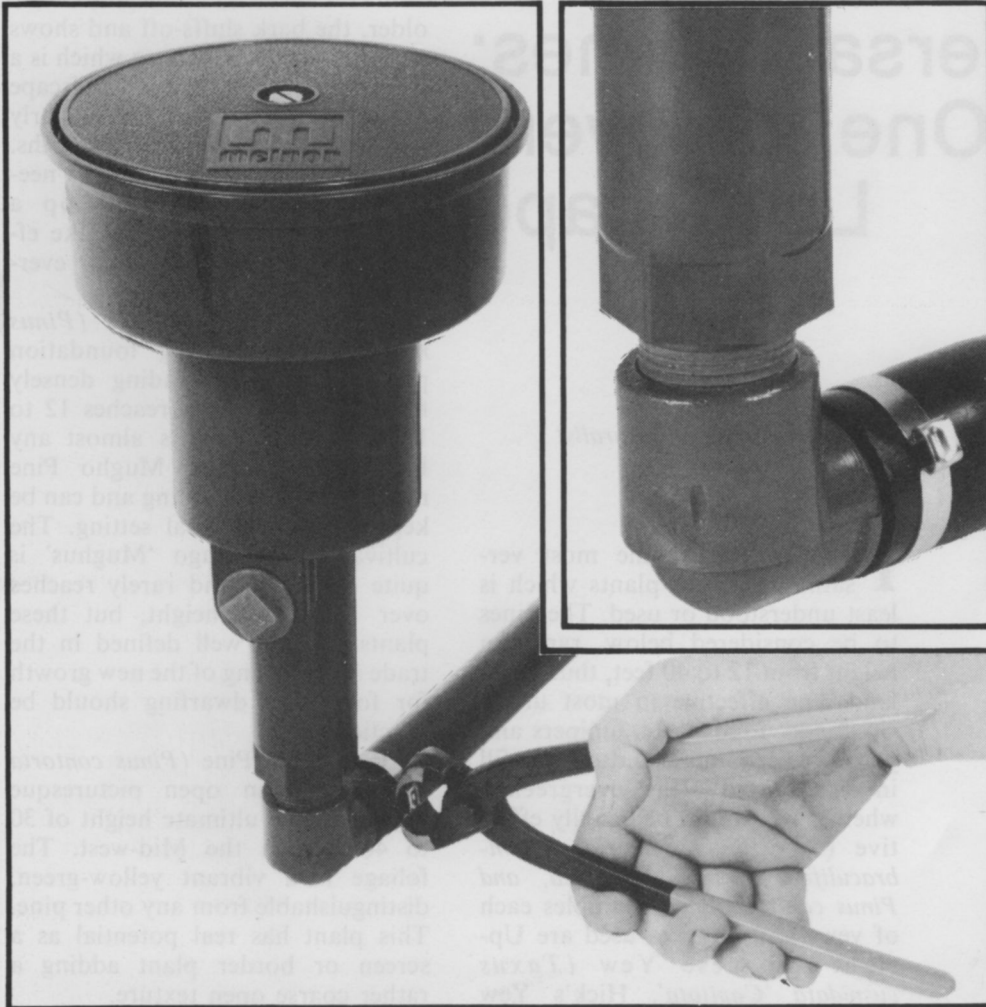
Melnor Industries has appointed Daniel R. Dawson as Western regional sales manager. He will direct the activities of Melnor sales representatives in Texas, California, the Mountain States, and the Pacific Northwest. Dawson will also coordinate all field sales activities with the home office and oversee trade show activities in those areas.

Douglas Dorling, aquatic biologist, has been appointed to the aquatic pest management department of A-1 Services. A-1 has been treating lakes in southwest Washington for algae and weed control for the past four years. Dorling's last position was concerned with salmon growth research for the U.S. Department of Interior.

Dr. Tal DuVall has been named director of the University of Georgia Cooperative Extension Service. He has been assistant Extension director in charge of field operations since July, 1972. In his new position, DuVall will oversee Extension programs in agriculture, home economics, 4-H and community development and will direct a staff of some 500 county Extension agents and 200 subject matter specialists. He holds a masters degree in Extension education and a doctorate in public administration.

OETIKER[®] STAINLESS STEEL CLAMPS

COMPARE OUR PRICES & QUALITY!



OETIKER 1-EAR CLAMPS in 304 stainless steel have already been installed on many irrigation systems.

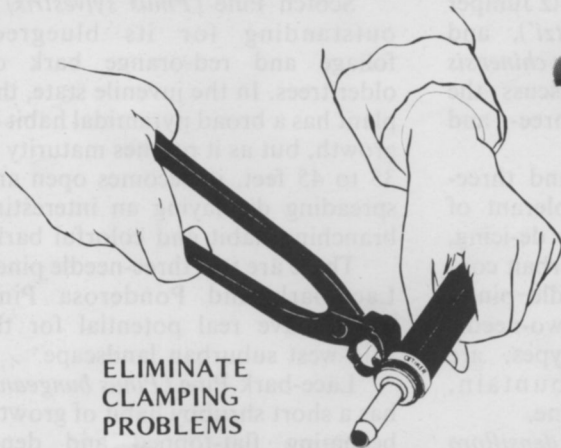
They are economical and are easy to install in the field with a pair of pliers.

Of the sizes listed, the most popular in the underground sprinkler systems industry are:

Part Numbers: 198SS, 210SS, 226SS, 256SS, 271SS, 331SS, 410SS and 620SS.

Our standard pincers, part number 1098, are the most widely used in the field; however, our side jaw pincers, part number 1099, are used where hose is in confined area.

Send for free samples and literature.



ELIMINATE
CLAMPING
PROBLEMS



USA: Oetiker Inc. - Livingston, N.J. 07039 - 71-77 Okner Parkway - USA - Tel. (201) 992-1920 - Telex 138 493
Canada: Oetiker Limited - Downsview - Ontario M3N 1V7 - 4335 Steeles Av. W. - Canada - Tel. (416) 661-7141 - Telex 96 57 14
Austria: Hans Oetiker Maschinen- und Apparatebau Ges.m.b.H. - 3430 Tulln - Königstetterstrasse - Nieder-Oesterreich - Tel. (02272) 2531 - Telex 12 447
France: SARL Oetiker France - 67390 Marckolsheim - 21, rue Clémenceau - B.P. 24 - Frankreich - Tel. (88) 92 53 53 - Telex 890 607
Germany: Hans Oetiker Metallwaren- und Apparatefabrik GmbH - 7833 Endingen a.K. - Usenbergerstrasse 13 - Deutschland - Tel. (07642) 7044 - Telex 77 22 889
Switzerland: Hans Oetiker Metallwaren- und Apparatefabrik - 8810 Horgen - Oberdorfstrasse 21 - Schweiz - Tel. (01) 725 55 55 - Telex 52 361

OETIKER Products sold in most other countries through licensees or distributors — U.S., CANADIAN and foreign patents.

The Versatile Pines: One for Every Landscape

by Douglas J. Chapman
Dow Gardens Horticulturalist
Midland, Michigan

Pinus is one of the most versatile genera of plants which is least understood or used. The pines to be considered below, range in height from 12 to 40 feet, thus being landscape effective in most urban situations. Frequently, junipers and yews are used in the landscape to fill in as "narrow-leaf evergreens" where pines would be equally effective (e.g. *Pinus densiflora* 'Umbraculifera', *Pinus bungeana*, and *Pinus cambra*). Two examples each of yews and junipers used are Upright Japanese Yew (*Taxus cuspidata* 'Capitata', Hick's Yew (*Taxus media* 'Hicksi'), Hetz Juniper (*Juniperus chinensis* 'Hetzzi'), and Keteleer Juniper (*Juniperus chinensis* 'Keteleeri'). We shall discuss the pines grouped as two-, three-, and five-needle pines.

In general the two- and three-needle pines are more tolerant of heavy soil, salt used for de-icing, restricted root sites, and urban conditions than are five-needle pines. The four most important two-needle pines, in the smaller types, are Tanyosho, Swiss Mountain, Lodgepole, and Scotch Pine.

Tanyosho Pine (*Pinus densiflora* 'Umbraculifera') is a large shrub or small tree with dense branching. At maturity it reaches 25 to 35 feet in height with a round or umbrella-shaped crown. As this plant gets

older, the bark sluffs-off and shows a brilliant reddish-orange which is a colorful addition to the landscape year-round, but most particularly welcome during the winter months. As the tree becomes older, the needles and branching develop a somewhat layered or cloud-like effect which is unique among evergreens.

Swiss Mountain Pine (*Pinus mugo*) is an exciting foundation plant. This low-spreading densely foliated plant, which reaches 12 to 18 feet in height, fits almost any landscape situation. Mugho Pine responds well to pruning and can be kept in a low formal setting. The cultivar *Pinus mugo* 'Mughus' is quite spreading and rarely reaches over 10 feet in height, but these plants are not well defined in the trade and pruning of the new growth for form and dwarfing should be practiced.

Lodgepole Pine (*Pinus contorta latifolia*) is an open picturesque plant with an ultimate height of 30 to 40 feet in the Mid-west. The foliage is a vibrant yellow-green, distinguishable from any other pine. This plant has real potential as a screen or border plant adding a rather coarse open texture.

Scotch Pine (*Pinus sylvestris*) is outstanding for its bluegreen foliage and red-orange bark on older trees. In the juvenile state, this plant has a broad pyramidal habit of growth, but as it reaches maturity at 35 to 45 feet, it becomes open and spreading displaying an interesting branching habit and colorful bark.

There are two three-needle pines, Lace-bark and Ponderosa Pine, which have real potential for the Mid-west suburban landscape.

Lace-bark Pine (*Pinus bungeana*) has a short shrubby habit of growth, becoming flat-topped and dense with an ultimate height of 20 to 30 feet. This plant is well adapted to a high water table — well drained — alkaline soils, making it particularly useful on landscapes which are



The Swiss Stone Pine is a five-needle variety useful as a screen or foundation plant for large buildings and homes.

The Bristle-cone pine branches grow in a pendulous manner making it a good specimen plant.



Japanese White Pine (Pinus...
 have a fine dense texture...
 a juvenile period. It has a...
 terminal habit of growth...
 the upper layers, and...
 at maturity. The mature...
 the 10-15 to 20...
 needles are yellowish-green...
 green being smaller than...
 providing an otherwise...
 the texture to the land...
 the small needles and dis...
 ting of branches...
 formation each pine are a...
 tation to Mid-west land...
 more plantations, nursery...
 somewhat recognize...
 as they should become...
 tains in the nursery beds

Versatile Pines

regularly irrigated with "alkaline water." The bark exfoliates exposing patches of red, green, and white providing additional interest to winter landscapes. The plant is dense enough with a unique green foliage, making it an excellent screen or specimen plant.

Ponderosa Pine (*Pinus ponderosa*) ultimately reaches 50 feet in height in the Mid-west. This narrow conical crowned plant becomes quite flat-topped at maturity but is a real addition to coarse textured pines while showing resistance to many of our environmental prob-

The Limber Pine is a broad, tall pine useful in medium to large residential lots.



lems. The cinnamon bark has deep fissures adding to the rugged coarse landscape appearance making it particularly effective in border plantings or as a specimen plant.

Five-needle pines, such as Bristle-cone, Swiss Stone, Limber, and Japanese White Pine, have a fine texture, in general, requiring well-drained soils, not exposed to highway salts.

Bristle-cone Pine (*Pinus aristata*) is a small tree ranging from 12 to 18 feet in height with an irregular picturesque habit of growth. The short bluish-green needles become dotted with a white resin exudate. This small tree is an outstanding specimen or foundation plant. Its short new growth (candles) grows in every direction from quite vertical to extremely pendulous, adding to the unique growth habit of this plant.

Swiss Stone Pine (*Pinus cembra*) has a very dense conical, somewhat formal, habit of growth reaching 30 feet in height. The dark green to bluish-green needles give a medium texture making this plant effective as a specimen, screen, or foundation plant for large buildings and homes. This plant not only grows vigorously in well-drained soils, but seems quite tolerant to many of our somewhat heavy urban soil conditions.

Limber Pine (*Pinus flexilis*) has a broad pyramidal habit of growth when young becoming quite open, reaching 30 to 40 feet at maturity. The glaucous bluish-green needles often are twisted, giving a "fox-tail" appearance. This is an exciting accent or specimen plant which is perfectly hardy and would fit into the medium to large home lot situation.

Japanese White Pine (*Pinus parviflora*) has a fine dense texture during the juvenile period. It has a broad pyramidal habit of growth becoming flat-topped, layered, and picturesque at maturity. The mature height in the Mid-west is 30 to 40 feet. The needles are yellowish-green to pale green being smaller than White Pine providing an otherwise unobtainable texture to the landscape with the small needles and distinct layering of branches.

The above-mentioned pines are a needed addition to Mid-west landscapes. As more plantsmen, nurserymen, and homeowners recognize their value, they should become more available in the nursery trade.

Good things come in small packages.



Whether you purchase seedlings for permanent planting or prefer to grow your own stock for later transplanting, you'll be impressed with our wide variety of fir, pine and spruce seedlings. Northern-grown for hardiness, they've all been personally cared for by the owner to assure that you receive only the very best.

As a businessman, you'll appreciate our dependability almost as much as our reasonable prices.

Write, wire or call us today for complete details and pricing.

CANALE'S NURSERY

Department 08-12
Shelocat (Indiana County), Pennsylvania 15774
412/354-2801

NG-54004A

Directory of 1978 Green Industry Shows

ARBORIST

American Society of Consulting Arborists, 12 Lakeview Ave., Mil-
town, NJ 08850, 201-821-8948. 11th
Annual Meeting, **Feb. 16-18**,
Sarasota Hyatt House, Sarasota,
Fla.

**International Society of Arbori-
culture**, 3 Lincoln Square, Box 71,
Urbana, Il. 61801, 217-328-2032.
Annual Meeting, **Aug. 13-17**,
Sheraton Centre Hotel, Toronto,
Ontario.

National Arborist Association, Inc.,
3537 Stratford Rd., Wantagh, NY
11793, 516-221-3082. NAA Annual
Meeting, **Feb. 19-23**, Sarasota Hyatt
House, Sarasota, Fla.

CEMETERIES

American Cemetery Association, 250
E. Broad Street, Columbus, Ohio,
43212. 614-221-6829. 2nd Inter-

national Conference, **Apr. 25-28**,
Wien Hilton, Vienna, Austria.
ACA/NAC Joint Convention and
Trade Show, **Oct. 11-14**, Hyatt
Regency, Chicago, Ill.

National Association of Cemeteries,
1911 N. Fort Myers Dr., Arlington,
Va., 22209. 703-525-8774.
ACA/NAC Joint Convention and
Trade Show, **Oct. 11-14**, Hyatt
Regency, Chicago, Ill.

FERTILIZER

Fertilizer Institute, 1015 18th St.
NW, Washington, DC 20001, 202-
466-2700. Fertilizer Institute Annual
Meeting, **Feb. 5-7**, Regency Hyatt,
Chicago, Il. FI/TVA Trade Fair,
Aug. 15-17, St. Louis Convention
Center, St. Louis, Mo. World Fer-
tilizer Conference, **Sept. 13-16**, St.
Francis Hotel, San Francisco.

**National Agricultural Chemicals
Association**, 1155 15th St. NW,

Washington, D.C. 20001, 202-296-
1585. Annual Meeting, **Sept. 24-27**,
Greenbriar, White Sulphur Springs,
W. VA.

**National Fertilizer Solutions Asso-
ciations**, 1701 W. Detwiler Dr.,
Peoria, Ill. 61614, 309-691-2870.
23rd Annual Convention &
Chemical/Equipment Exhibition,
Dallas Convention Center, **Nov. 28-
Dec. 1**, Dallas, Texas.

National Limestone Institute, Inc.,
702 H St. NW, Washington, DC
20001, 703-273-8517. Annual
Convention, **Feb. 5-8**, Capitol
Hilton, Washington, D.C.

GOLF COURSE

**American Society of Golf Course
Architects**, 221 N. LaSalle St.,
Chicago, Il., 60601, 312-372-7090.
Annual Meeting, **Feb. 26-Mar. 3**,
Carefree Inn, Phoenix, Az.

TRELAN®

"Whole Tree Chippers"

From brush to full 18 inch trees....

A chipper to fit your needs.



MODEL C-14 (14" Capacity)



MODEL D-60 (18" Capacity)

THE CHIPPER MAKERS

**STRONG
MANUFACTURING
COMPANY**

498 Eight Mile Road
REMUS, MICHIGAN 49340

Phone 517-561-4881
or 517-561-2280




Give your course the 100% Standard Touch.

Whatever you need in the way of quality golf course accessory equipment, you can get from Standard. Because we manufacture and sell the most complete line in the world.

For more information on any of the items listed below, check the appropriate box, fill in your name and address and mail this advertisement to Standard Golf. Or contact your local Standard Distributor.

The Standard Touch makes a difference.





ON THE TEE

-  Standard Tee Consoles
-  Standard Professional Ball Washers
-  Standard Club Washers

ALSO ...

- Standard Tee Benches
- Standard Kooler-Aid
- Standard Litter Caddies
- Standard Tee Markers
- Standard Tee Towels
- Mr. Chain (Plastic Chain)
- Standard Spike Kleener

ON THE GREEN

-  Standard Flags & Poles
-  Standard Personalized Flags
-  Standard Cups
-  Standard Hole Cutters

ALSO ...

- Standard Cup Setters
- Standard Cup Hooks
- Standard Soil Samplers
- Standard Turf Repairers
- Standard Greenskeeper
- Standard Du-Whipper

ON THE FAIRWAY

-  Standard Rakes
-  Standard Porta-Span Bridges
-  Standard Metal Signs
-  Standard Fairway Markers
-  Standard Hazard Markers

ALSO ...

- Standard Direction Arrows
- Standard Special Signs

RUSH ME YOUR NEW FREE 4-COLOR 32-PAGE CATALOG



STANDARD GOLF Pro-Line

NAME _____ TITLE _____

COMPANY _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

Mail to: **Standard Golf Co.**, 220 East 4th Street,
Cedar Falls, Iowa 50613

200+6 Reasons To Attend The 1978 Mid-Am

Bigger and better than ever before, the 1978 Mid-Am will feature an all new look with

200 important exhibitors from across the country.
More than 80,000 square feet of industry-related displays and exhibits featuring everything from tractors to trees; from sod to seeds; from chemicals to containers.

6 Plus top-notch seminars that can directly affect your profits.

Seminars on:

- Tissue Culture Propagation
- Nursery Stock Pricing
- The Future Of Mall Design
- Tree Wound Care
- Co-op Buying
- Utilizing Space Photography

And

The opportunity to hear keynote speaker Dr. Earl Butz, former Secretary of Agriculture.



Plan now to attend and shop the largest "store" of its kind in the midwest.

MID-AM '78
JANUARY 15-18
O'HARE EXPOSITION CENTER
ROSEMONT, ILLINOIS

Avoid standing in line by pre-registering now. For pre-registration forms, call or write:

Mid-Am Trade Show
4902 Tollview Drive
Rolling Meadows, Illinois 60008
312/398-3140

Circle 124 on free information card

Limited exhibit space still available. Call now to reserve yours