ALCA Opens Competition For 1976 Landscaping Awards

The Associated Landscape Contractors of America has opened competition for its Seventh Annual Environment Improvement Awards Program.

Entrants are welcome from all of the landscape industry and may or may not be association members.

Categories for the competition are landscape contracting, landscape maintenance, erosion control and interioscape projects, a new category.

Entries should include a set of working designs or planting plans (maintenance contractors may omit this), a set of color slides showing the development of the project and a written description of the project. Entry fee is \$55 for non-members, \$45 for members and deadline is Nov. 1, 1976.

Entries will be judged by a jury of professionals and journalists who will make recommendations for awards to the Awards Committee. Jim Gibbs of Atlanta is committee chairman. Separate judging will be done for each of seven geographic regions.

For more information write ALCA, 1750 Old Meadow Road, McLean, Va. 22101.

FTGA Plans Conference, Show For Orlando October 10-14

The Florida Turf-Grass Association Management Conference and Show is scheduled for October 10-14 at the Sheraton Towers Hotel in Orlando.

The event, expected to attract about 1,000 people, will feature a "Down to Earth Turf Session" and 27 special speakers. The main address will be Dr. Kenneth Tefertiller's speech "Turf-Florida's Jolly Green Giant" as part of the program theme, "Turf from Surf to Surf."

Over 60 national manufacturers will display equipment and/or products.

For more information, contact Ms. Nona Murphy, executive secretary, 1520 Edgewater Dr., Suite E, Orlando, Fla. 32804.

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NEWS continued

Cherry Aphid Wrecks Season On Trees, Mustard Plants

Season is underway for the black cherry aphid as it feasts upon its favorite food, sweet cherries.

Aphid damage is recognized by the distorted terminal growth on the leaves. This shiny coating is called 'honeydew'.

Black cherry aphids begin life

after overwintering on the tree and hatching as the buds are opening becoming green. By spring and early summer, wingless aphids are developing which will distort the leaves and then take their destruction to watercress, peppergrass and other mustard family plants.

Malathion, guthion, diazinon or parathion are effective in controlling the aphids. When applying them, give careful, thorough coverage of the terminal growth and pay special attention to the minimum days waiting time from last application to harvest.

Calcium Arsenate One Way For Control of Poa Annua

A concern with use of herbicides for control of Poa annua is the injurious effects of the herbicide on desired turfgrasses, according to Dr. A. J. Turgeon of the University of Illinois horticulture department.

"If a preemergence herbicide reduces the spreading growth of a turfgrass, it may not grow into voids even if environmental conditions favor rapid growth," he reported at the Kentucky Turfgrass Conference held last year at Barren River Lake State Resort Park, Lucas, Ken. Proceedings of the conference were published recently.

"Similarly, the application of a postemergence herbicide may not provide satisfactory results if it injures the desired turfgrass too severely," he said.

"Calcium arsenate is a unique herbicide in that it has both preemergence and postemergence activity," he said. Thus, it can reduce the existing stand of annual bluegrass and also preclude new annual bluegrass development from seed germination. However, calcium arsenate application will not result in healthy turf where environmental conditions are unfavorable.

He said research at the University of Illinois has shown complete control of annual bluegrass with calcium arsenate in closely clipped Kentucky bluegrass turf was followed by the development, and eventual dominance, of creeping bentgrass in the turf. Hence, one problem may be replaced by another following herbicide use where the growth requirements of a desired turfgrass are ignored, he said.

Also, where calcium arsenate was applied for several years consecutively to Kentucky bluegrass, earthworm activity was eliminated and substantial thatch developed. The thatched turfs were observed to be more wilt-prone during midsummer stress periods and Helminthosporium disease incidence was severe in spring.

Horticultural Perlite..

The multi-purpose soil conditioner for turf, containers and propagation.

Professional landscapers and grounds maintenance men have long made Horticultural Perlite one of their main 'tricks of the trade'. It's an ideal soil conditioner that



helps promote "a sea of green velvet". You see, by preventing compaction, it keeps the soil loose enabling more oxygen to reach and help nourish the root system. And because Horticultural Perlite also retains three to four times its weight in moisture, it keeps the root network moist long after watering. The result is a beautiful blanket of green growing on a thick healthy, robust rootsystem that not only keeps grass beautiful, but prevents golf courses, institutional and campus

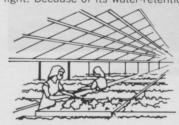
lawns and residential lawns from getting soggy, mushy or soft underfoot.

Nurserymen find Horticultural Perlite practically indispensible for container grown plants and shrubs because of its ability to retain moisture, and to keep the mixture

around the root environment loose. It is also a great "starting mixture" for transplanted stock as it helps reduce the incidences of transplant shock. And because Horticultural Perlite is sterile and non-toxic, it won't rot, decompose, disintegrate or break down. Nor will it help promote insect life. Being light in weight, Horticultural Perlite makes container moving light work and shipping costs a lighter expense. It's not only ideal for your plants - Horticultural Perlite is ideal for your business.



For plant propagation, Horticultural Perlite soil mix is almost as important as sunlight. Because of its water-retention characteristics, this mixture maintains an even



distribution of moisture to stimulate fast root development in cuttings and to speed seed germination. Most important, by keeping the starting mixture loose, Horticultural Perlite permits a freer flow of oxygen to help nurture the new growth. This also makes transplanting easy: without root damage; and without undo shock. Horticultural Perlite is inert matter that can last indefinitely in your seed beds. It is sterile, odorfree and can't promote insects or bugs. It is a

great asset for the new beginnings of plant life.

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That's why John Deere Tractors come in a wide range of sizes. So you can have John Deere performance and dependability going for you on any job.

Take the new John Deere 2040. It has a 40*-hp diesel engine, 8-speed constant-mesh transmission, and plenty of hydraulic power to handle any attachment you might need. Including a 6-foot, center-mounted rotary mower. The 2040 was designed to do the big jobs faster and easier.

For work that doesn't require a tractor as big as the 2040, there's the hydrostatic-drive John Deere 400. It's powered by a twincylinder, 19.9-hp engine. And there's a 5-foot, center-mounted rotary mower that's designed to match the 400.

To do small jobs economically and efficiently, John Deere offers you the 200 Series lawn and garden tractors. You can choose from 8-, 10-, 12-, and 14-hp models, all with variable-speed drive to change ground speed without stopping or shifting gears. Rotary mowers are available in either 38- or 46-inch widths.

With any size John Deere Tractor, you also get the John Deere tradition of expert service, parts availability and flexible financing.

For any job that comes along —big, small or in-between —John Deere has a way to do it. Profitably.

*Maximum PTO horsepower measured at 2,500 engine rpm (factory observed).

NOTHING RUNS LIKE A DEERE



Circle 132 on free information card

Products

Jacobsen has introduced a new front reel trimming mower with automatic drive. It has an 8 h.p. aircooled Kohler engine, automatic hydrostatic drive and various safety features such as neutral starting, interlocks for power take off and drive train, recommended shielding, and separate service and parking brakes. It is also built to American National Standards Institute standards — the only U.S. made mower so designed today.

Circle 801 on free information card

Double check valve assemblies are available from Rain Bird. Made of all bronze construction with stainless steel internal parts and modu-



lar design, the assemblies fit easily into the water system and prevent reverse flow in water lines as well as stopping polluted water entering the potable water supply.

Circle 802 on free information card

Three new slide sprayer models by Root-Lowell Corporation find use for plant and livestock care. They



maintain pressure of up to 180 pounds and have different nozzles to reach over 25 feet. Each are all brass and corrosion resistant.

Circle 803 on free information card

Horizontal tanks in 50 to 500 gallons are marketed by Debson Incorporated. Their fully ribbed construction, low-melt index polyethylene



and translucence make for a convenient, sturdy product while a 10 inch top opening gives easy entry to the tank interior.

Circle 804 on free information card

Vermeer Manufacturing Company has introduced another stump cutter in their tree equipment line. It has a 65 h.p. Wisconsin air-cooled engine and weighs 2900 pounds. Special



features are its all hydraulic control panel, safety shields and ability to cut out stumps 24 inches below ground level and up to 72 inches wide without repositioning.

Circle 805 on free information card

Problems with algae and weeds on lakes, ponds and streams are dealt with in the 64 page book, "How to Identify and Control Water Weeds and Algae." With full color photos and U.S. maps, the book identifies and studies the algae problem while

offering many solutions and formulas.

Circle 806 on free information card

Lawn Boy is marketing a limited edition "Liberty Machine" mower in keeping with the nation's Bicentennial. Created in a familiar simple motif, the mower has an electric starting, solid-state ignition and is self-propelled.

Circle 807 on free information card

A turf sprayer-trailer is available for the Bean 100 gallon high or low pressure sprayer manufactured by FMC Corporation. Towed by small



turf tractors, it has a 15 foot boom and mounts in the back of utility vehicles.

Circle 808 on free information card

Fox Valley Marketing Systems, Inc. has created an easy marker which adjusts to arm length easily and sprays upside down. Guaranteed not to clog, the product comes in five fluorescent colors and white, blue, yellow and aluminum. It is packaged in 12-13 oz. cans per case.

Circle 809 on free information card

A semi automatic sharpening device and sprocket tip guide bars are now added as standard equipment to saws made by the McCulloch Corporation. Called Auto Sharp, the device gives maximum cutting efficiency as a single knob starting the grinding wheel and the sharpening motion. These are features of the Mini Mac 35 saw.

Circle 810 on free information card



Si linb

Truly a professional piece of groundskeeping equipment, the HUSTLER mows areas where handmowers have been necessary. The HUSTLER becomes an extension of the operator, allowing one man and one machine to complete complicated mowing tasks that can take a variety of machines and two or three men.

Groundskeepers, contractors and superinten dents use the HUSTLER because of its proven dependability and productivity which saves them time and manpower dollars.

WHY DUAL HYDROS?

The HUSTLER has total maneuverability because of its unique design of two hydrostatic transmissions which operate independently. The dual hydros allow the operator to back up and turn the machine with a twist of the wrist. Dual hydros allow one wheel to move forward while the other reverses so that the mower mows square corners and doesn't miss the edges, getting around tough spots like park benches, around tree trunks and between fence posts.

72-INCH DECK

The feature of the unobscured 18" offset deck allows the operator to reach under guard rails and bushes, and to do difficult moving jobs with maximum efficiency.

The 72-inch mower deck can mow up to four acres per hour. The hydraulic lift simplifies changing attachments, blade servicing and raising of mowing deck to clear curbs.

easier include:

- Interlocking ingnition
 Parking brake
 - Headlights for night mowing
 - Adjustable suspension seat

ALWAYS IN SEASON WITH HUSTLER ATTACHMENTS

You can work the HUSTLER tractor year-round with attachments that include ROPS cab, snow thrower, rotary broom, dozer blade for earth and snow, edger and a flail mower. Transporting the HUSTLER

is easy with a tilt deck, easy load trailer. Save money by putting one piece of equipment to work for several. Check out the truly professional grounds maintenance machine with TOTAL MAN-EUVERABILITY— the HUSTLER 272A.

	more info on the HUSTLER 272A t Inc., Box 727, Hesston, KS 67062.
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Address	
City	Acres a week house about
State	Zip
Phone (
Company	
Type of operation	



Excel Industries, Inc.

Box 727/Hesston, Kansas 67062 316/327-4911

Its active ingredient is 29.1 percent paraquat dichloride (1,1-dimethyl 4,4-bipyridinium dichloride).

Elanco, Indianapolis, Ind., manufactures several turf herbicides. Balfin can control smooth and hairy crabgrass, annual bluegrass, goosegrass (silver crabgrass or crowsfoot), watergrass and yellow and green foxtail.

Balan granular can control *Poa annua* smooth and hair crabgrass, watergrass (barnyardgrass) and yellow and green foxtail. It works on established perennial bluegrasses, perennial bluegrasses, perennial ryegrass, centipedegrass, fescue, zoysiagrass, Bermudagrass, St. Augustine grass and bahiagrass.

Its active ingredient, 2.5 percent, is N-butyl-N-ethyl-aaa-

trifluoro-2, 6-dinitro-p-toluidine.

Surflan can control barnyardgrass, crabgrass, foxtails, goosegrass, johnsongrass (from seed), fall panicum, brachiaria (signalgrass), crowfootgrass, wild oat, common chickweed, common purslane, carpetweed, Florida pursalne, lambsquarters and pigweed.

Its active ingredient is 75 percent oryzalin (3,5-dinitro-N4,N4-

dipropylsulfanilamide).

Spike can control bedstraw, Poa annua, burclover, downy bromegrass, ripgut bromegrass, smooth bromegrass, smallflower buttercup, wild carrot, cheat, chickweed, red clover, cocklebur, Virginia creeper, crowfootgrass, curley dock, dogfennel, fescue, rattail fescue, filaree, redstem filaree, annual fleabane, foxtail, goldenrod, gumweed, henbit. Japanese honeysuckle, horseweed, knapweed, kochia, lambsquarters, black medic, morning glory, common mullein, silverlead nightshade, wild oat, Texas panicum, Virginia pepperweed, pigweed, buckhorn plantain, puncturevine, giant ragweed, Italian ryegrass, annual sedge, shepherd's purse, annual sowthistle, spikeweed, spurge, spotted spurge, yellow starthistle, telegraphplant, Russian thistle, trumpetcreeper, velvetgrass, vetch, witchgrass, foxtail barley, carpetweed, chicory, common cinquefoil, white sweet clover, poison ivy, field sandbur, swamp smartweed, perennial sowthistle, prostrate spurge, barnyardgrass, crabgrass, itchgrass, johnsongrass, (seddling), lovegrass, orchardgrass, poorjoe, common purslane, common ragweed, Bermudagrass, cudweed, dalligrass, Venus lookingglass and vasey grass.

Its active ingredient is 80 percent 1-(5-tert-butyl-1,3-4-thiadizol-2-yl)-1, 3-dimethylurea.

Amchem, Ambler, Pa., offers a wide range of turf herbicides, Amitrol can control muhlenbergia, bentgrass, Bermudagrass, tall fescue, quackgrass and orchardgrass.

Its active ingredient is 1 percent amitrole (3-amino-1, 2, 4-traizole).

Amitrol-T can control poison oak, poison ivy, quackgrass, tall

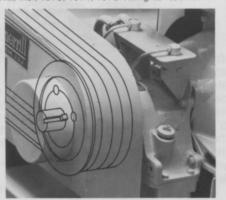


Applying engineering designs which "Sound Conditioned"* our industrial scrap reduction machinery, Mitts & Merrill can modify our brush chippers for low noise levels. At the same time, those engineering features which have made Mitts & Merrill the leader for years have been retained.

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Staggered knife pattern, for years a Mitts & Merrill feature, has always resulted in a lower noise level. First, by segmenting the noise source. Second, through smoother cutting action. Third, by producing smaller chips.



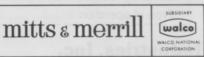
Optional torque converters and the heaviest steel cylinder — even without an external flywheel — combine to give positive cutting action under the most rugged conditions. Isolates the engine from shock. Minimizes maintenance.

Plus

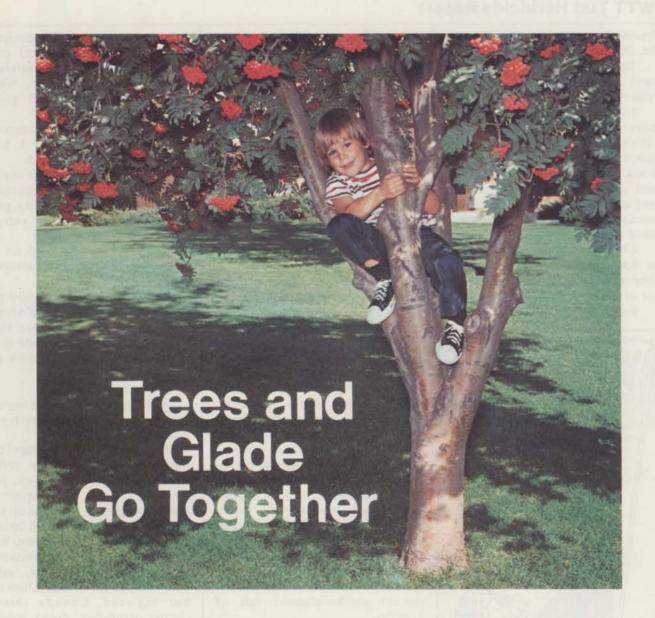
• Positive safety-lock pin for greater operator safety

• Swing-away, folding feed chute
protects cutting chamber; allows instant access and increases maneuverability

• Heavy
duty construction includes coil spring, torsion-type suspension, and box tubular steel frame.



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A new natural team, Glade Kentucky bluegrass and trees! Glade performs well in moderate shade, especially when mixed with fine fescues. A selection from Rutgers University (tested as P-29), Glade is an improved, low-growing, medium to dark green grass with fine leaf texture and thick, rapid-growing rhizome and root system. Glade has good resistance to important turfgrass diseases including powdery mildew.

Like boys and trees, Glade and shade go together. Mixed with other elite bluegrasses and fine fescues in moderate shade, Glade is a natural.

Get new Glade at local wholesale seed distributors.

KENTUCKY BLUEGRASS

U. S. Plant Patent 3151

Another fine product of Jacklin Seed Company

WTT Turf Herbicide Report

fescue, Bermudagrass, Canada thistle, milkweed and horsetail rush.

Its active ingredient is 21 percent amitrole (3-amino-1, 2, 4triazole).

Nu-Lawn weeder is designed to control mustards, pennycress, smartweed, henbit, knawel, lambs-quarters, pepperweed, pigweed, ragweed, shepherd's purse, wild radish and yellow rocket. It will not control established perennial broadleaf weeds such as Canada thistle, bindweed or horsetail rush.

Chemically, its active ingredient is 8.4 percent bromoxynil (3,5-dibromo-4-hydroxybenzontrile) ester of octanoic acid.
Super D weedone works to consumption with NITROFORM and savel

W.I.N. with Nitroform nitrogen . . . and savel In lower cost per pound of W.I.N.

Kerr-McGee Bags It

Circle 120 on free information card

HERCULES Wilmington, Delaware 19899

trol buckhorn plantain, bull thistle, burdock, buttercup, butter print, Canada thistle, chickweed, chicory, clovers, cinquefoil, cocklebur, dandelion, docks, Frenchweed, galinsoga, ground ivy, hawkweed, heal-all, henbit, jewel weed, jimson weed, knotweed, lambsquarters, mallow, morning glory, mustard, oxalis, pennywort, peppergrass, pigweed, plantain, poverty weed, purslane, ragweed, sheep sorrel, smartweed, sow thistle, speedwell, vervains, wild aster, wild carrot, wild garlic, wild lettuce, wild onion, wild radish, and yarrow.

Its active ingredients are 20.1 percent diethanol amine salt of 2,4-dichlorophenoxyacetic acid, and 1.9 percent diethanol amine salt of dicamba.

Super D Weedone contains banvel D and controls broadleaf plantain, cinquefoil, clovers, common chickweed, docks, dandelion, ground ivy, heal-all, henbit, knotweed, (young or mature), mouse-ear chickweed, mustards, narrow-leaved (buckhorn) plantain, oxalis, pennywort, purslane, ragweed, sheep sorrel, speedwell, spotted spurge, thistles, wild carrot, wild garlic, morning glory, wild onion and varrow.

Active ingredients are 1.33 percent diethanolamine salt of 2, 4dichlorophenoxyacetic acid and .44 percent diethanolamine salt of dicamba.

It is not designed for use on lippia, dichondra, St. Augustine, carpetgrass or bentgrass lawns unless damage can be tolerated.

Weedone preemergence crabgrass control is marketed to control common chickweed, fall panicum, green foxtail, hairy (large) crabgrass, lambsquarters, purslane, smooth (small) crabgrass, witchgrass, yellow foxtail and goosegrass.

At 5.7 percent, its active angredient is dimethylester of 2, 3, 5, 6-tetrachloroterephthalic acid.

Weedone 2, 4, 5 TP can control common chickweed, mouse-ear chickweed, henbit, ground ivy, prostrate (spotted) spurge, yarrow, clover and black medic.

It should not be used on St. Augustine, carpet and centipede lawns.

The active ingredient is 60.3 percent butoxyethanol ester of silvex.

Weedone LV-4 can control bindweed, thistle, smartweed, wild buckwheat, wild garlic, curled dock and wild onion.

It may injure wheat.

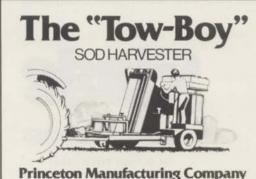
At 64 percent, its active ingredient is 2, 4-dichlorophenoxtacetic acid, butoxyethanol ester.

Emulsamine E-3 can control bull thistle, burdock, cocklebur, coffeeweed, Frenchweed, galinsoga, jimsonweed, kochia, lambsquarters, morning glory, wild mustard, peppergrass, pigweed, wild lettuce, wild radish, common ragweed, Russian thistle, common sowthistle, velvetleaf, alkali mallow, aster, bindweed, blue lettuce, blueweed, bur ragweed, Canada thistle, chicory, dandelion, docks, goldenrod, nettles, orange hawkweed, plantains, poverty weed, ragweed, sowthistle, stinging nettles, toad flax, wild garlic and wild onion.

Do not apply it to St. Augustine, bentgrasses, dichondra or clover.

Its chemically active ingredients are 50.7 percent dodecyl amine salts of 2,4-dichlorophenoxyacetic acid and 12.7 percent tetradecyl amine salts of 2,4-dichlorophenoxyacetic acid.

3-D Weedone can control chickweeds, cinquefoil, clovers, dandelions, ground ivy, hawkweek, healall, henbit, knotweed, morning glory (annual) oxalis, plantains (broad, narrow), pennywort, purslane, sheep sorrel, speedwell (annual), spotted spurge, wild garlic, wild



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- Burns up pollutants which grow algae permitting fish life to flourish.
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onion, yarrow, bindweeds, buttercups, burdock, chicory, cockleburs, docks, galinsoga, jewelweed, jimsonweed, knawel, lambsquarter, mallow, peppergrass, pigweed, poverty weed, mint, mustard, ragweed, smartweed, thistles, vervains, vetch, wild aster, wild carrot, wild daisy, wild geranium, wild lettuce and wild radish.

It should not be used on lippia or dichondra lawns and may injure bentgrass, St. Augustine grass, centipede grass, carpetgrass and newly seeded lawns.

Active ingredients are 17.3 percent butoxyethanol ester of 2,4-dichlorophenoxyacetic acid, 8.2 percent butoxyethanol ester of 2,4,5-dichlorophenoxypropionic acid, and 1.5 percent dicambra (2-methoxy-3, 6-dichlorobenzoic acid).

Weedone chickweed killer can control common and mouse-ear chickweed henbit, clover, yarrow and prostrate (spotted) spurge.

St. Augustine, centipede, carpetgrass and lawn grass substitutes such as dicondra and lippia are sensitive to this product and should be tested before application is made to an entire lawn.

Its active ingredient is 12.8 percent butoxyethanol ester of silvex.

Weedone crabgrass killer can control crabgrass. It should not be used on St. Augustine grass.

Chemically, its active ingredient is 10.3 percent calcium acid methanearsonate.

Weedone crabgrass killer granular can control crabgrass.

Its active ingredient is 2.5 percent disodium methlarsonate-hexahydrate.

Weedone granular lawn weed killer can control dandelion, plantain, chickweed, spotted spurge, and clover.

The chemically active ingredients are 2.67 percent 2,4-dichlorophenoxyacetic acid and 1.33 percent silvex (2-(2, 4, 5-trichlorophenoxy) propionic acid.

Velsicol, Chicago, Ill., manufactures several turf herbicides. Banvel 2,4-D can control dandelion, plantains, curly dock, chickweeds (common mouse-ear and perennial or stitchwort), dog fennel,

knotweed, sheep sorrel, clover, knawel, chicory, henbit, ragweed, pigweed, burdock, poison oak, poison ivy, ground ivy (creeping charlie), wild garlic, wild onion, English daisy, spurge, purslane, pepperweed, lawn burweed, hawkweed, spurry and carpetweed.

It is not designed for use on dichondra, St. Augustine grass or centipede grass or where desirable bent grasses or clover exist.

Its active ingredients are 18.4 percent dimethylamine salt of dicamba, 3.2 percent 3, 6-dichloro-o-anisic acid, 3.2 percent dimethylamine of related acids, and 36.8 percent, dimethylamine salt of 2,4-dichlorophenoxyacetic acid.

2,4-D amine can control bitterwintercress, box elder, buckhorn, bull thistle, bullrush, burdock, bur ragweed, buttercup, Canada thistle, catnip, chickweed, chicory, cocklebur, coffee bean, creeping Jenny, curly indigo, elderberry, goldenrod, ground ivy, hemp, hoary cress, honeysuckle, indigo, ironweed, jimsonweed, lambsquarters, nutgrass, pennywort, pigweed, plantain, poison ivy, pokeweed, povertyweed, puncture vine, purslane, rush, Russian thistle, sagebrush, shepherd's purse, sow thistle, stinkweed. sumac, sunflower, Virginia creeper, wild garlic, wild lettuce, wild radish, willow, witchweed, arrowhead, artichoke, bindweed (hedge, field and European), locoweed, Mexican weed, morning glory and mustard.

Weedar 64 can control beggarticks, bull thistle, burdock, cockle, cocklebur, coffee weed, fleabane (daisy), Frenchweed, galinsoga, goatsbeard, jimsonweed, · kochia, artichoke, aster, Austrian fieldcress, bindweed, blue lettuce, Canada thistle, catnip, chicory, dandelion, docks, dogbane, knotweed, lambsquarters, wild lettuce, mallow, marsh elder, morning glory, mustard, parsnip, peppergrass, pigweed, prickly lettuce, primrose, goldenrod, ground ivy, heal-all, hoary cress, horse tail, iron weed, loco weed, nettles, orange hawkweed, plantains, poverty weed, wild radish, common ragweed, Russian thistle, smartweed, common sow-

Continues on page 42