

# GREEN INDUSTRY NEWS

EQUIPMENT

## Shipments of equipment to decline

The average forecast of 21 companies who responded to an industry outlook survey by the Outdoor Power Equipment Institute is for an overall 5 percent decline in selected industry shipments for the 1980 model year, which began Sept. 1, 1979.

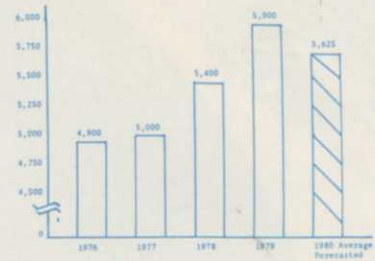
With the exception of rotary tiller shipments, which are expected to remain about the same, the projections indicate a decline in shipments of walk-behind mowers, lawn tractors/riding mowers, and garden tractors.

Shipments of walk-behind power mowers are projected at 5.6 million units, a 5 percent decline from 1979's estimated 5.9 million units. Lawn

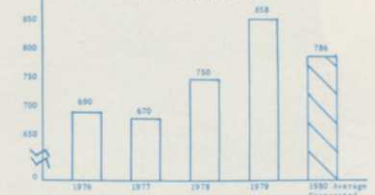
tractors/riding mowers are expected to decline by 12 percent to an estimated 786,000 units, while a 10 percent decline to 228,000 units is seen for garden tractors. Rotary tiller shipments are expected to increase slightly from 1979's estimated 571,300 units to 572,500 units in 1980.

The major economic indicators relevant to the lawn and garden industry support these projections. The consumer price index should increase 10 percent in 1980 while the gross national product (in 1972 dollars) should increase a mere 1.9 percent. Housing starts should be 1.5 million, the unemployment rate at 7 percent, and producer prices for finished goods at 10.5 percent.

Walk-Behind Mowers  
In Thousands



Lawn Tractors  
In Thousands



Data from Outdoor Power Equipment Institute.

FORESTRY

## Congress approves urban forestry program

Congress has passed the Urban Forestry Assistance Program, which is appropriated for approximately \$3.6 million for fiscal year 1980.

The bill is subject to annual appropriations and keeps urban forestry with about the same funds it received in 1978, when the Cooperative Forestry Act of 1978 was passed.

The Senate Appropriation Act had originally scheduled zero dollars for urban forestry, but the House had passed the same amount as in 1979, says Richard Greffenius, a forester at the Forest Service. When it went to conference committee, the Senate resolved its differences and agreed with the House appropriation.

The President, in an attempt to cut his budget, had also not recommended money for urban forestry. All of the interested parties, including the American Forestry Association, the International Society of

Arboriculture, and the National Association of State Foresters, contacted congressmen who serve on the committee that has jurisdiction, committee staff people, and whoever else was involved.

Money for the program has risen slightly from the 3.5 million in 1978 to slightly more than \$3.6 million for fiscal year 1980, but some of this will be taken out for a travel reduction. The Cooperative Forestry Assistance Act has a section that requires state forestry agencies to get at least what they received in 1978. The state foresters, themselves, agree they would like to get an even share of increases or decreases, says Greffenius.

Approximately 90 percent of the appropriated money goes to state forestry agencies. They can use it within their agencies or subgrant it to cities, towns, organizations, or individuals who qualify for it as long as they spend it toward the purpose of the act.

ACQUISITION

## American Garden to merge with Amfac

American Garden Products, Boston, MA, has agreed to merge with Amfac, headquartered in Honolulu, subject to approval by American Garden's stockholders.

Amfac, a New York Stock Exchange company, is involved in a diversity of activities which includes the production and marketing of horticultural products. American Garden's Board of Directors determined that Amfac's strong ties to production, wholesale distribution, and retail merchandising would be helpful to American Garden's operation.

TURF

## Study shows effects of cold on bermudagrass

A study done by two agronomists at Virginia Polytechnic Institute in

# LANDSCAPE

## CONTRACTOR NEWS

### Californians plan first landscape show

The first annual Landscape Industry Show ever produced by the California Landscape Contractors Association has been scheduled for April 3-4 at the Long Beach Convention Center.

The show will feature the latest in equipment and plant materials for landscape and irrigation contractors, landscape maintenance contractors, nurserymen, landscape architects, and anyone else connected with or interested in the landscape industry.

The event will also contain exhibits on business methods, machinery, and products to help the industry cope with the rapid growth and expansion it has experienced in recent years.

### ALCA will lobby at construction conference

The Associated Landscape Contractors of America, co-sponsors of the 1980 Construction Industry National Legislative Conference, hope to influence the Federal government on a number of important issues at the three-day meeting.

The program, which will be held at the Sheraton Washington Hotel, Washington, D.C., on March 16-18, includes workshops on equal employment opportunity, collective bargaining, pension law, labor legislation, multi-employer certification, and the role of the Federal government in aiding small business. Senators, Representatives, and high-ranking officials of the executive agencies will speak.

"Our overall intent is lobbying," says John Shaw, executive director of ALCA. "We hope to influence the governmental environment in which landscape contractors operate, and secondarily, make members more aware of the governmental environment they work in and more aware of what influence they can have on it."

Blacksburg, VA, indicates that below-freezing temperatures and prolonged dormancy may hinder the survival of bermudagrass. The laboratory tests also showed that short deacclimation periods before freezing may lessen winter injury in the field.

D.R. Chalmers and R.E. Schmidt investigated the effects of deacclimation, freezing temperatures, and duration of dormancy after exposure to freezing temperature on 'Tifgreen' bermudagrass. They deacclimated the grass from zero to eight days at 27/13 degrees C. (day/night), subjected rhizomes and stolons to temperatures of +2 to -6 degrees C. for 24 hours, and kept one-third of the samples in dark storage for 0, 45, and 90 days at about 2.7 degrees C.

Prolonging dormancy after exposure to low temperatures reduced the viability of both stolon and rhizome node buds. This suggests that continuation of the dormant condition on into spring could be an important contributing factor

to the decrease in winter survival of both bermudagrass rhizome and stolon buds.

### SALES

#### Toro reports quarter of \$101.6 million sales

The Toro Co. has announced record first quarter sales for the period ending Oct. 31, 1979. Its earnings of \$101,596,000 are an increase of 52.8 percent over the same quarter last year.

Toro Chairman David T. McLaughlin said a 59.6 percent increase in sales of snow removal equipment was a major factor in the quarter. Sales of snow removal equipment in the first quarter accounted for 64 percent of total sales, consumer lawn equipment for 18 percent of the total, professional turf equipment for 9 percent, and irrigation equipment for 8 percent.

### HERBICIDES

#### Devrinol labeled for ornamentals, liners

Devrinol, a surface-applied herbicide, has been federally registered for weed control in ornamentals, field-grown nursery stock, liner stock, ground covers, and dichondra.

The Stauffer Chemical Co. product has been labeled to control eight annual grasses, including barnyardgrass, bristly fox-tail, and large crabgrass, as well as 12 annual broadleaf weeds, including common purslane, lambs-quarter, and redroot pigweed.

It can be applied as a broadcast treatment over young nursery stock or as a directed spray to larger stock either as a band or broadcast application, and is recommended on several different container potting soil mixtures. Application can be made any time of the year to weed-free soil.

### WEEDS

#### National program hits weeds from every angle

The multidisciplinary National Research Program is designed to develop weed control technology that will reduce the losses weeds cause and the cost of their control.

The research is organized into 122 projects at 45 locations and is conducted by 64 scientists in cooperation with several Federal agencies, State Agricultural Experiment Stations, private universities, and industrial research organizations.

During the decade 1977 to 1986, the technology from this program is expected to produce total net benefits that include:

1. Reduction in the crop losses caused by weeds from 10 percent to seven percent resulting in an annual savings in production valued at \$2 billion.

2. Reduction of 10 percent in the current cost of weed control resulting in a net annual savings of about \$620 million.

3. Improvement in the quality of crops by one percent resulting in a net increase crop value of \$600 million per year.

4. An increase of four percent in crop production efficiency valued at an estimated \$2 billion each year.

5. Reduction of 4 to 8 billion gallons per year in diesel fuel re-



# GOVERNMENT UPDATE

## Law orders labeling of service containers

Regulations have been adopted in California to require that service labels include the identity of the person responsible for the containers, the identity of the pesticide byproduct or common name and concentration, and the signal word which describes the toxicity of the pesticide.

Regulations for all service containers, those other than the original labeled containers that are used to hold, store, or transport pesticides or pesticide dilutions. In addition, the regulations require that a copy of the registered label be present at each mixing and application site where service containers are used.

In the case of spills or other contamination, the labels will permit prompt identification of the pesticide involved so that appropriate action can be taken to protect public health.

## Tax credit program helps hiring unskilled

Mike Jones, owner of a professional landscaping and grounds maintenance company in Tacoma, WA, will be receiving tax credits for hiring employees who might not be able to find full-time work or have a chance to learn a valuable skill.

Jones has hired disabled people, ex-felons, and those without proven abilities for years in his Grow It Green business. The Employment Security Department in Washington State will now be giving him and other private employers tax credit for training and providing opportunities for people who need jobs and want to work.

The credit can mean a tax savings totaling as much as 50 percent of wages up to \$6,000 for each eligible employee in the first year of employment. In the second year, the tax credits amount to 25 percent of that amount.

According to Dr. Eugene Wiegman, commissioner of Employment Security, the Targeted Jobs Tax Credit paperwork is straightforward in application. An eligible worker is given a voucher informing potential employers that he or she is a member of a "targeted group." When the person is hired, the voucher is endorsed by the employer and returned to the Employment Security Department. There are no other obligations or restrictions. Employers receive the tax credit directly through the Internal Revenue Service.

Targeted Jobs Tax Credit is a national program available in all states. Information on the Targeted Jobs Tax Credit is available from your state Employment Security Department or the local office of the Internal Revenue Service.

## Strip miner group wins in land restoration suit

A federal judge in Abingdon, VA, has ruled that strip miners don't have to rebuild mountains after they remove coal from them.

In the early January ruling, Judge Glen Williams also declared unconstitutional portions of the U.S. Surface Mining Control and Reclamation Act that let the government halt mining and assess penalties without a hearing and that allowed anyone complaining the land was unsuitable for mining to stop the operation.

The Virginia Surface Mining and Reclamation Association filed the suit in 1978, claiming the federal government had overstepped its bounds.

Executive Director of the Virginia association, B.V. Cooper, said the ruling overturned three important parts of the 1977 federal law. The major gripe of strip miners was the provision that strip-mined land had to be restored to original contours. In many cases, that meant rebuilding mountains, Cooper said.

The federal government—the suit was filed against the Secretary of the Interior—is expected to appeal.

quirements by achieving optimum tillage for weed control in crop production. This would amount to an annual savings of \$1.6 billion.

## PARKS

### Girl Scout cookie sales will build a forest

In the San Francisco Bay area, Girl Scouts are helping the park system when they sell cookies in the annual January-March sale this year.

The 1980 sale will fund a new forest of native California trees in the East Bay Regional Parks, the 40-parkland system stretching along the eastern side of San Francisco Bay.

The hope for this first year is for 150 new trees, each to be planted in the name of a Girl Scout who ranks among the top sellers, according to Linda L. Chew, director of development and public information for the East Bay Regional Park District.

The forestry project is being conducted in all five Bay counties — Alameda and Contra Costa, home of the Regional Parks, and across the Bay in Marin, San Francisco, and San Mateo counties.

## HORTICULTURE

### Research changes view on succulent growth

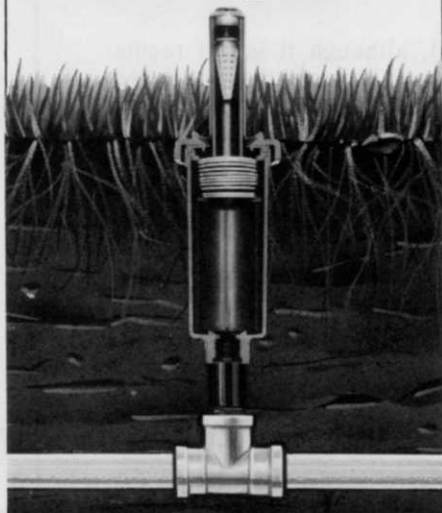
Cacti and other succulents grow better when watered and fertilized more frequently than generally done, say researchers at Cornell University.

Their findings run contrary to the popular belief that these plants do best in a desert-like environment. Good light is essential, but it does not have to be as intense as that found in the deserts, nor is it necessary to keep the temperature high at night. In fact, succulents do well at cool temperatures ranging from 50 to 60 degrees F. at night.

Since production may now be possible anywhere in the northern United States and in Canada, more exotic varieties of succulents may become available to consumers. Home gardeners can also benefit from the findings because they can grow them easily at home and can provide better care.

*Continues on page 66*

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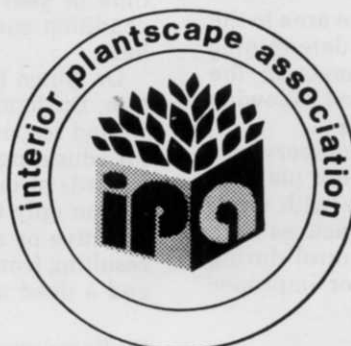
Circle 146 on free information card

## INTERIOR

### New association gets organized

The Interior Plantscape Association, formed last spring, is picking up momentum with membership of more than 150. IPA President Harry Belin says an interior plantscape show is being arranged for September in Dallas, TX, and that a operations manual is being developed with the idea of certification in the next year or two.

IPA attracted 400 interior plantscape specialists to its first meeting in Atlanta when it was only 250 days old. Association director Carol Felix keeps daily tabs on IPA affairs from its Reston, VA office.



The group publishes a newsletter each month.

There are four membership categories; active, allied trade, allied associate, and sustaining. Dues ranges from \$50 to \$150 per year. Persons interested should contact IPA, Suite 14, 1601 Washington Plaza, Reston, VA 22090.

## PESTICIDES

### Specialist lists guides for handling pesticides

Pesticides and other chemicals, which are used extensively in the Green Industry, can be dangerous if not handled or applied properly. According to extension specialist Glenn H. Hetzel, a variety of pesticide handling guidelines should be followed, including:

- Everyone involved in applying organophosphorus pesticides should exercise extra care and should get a cholinesterase blood test before the work season to establish their baseline. Then, if poisoning symptoms occur, further blood tests will show changes in cholinesterase, which could indicate poisoning from

organophosphorus materials.

- All pesticides should be stored separately from other supplies, materials, tools, or normal work areas. The storage area should be cool, dry, and locked whenever unattended. If possible, the storage area should be a separate building of fireproof construction and should be vented to the outside. Further, signs should be posted to indicate that dangerous materials are stored there.

- Pesticide training should include the symptoms of pesticide poisoning. Proper protective equipment and clothing should be provided and required for anyone handling pesticides. Those mixing and applying pesticides need more protection than those who move the material into or out of storage. Always follow the instructions on the label and note the toxicity level when making decisions on what precautions are needed for a specific pesticide.

- When mixing pesticides, the use of splashproof goggles, gloves, and apron are mandatory. When mixing organophosphates and other highly toxic pesticides, a full face shield, clothing to cover arms, and the proper respirator are necessary. Since pesticides are absorbed through the skin, as well as inhaled, every precaution should be taken.

- Special care should be exercised when applying pesticides. Herbicides are probably less dangerous to the applicator because large droplet size and lower pressures are normally used. However, insecticides are usually more likely to be applied with higher pressures and smaller droplet sizes. This leads to a greater likelihood of spray material blowing or drifting. Consequently, the operator must check wind conditions, as well as the proximity of other humans and animals. Highly toxic pesticides should not be used on windy days and usually not immediately before a rain because drift and runoff could cause disastrous effects. If fine mists are being created, full protective clothing and equipment should be used. Boots and leg protection are necessary for all ground applications.

- No pesticide should be applied until the application equipment has been calibrated. Any change in operating pressure, nozzle size, forward speed, height of boom, concentration of the pesticide, or mix ration will require recalibration of the equipment. Excessive amounts of pesticides could cause harm to

Continues on page 68

animals, humans, or plants. Careful selection and use of pesticides must be the standard operating procedure.

- All people working with pesticides should develop the following habits: 1.) Never smoke or handle any food before washing hands. 2.) Do not place food near pesticides or in areas where pesticides are stored or mixed. 3.) Follow the 3-30 rule when mixing pesticides. That is, rinse the pesticide container three times and allow it to drain 30 seconds between rinses. 4.) Change clothes daily and do not wear any clothes that have been exposed to pesticides until they have been laundered. Contaminated clothing should be handled and washed separately from other clothing.

- Equipment used for mixing or applying pesticides should be thoroughly washed and decontaminated after use or before repairs are made. This is especially true when applying toxic substances. Mechanics or service people should be warned about the need for practicing

good hygiene when making repairs or adjustments to chemical applicators.

**GOLF**

**Carol McCue receives Herb Graffis Award**

Carol McCue, associate executive director of the Chicago District Golf Association, shared the spotlight with the gentleman for whom the honor was named in November when she received the 1979 Herb Graffis Award.

The appearance of the National Golf Foundation's co-founder and one of the world's greatest golf writers and humorists thrilled Ms. McCue as well as 275 others who attended the awards banquet.

Ms. McCue, in her own words, has done for the CDGA "just about everything" in the office, starting tournaments, writing releases and correspondence, and working with Chicago District Golf Charities and people who design courses."

Graffis had recently lost his wife Dorothy, when she died October 6 in Fort Meyers Beach, FL, at the age of 86. They had been married 62 years.

**MARKETING**

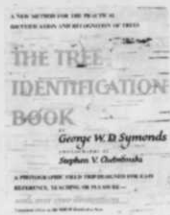
**NMC advertising will increase sales**

According to results of final consumer research tests conducted by the Nursery Marketing Council, the nursery industry can expect NMC radio advertising to generate at least \$195 million in new purchases of living plants, related products, and services over a three-month advertising period. This is based on a 5 percent increase over current sales.

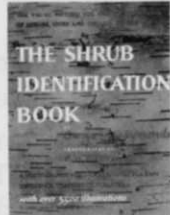
This news comes following completion of the intensive two-year study by NMC to determine how much advertising will be required to break through all other messages to consumers, capture their attention, and most importantly, move them to

*Continues on page 71*

# Technical & Instructional Books



**Tree Identification**  
by George W. D. Symonds  
A pictorial key to trees with more than 1,500 illustrations. With this book you can identify trees by looking at leaves, buds, branching, fruit and bark.  
Paperback—\$8.00



**Shrub Identification**  
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Same as The Tree Identification Book on shrubs. Contains more than 3,500 illustrations from which to make identification.  
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Paperback—\$8.00



**Gardening Encyclopedia**  
by Donald Wyman  
This revised, updated edition includes information on gardening practices, plants, methods of cultivation, fertilizers, and pesticides. 1,200 plus pages with 10,000 articles, 200 drawings, 170 photos.  
\$25.00



**Home Landscape**  
by Garrett Eckbo  
Provides designs examples, and current innovations and refinements to older traditional designs. Covers all aspects of residential landscape design.  
\$16.00



**Ornamental Conifers**  
by Charles R. Harrison  
More than 550 photos with plant descriptions and complete notes on their cultivation in both hemispheres.  
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**Exotic Plant Manual**  
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action. Test marketing showed that an expenditure of \$40,000 a day (about \$2,750,000 for the three-month period) would achieve that desired result in a campaign covering both the U.S. and Canadian market.

The NMC advertising plan will begin this spring, according to NMC Steering Committee Chairman Richard Hutton. Advertising will be focused on Saturdays from late April through May to maximize its effect for all growing zones.

**EXPANSION**

**OMC Lincoln adds large warehouse**

OMC Lincoln is building a 102,000-square foot parts warehouse at its manufacturing complex in Lincoln, NE, announced Herbert A. Jespersen, div. manager, vice president Outboard Marine Corp.

Jespersen said that with the addition of the warehouse, all in-process parts storage will be consolidated under one roof. The new facility will incorporate a multi-level, rack-storage system that will expand the firm's present parts warehousing capacity.

The new warehouse will streamline production of products coming on line this year, such as the company's new 72-inch Front Line mower and Mini-Miser electric personnel carrier.

**TECHNOLOGY**

**Nuclear chemistry explains nitrogen loss**

Researchers at Michigan State University are using techniques of nuclear chemistry to study the loss of nitrogen applied to soils with the aim of trying to reduce it and thereby make fertilizer use more efficient. About 25 percent of the nitrogen given to soils escapes as gaseous nitrogen or nitrous oxidetrous oxide.

According to Jim Tiedje, professor of crop and soil sciences and microbiology at MSU, less is known about denitrification, the process by which nitrogen is lost to the soil, and a competing process, which conserves nitrogen in a form plants can use, than is known about many other basic biological processes. The tool that has made it possible for Tiedje and his co-workers to begin to unravel these processes is a radioactive


isotope of nitrogen produced in the MSU cyclotron.

Michigan State is one of only a handful of institutions in the world using nitrogen-13 for research and one of only two universities in the nation producing the isotope for agricultural studies. Nitrogen-13 is the key to finding out what happens to nitrogen applied to the soil because it makes it possible to trace small amounts of nitrogen as it is transformed by soil microorganisms.

"In our studies of denitrification, use of the radioisotope nitrogen-13 is particularly important," Tiedje says, "because the product, nitrogen gas, must be detected in our atmosphere, which is 80 percent nitrogen. This can be done only if we have nitrogen-13 as a tracer."

Experiments with nitrogen-13 nitrate applied to soil can reveal how much of the nitrogen escapes as free nitrogen or nitrous oxide and what conditions promote or retard this loss.

*Continues on page 72*



*Announcing a course in the*  
**CONTROL OF WEEDS  
 AND ORNAMENTAL  
 INSECTS AND DISEASES**  
**MARCH 13 & 14, 1980**  
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The purpose of this course is to offer training in the recognition, biology and control of outdoor pests including the fundamentals of weed identification and control. In addition to providing basic training, the course is designed to cover subject areas specified by EPA for the certification of commercial applicators. Topics include:

- Laws, regulations, labeling and pesticides
- Insects and insect control
- Plant disease and their control
- Weeds and weed control

Instructors are  
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HERBICIDES

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- Used as directed Banvel will not harm trees, ornamentals or turf—it just eliminates weeds.
- No season restrictions. Lay down Banvel from early spring to late fall—all through the growing season.
- Rain will not affect Banvel. It keeps on working because it translocates—penetrates leaves and is absorbed through roots to attack every part of the weed.
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- Mixes readily with hard or soft water.
- Easily stored through winter months without losing potency.

**Banvel herbicides—products for professional turf men**



# Velsicol

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## “Oak becoming a necessity for survival”

There is probably no other tree as useful for shade and a multitude of other needs as the oak, says Charles W. Dunn, executive vice president, Florida Nurserymen and Growers Association.

The live oak (*Quercus virginiana*) has the greatest endurance. It survives disease and insects, wounds from cars, roots cut from water line repairs, and a variety of soils. Live oaks produce strong and massive branches that can withstand even the severest of hurricanes. Many are over two or three hundred years of age.

The massive spread of the live oak can cut energy bills during the summer. Cool breezes beneath its canopy are almost as good as air conditioning. Leaves are shed during late winter to permit warm sunshine on the house. The leaves are excellent for mulching azaleas and other acid loving plants.

### SEED

#### Northrup King names Churchill to manage

Northrup King Co., Minneapolis, MN, has appointed Joe Churchill as assistant manager, Professional Turf Products Div.

In his new position, Churchill will be responsible for supply management of Northrup King turf mixtures and improved grass seed varieties. Prior to this position, Churchill worked at Northrup King's research center in Eden Prairie, MN.

### FLOWERS

#### Zinnia ranks at top of flowering annual list

According to the amount of seed sold, zinnia, marigold, petunia, nasturtium, alyssum, aster, morning glory, portulaca, snapdragon, and sweet pea rate as the most popular flowering annuals.

Zinnia, a plant native to Mexico and Central America, is one of the most easily grown annuals for seeding directly into the garden. This, along with the wide range of colors, flower forms, and plant sizes and strong resistance to pests, makes zinnias so popular.

Marigold seeds may also be successfully planted directly into the garden. However, for earlier bloom, plants should be purchased or seeds started indoors. Color of marigolds is limited to yellow and orange shades but many plant forms and sizes are available.

Petunias, which come from Argentina, have extremely small seeds and should be started indoors or purchased as started plants. They are best suited to sunny locations in well-drained soil and have few pests.