

# Flowers

by Bruce Cowan

As you approach the Rod McLellan Company from San Juan Road near Watsonville, you may be startled by the acres of slaty sea-blue all around you—row upon row of waves poised but unmoving. This is no ocean, but a plantation of silver mountain gum (*Eucalyptus pulverulenta*), whose foliage goes into dried or fresh flower arrangements nationwide. Preserved by soaking in glycerin and water for a week or two, the rounded leaves retain their shape and color indefinitely.

Eucalyptus leaves are not the main interest of the Rod McLellan Company; most of their 105 greenhouses produce beautiful and exotic orchids. Among the most diverse and wide-spread plants in the world, orchids occur on every continent, even Antarctica. At least 15,000 species grow naturally.

It requires infinite patience to produce a new variety. The flowers have to be cross-pollinated by hand and the tiny seedlings must be nurtured and grown for as long as seven years before the first blossom appears. Only then is it known if the new variety is worth perpetuating.

Desirable orchids can be propagated by division, a slow process. In a new technique called "meristem propagation"—growing new plants from tiny, actively growing tissues of the parent plant—genetically identical plants or clones can be produced by the thousands. Still, years are required for the nearly microscopic meristem cell clusters to grow into plants large enough to bloom.

The popular orchids, the *Cattleyas*, have very large clusters of blossoms in magenta, lavender or white. Natural epiphytes which occur in the wild in the branches of tropical trees, *Cattleyas* are cultivated in pots in a medium of bark chips. They need humidity and plenty of moisture, and a temperature above 55° F.

One problem facing commercial orchid growers is the necessity of having plants bloom in time for special holidays, parti-

photography by Robert J. Western  
and Owena Fogarty

Monterey Life

12/80

cularly Christmas, Easter and Mother's Day. Since Easter comes on a different date each year, getting flowers to cooperate requires exacting knowledge of their biology. *Cattleyas* can be either winter or summer bloomers. In the tropics, where temperature fluctuations are slight, the plants depend on the seasonal change in the day's length—photoperiod—to initiate blossoming. In the greenhouse the plants can be "fooled" into blooming at any time of year by manipulating the photoperiod artificially. To get normal winter bloomers to bloom in summer, lights are turned off and the plants are shielded by black plastic for a few hours each day for about six weeks before the flowers are needed. Summer blooming types of *Cattleyas* can be stimulated to bloom in winter by turning on lights a few extra hours.

A good time to see orchids blooming is the first week of December, when Rod McLellan Company has open house for visitors.

A really hardy orchid is the *Cymbidium*, which can tolerate temperatures as low as 28° F. and can grow either in pots or in the ground. You can tell you're in a *Cymbidium* greenhouse by the noticeably cooler temperature. Besides being useful for cut flowers, *Cymbidiums* make good garden plants for cool coastal areas such as Pebble Beach, requiring mainly shade and just enough moisture to keep from drying out. They thrive on neglect.

When orchids are cut for shipment, the stems are inserted into a vial of water, which fits right into a special package and will remain with the flower until it reaches the consumer. Harvesting, preparing and packaging orchids is a labor-intensive activity,

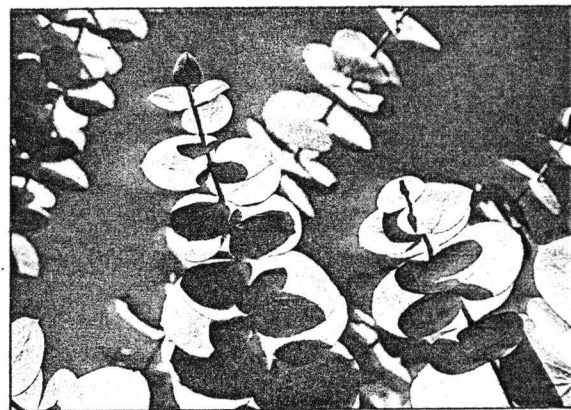
as is the shipping of gardenias. These fragrant blossoms must have the petals opened individually by hand; then each flower is inserted into a collar of gardenia leaves which is stapled to a cardboard disc. They are then packaged in groups of 3, 6, 12, or 24. Gardenias and other flowers are kept refrigerated and are shipped air freight or by refrigerated truck.

Red roses are always popular, and getting them to bloom on time is not as tricky as it is with orchids. Since it takes about six weeks for roses to bloom again after each cutting, full production can be obtained for Christmas by cutting all earlier flowers and buds six weeks before shipping time. Valentine's day comes about six weeks after Christmas, followed by Easter about six weeks later, and in another six weeks is Mother's Day. Roses are very obliging to the cut flower industry.

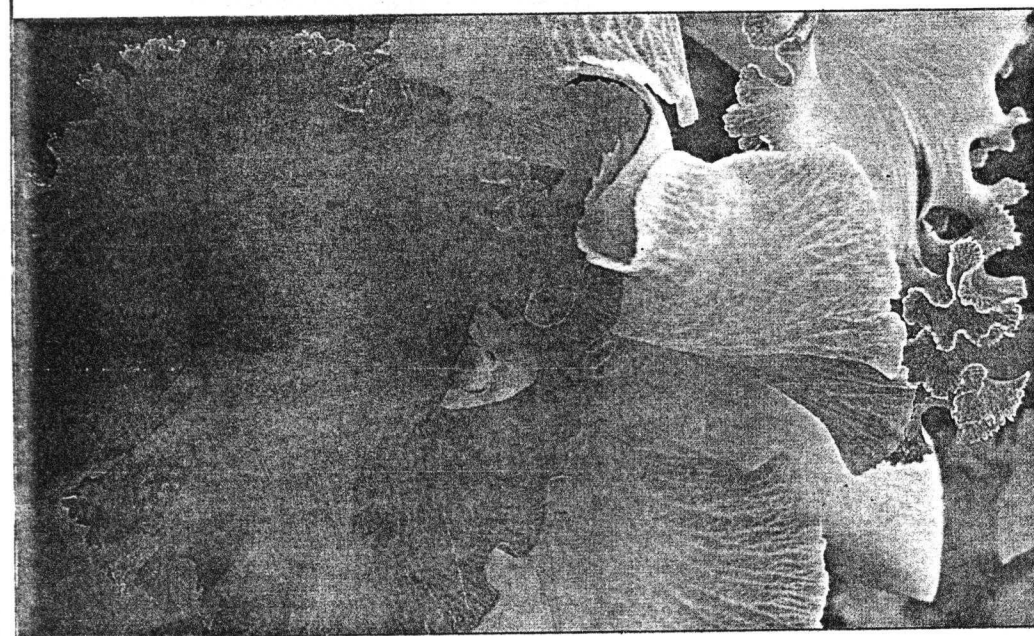
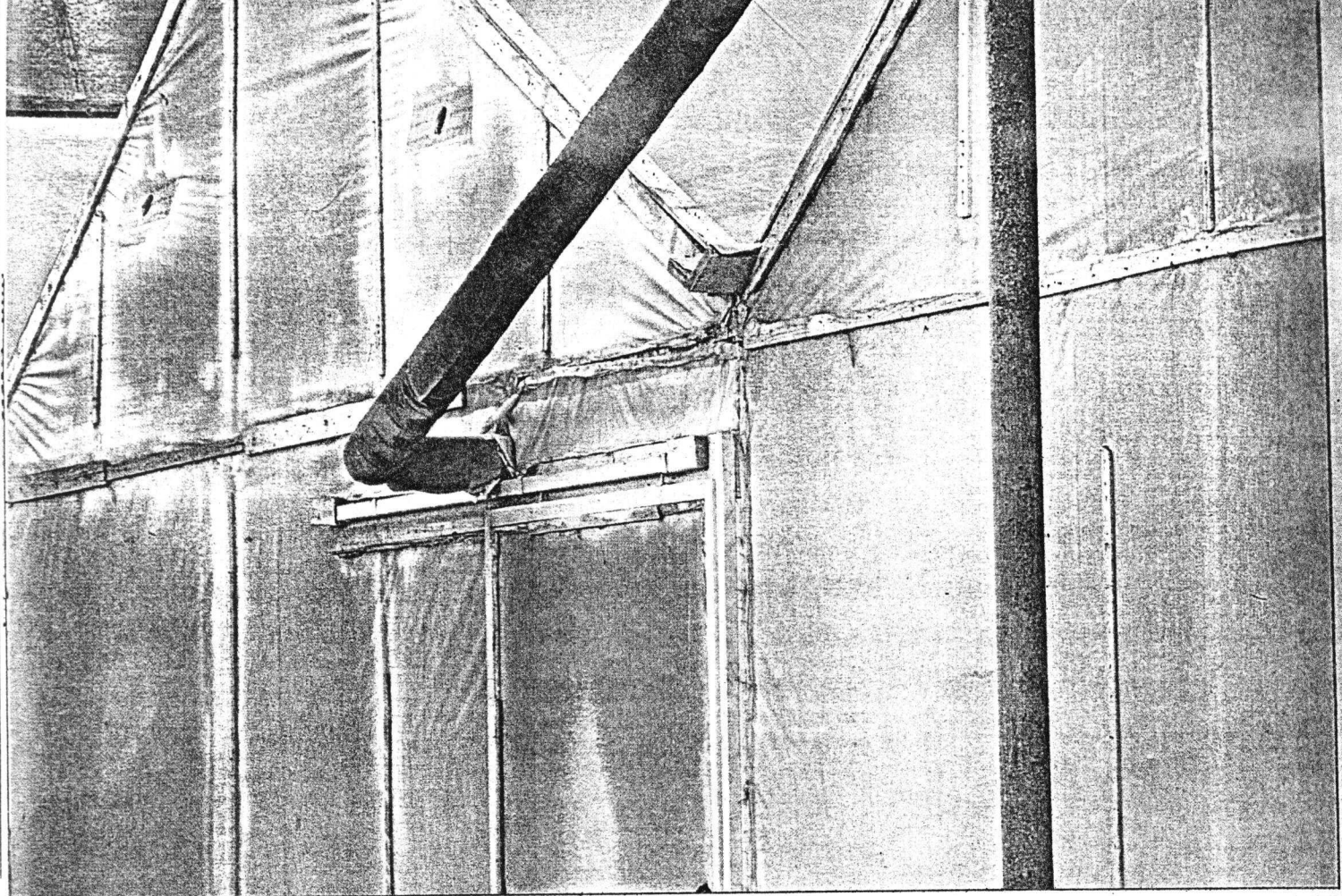
Some other factors are not so obliging. Airline strikes have a notorious habit of occurring just prior to holiday seasons. A devastating event to the flower grower, many a perfect rose originally destined to decorate a dining room table somewhere on the East Coast may well end up on a compost heap in California.

Though the majority of cut flowers are shipped to the East, the industry has moved west. Sunbay, Inc., a miniature carnation grower in Watsonville now functioning primarily as a flower shipper for other small growers, began in New England but moved to California 15 years ago because of California's more favorable climate. The rising cost of energy is one of the biggest problems facing growers today, and the cost of heating greenhouses through a New England winter can be tremendous.

During the past 20 years the Watsonville-Salinas area has become the main cut flower growing area of the United States, says Harry Fukutome, a carnation grower in Watsonville. Fukutome, with 180,000 square feet of greenhouse space on four





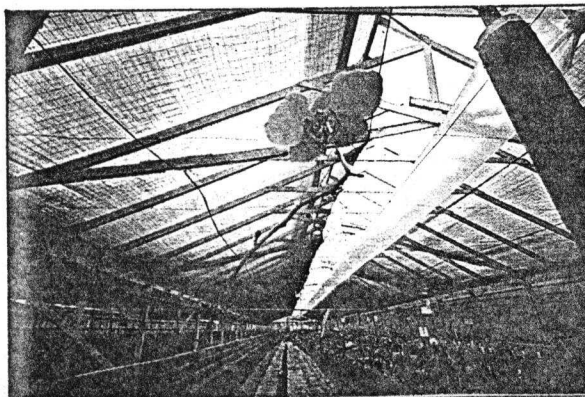


acres, calls himself a medium-sized grower. The smallest wholesale grower he knows has about half as much, while a large grower may have an operation five times as big. Large growers may employ as many as 100 to 150 people.

In 1979 the cut flower industry in Santa Cruz and Monterey counties grossed \$39,483,000 on 654 acres. Monterey County led by 16% in total gross income. In both counties combined, the industry increased 5% in acreage from 1978 to 1979, with a 17% increase in gross income. Carnations led in production and income, followed by roses and chrysanthemums.

In some respects the cut flower industry has fewer problems than other types of agriculture. Since cut flowers are a relatively clean crop grown under aseptic conditions, they have fewer pests and diseases than other crops.

According to Charles Barr, Jr., President of Sunbay, Inc., also President of the Santa Cruz County Farm Bureau, growers in the area are financing research to come up with a broader range of non-chemical control. One method coming into use is a blue light with an electric grid, useful for killing moths and other flying insects attracted to



the light. Greenhouses that are not sprayed chemically are good areas to test control by insect predators such as ladybird beetles because the predators will not fly away.

As with other agriculture in this area, a large percentage, probably 75%, of the labor force is Mexican-American. Another 15% is Japanese. A small percentage are trainees from many foreign countries, sponsored for a one-year work/training program by the California Farm Bureau Federation, which provides the trainees with travel pay and a living allowance. The trainee program is funded by growers who pay dues and in turn are provided with trainees. Growers wishing to retain a trainee must provide living quarters. The program, designed to establish good relations between countries, has been in existence for 20 years. Trainees gain valuable experience they are later able to apply in their own countries.

Most regular employees are residents of the communities in which they work, for unlike many other types of agriculture, the cut flower industry offers year round employment. There are many jobs available to women. Sometimes whole families work together.

Though largely non-union, many growers in the industry are now providing fringe benefits including vacation, hospitalization insurance and pensions. As a whole the cut flower industry has not encountered the intense and sometimes violent labor/employer/union confrontations experienced in other phases of agriculture. However, pressure from the unions is growing. Charles Barr says that part of the problem may be because the nursery business as a whole has slipped from the highest paid to the lowest paid employment in agriculture since 1965. Even so, benefits such as steady employment attract enough people so that there is no shortage of labor. Harry Fukutome has no problem acquiring and retaining sufficient help except when, on occasion, a bountiful lettuce harvest in the Salinas Valley suddenly leaves him nearly alone in his greenhouses.

Asked how the future of the industry appears, Fukutome shook his head uncertainly. High energy and labor costs, plus competition from other parts of the world, particularly South America, Israel and Mexico, cast lengthening shadows. Half the carnations sold in the United States now come from Colombia, South America, where labor is cheap and the climate so ideal they can be field-grown.

But for the time being, the cut flower industry is doing just fine in central California—in fact, business is blooming.