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Above—Indianapolis White and Masterpiece.

# BALL Mums

## Carnations for 1948

Geo. J. Ball, Inc., West Chicago, Ill.

# 1948 Novelties

## CONSTELLATION

Yellow Decorative—Matures November 5

The two outstanding features of this variety are its uniformity in response to black cloth shading and its dependability as a high producer of quality flowers. Constellation has consistently yielded as high as the most productive of the commercial varieties. With the use of light and shade we recommend this variety for flowering from May 5 to November 15.

## SENECA

Orange Bronze Decorative—Matures November 1

The earliest bronze pompon in the cloth house shading program. It holds its color well. It is a better producer than Navaho. It is the most reliable bronze pompon for early shading.

## TALLY-HO

Yellow Intermediate Pompon—Matures November 15

A quality pompon. It is very similar in many respects to the variety Princeton and complements this variety in being a clear yellow and well-rounded hard pompon.

## YELLOW QUEEN

Yellow Sport of Orchid Queen—Matures November 10

Highly recommended for natural flowering and delayed flowering into Thanksgiving season by the use of artificial light.

## SPELLBOUND

Lavender Pink Decorative—Matures September 25

A striking 3 inch decorative that combines the beauty and grace of Lavender Lady with the durability and substance of Jean Treadway. Spellbound captivates the eye with its gloss and finish derived from Burgundy. The plant is a solid, compact bush attaining a height of 24 inches. The characteristic, uniformly planed flower development contributes to a wonderfully showy mass effect that cannot fail to greatly enhance the early fall garden. The habit of growth is equally ideal for pot plant culture.



Tally-Ho.

## SERENITY

White Daisy—Matures September 25

The major requirements of a good garden chrysanthemum are early, showy, flowers borne on rigid compact, bushy plants. A degree of resistance to frost winter kill, insects and diseases is equally desirable. Serenity combines all of these qualities plus a uniformity of growth and flowering seldom exceeded by an outdoor chrysanthemum. It is a beautiful creamy white, heavily petalled daisy that opens rapidly to a real show of literally hundreds of blooms.

As a pot plant, it resembles the bushy, compactness of Judith Anderson and Pomponette. The shapely plant, because of its strength and rigidity makes a beautiful border or low hedge.

## HONEYCOMB

Yellow Pompon—Matures September 25

A small perfectly formed pompon of intense golden yellow. The flowers are born on well formed sprays, nearly ideal for cut flowers of medium 18-22" stems.

Honeycomb is a marked advance over the widely grown and well known Early Yellow and Pomponette in that the habit of growth is more vigorous and productive, the flowering season is equally early and the quality and color of the flower is such as to closely rival many greenhouse grown counterparts.

Honeycomb will shape up to a fine pot plant or add a distinctive note of formality and rich color to the fall garden scene.

Prices, Rooted Cuttings on all above 7 items \$80.00 per 1000



## Our Mum Cuttings for '48

Thru shading and lighting, Mums are and will continue to increase in value. Also, we must improve their vitality. To this end we must not only take better care of our young stock, but encourage the hybridists to grow seedlings. They not only improve the flowers, but new varieties or seedlings increase that all important vigor and vitality. In other words, new varieties put life into the Mum business. We feel that better and more care of propagating stock must be practiced if quality and resistance are to be improved or maintained.

The cause and control of the crippling new infection known as "Stunt" is not yet definitely known; with our leading pathologists studying it, control measures will be found. (Turn to our December GROWER TALKS, page 1, and to page 8 this catalog for details.) Meantime, as producers and suppliers of rooted Mum cuttings, we have arranged to furnish them (in good faith, but without guarantee) from plants that have shown no trace of stunt or any other infection. But, to do so it will be necessary to draw on supplies from various sources. This will involve some delays and some substitutions might be necessary, too.

You can depend on us to do our utmost, sparing no cost, to maintain our position in the world of Chrysanthemums. All shipments will start about April 1st.

### New Varieties — To Us

The following varieties are quite extensively grown in one or more of the larger Mum markets of the country but have either never been offered before by us or have been dropped. There are some very excellent varieties in this list—both for shading and otherwise. All these varieties appear in our general list that follows:

#### YELLOW CHIEF and WHITE CHIEF

Both sports of Pink Chief. Very good for early shading. Mature October 15 naturally. Price \$42.50 per 1000.

#### RAYONNANTE

A pink spider variety maturing November 5. Price \$45.00 per 1000.

#### DISTINCTION

An old timer listed as a standard Thanksgiving Pink Mum in our first cutting catalog in 1935. Price \$42.50 per 1000.

#### BRISTOLITE and YELLOW BRISTOLITE

Large button Pompons for Thanksgiving. Bristolite has been a standard orange bronze for at least 10 years and the Yellow is a sport. Price \$50.00 per 1000.

#### BRONZE DOT

This sport of the original Pink Dot is very excellent for early shading. Grown in large quantities by Rowe of Kirkwood, Mo. Price \$40.00 per 1000.

#### NOVEMBER BRONZE

A large orange bronze button Pompon, maturing for Thanksgiving. Price \$50.00 per 1000.

#### WHITE USONA

A pure white sport of the original pink Usona. Good producer; sometimes preferred to Cordova for a white Pomp for Thanksgiving and later. Price \$60.00 per 1000.



Illini Gold.

#### ILLINI GOLD

A fine button Pompon (1 1/4 inches in diameter) introduced by the University of Illinois. Deep, rich golden yellow. Flowers normally Nov. 10. Price \$50.00 per 1000.



BETTER MUMS

Geo. J. Ball  
INC.

FOR FLORISTS



Green Mill Gardens at Addison, Ill., one of the largest quality pot plant growers in the Chicago area, shade a 36 x 150 ft. house in 4 to 5 minutes. Shade cloth is drawn over a net-work of over-head wires, covering all beds at one time. Variety shown is Bonnaffon Deluxe. Rooted cuttings to 2 1/4's 6/1; 4 plants in a 6" pot (Mr. Bergholt says 3 would have been better) 7/15; shaded 8/15—9/15.

# Growing Better Mums

By Vic Ball

## FIRST, ON PROPAGATION

Soon as the flowering season is over, select your stock using only vigorous clean plants. You can count on about ten cuttings from each stock plant; more or less on certain varieties. Plant them to good clean soil in a cool airy house, and preferably on a raised bench. You'll get the strongest cuttings if they are kept at 45 degrees and on the dry side. A house kept at 50 or higher, close, muggy, poorly ventilated, will surely turn out spindly soft cuttings. Where winters are not too severe, a heated cold frame would do well. Keep a sharp eye out for insects here. It's a lot easier to control them, particularly midge, now than later.

In late winter, they may be run up to 50 degrees and given more water. In propagating, take cuttings 3 to 4 inches long and leave most or all of the foliage on. Some prefer to remove lower leaves and trim the uppers. It has been clearly shown that, if some shade is provided from bright sun, the untrimmed cuttings will root faster and

better. Be sure to use sterilized sand—kept at 60 to 65 degrees thru some bottom heat.

We should add a word on the recently advocated method of rooting cuttings right in soil. The unrooted cutting is usually potted to a soil made light with sand—and low in plant foods. The plan is being used successfully by a few large specialists who keep a close eye on the cuttings. For the average smaller grower, particularly when benching cuttings directly, it would be of questionable value.

## FOR THOSE WHO BUY

For those growers who have switched over to buying in rooted cuttings from the specialist: First, if cuttings are wilted at all upon arrival, dip them in cold water and let them stand a few hours before planting. It will stiffen them up. If they are lightly frozen upon arrival they can ordinarily be revived by thawing them very gradually. Keep them just above freezing for half a day, then warm up gradually.



Some growers order cuttings for delivery as early as January, planning to use the plants for propagating in the spring. The plan is OK but you *must* keep such cuttings under additional light until mid-March. Failure to do so will usually result in the plants going to worthless buds—and yielding no cuttings. Use 60 watt bulbs with reflectors at 6 ft. intervals 3 ft. above plants. Up to February 15 light from 12:00 midnight to 4 A.M. February 15 to March 15 light from midnight to 2:30 A.M.

### BENCHING DATES

Successful Mum crops may be benched anywhere from late April to September. Benching may be delayed by carrying the cuttings along in plant bands—or even planting out to the field till the space is clear for them. This careful fitting of crops together into a tight rotation cuts waste space and makes greenhouses pay.

You may bench rooted cuttings June 15 for mid-season varieties flowered at their normal dates. This date may be extended in proportion for late season sorts. Mums to be black cloth shaded must be benched in early May—at least six weeks growth is needed before shading is started. If your bench is not clear in time for the above schedule, plant the cuttings off into 2½ inch plant bands or pots. If, a month or six weeks later, the space is still not ready, you can run them out to the field. We carried a house of late Mums and Poms outdoors in this way this season until August 26. They suffered almost no check when benched in spite of their size—because the soil ball in the bands cushioned the root shock of replanting.

The critically important point in all this is: *don't let them get hardened in pots or bands.* That's one sure way to ruin a crop, increase its susceptibility to disease, etc. If the plants have obviously filled the bands, by all means plant them out in the field (band and all) where they may continue an unchecked growth. Keep them watered. Better still, where your space plans permit, bench rooted cuttings directly where they are to flower. You'll be surprised at the rapid growth, especially if kept wet enough. Furthermore, you save the cost of the intermediate handlings. And they can't get pot bound!

### A GOOD MUM SOIL

No certain "type" soil is needed for Mums. A good garden soil—one that does good Carnations or Peas—will be fine. The really important points:

1. It must be sterilized, either with steam or hot water. To the extent of our trials, no chemicals can be relied upon for control of soil borne diseases and weeds. Propagating specialists go to great expense to supply cuttings cultured against verticillium and carefully kept clean of

foliar nematode, septoria leaf spot, etc. Why not go a step farther and use sterilized soil? Often the savings in weeding (at today's labor costs) will pay your sterilizing costs. Use sterilized soil (180 degrees for 30 minutes) in potting or banding. We have yet to see the first lot of Mums hit by verticillium, or any disease, where clean cuttings were used and soil sterilizing was carried out. It pays.

2. It must not contain excess plant food—or any salts. Every year we get a soil sample or two from a grower complaining of Mums that "won't grow." Tests show great excesses of nitrogen, and other salts. The usual story: The grower had a very hard water supply, built up an accumulation of hard water salts in his soil thru long years of watering. As these salts began to throttle growth, he turned to Vigoro, which of course only aggravated the trouble.

If in doubt, have soil tests made. If excess salts are very severe, better change soil. If not too bad, water the soil very heavily daily to wash the harmful material out. Working chopped straw into the soil will help. Steaming soil, by the way, especially in summer, may temporarily aggravate the high nitrate problem.

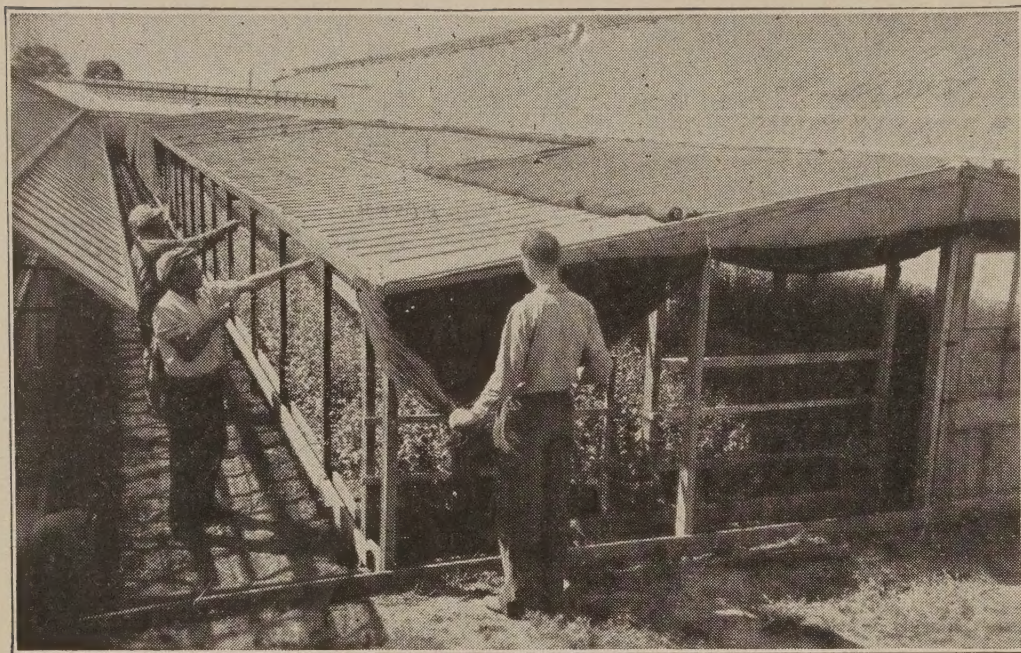
3. It should have organic matter. A wheelbarrow of manure per 100 sq. ft. is good. Peat moss if available locally and cheap seems to be much to the Chrysanthemum's liking. Some growers "top dress" with it after benching—a mulch, really. Organic matter helps keep moisture uniform, acts as a buffer in avoiding extremes in nutrients, acidity, etc.

4. It must contain reasonable amounts of nitrates, and the other plant foods. Proper levels may be best described as somewhere between "low" and "high" on the soil testing system you are using.

### ON PLANTING DISTANCES

Standard spacing for Pompons is 6 x 8 inches, for big Mums 8 x 8 inches with the standard two flowers per plant. It pays to look your crops over at flowering date to see which could have been run a little closer. There's a lot of difference in the way varieties grow. Also, later flowering sorts, especially if grown on ground beds, will need more room. Adapting your spacings in this way is one of those fine points which, added together, mean profits.

These spacings are based on flowering three shoots per plant on Poms. Better trim out all over that to concentrate the plant on the three to be cut. Mums, by the way, are grown anywhere from one to four flowers per plant, depending on what size flower you can sell. At least part of a retail grower's Mums grown three per plant might pay a lot better than the usual two. What can you sell?



Shaded Poms outdoors at our West Chicago range. No glass on that frame house. Shade is rolled up and down the roof by ropes as shown; waterproof canvas is used for shading so that flowers may be protected from fall rains. Mums seem to greatly enjoy exposure to the cool outdoor air over summer.

### CARE OF THE CROP

Some suggestions to help keep them moving along during growing season.

1. **WATERING.** Especially on raised benches, you are not likely to overwater. Without doubt 90% of the watering errors on Mums are otherwise—all too often a ruinous drying out. Always watch the edges and ends. Insist on your help checking these edges with the hose between waterings. It doesn't make sense to keep the center twice as wet as the edges, yet that's what often happens.

Constant level watering as developed at Cornell is most dramatic proof of all this. Here, soil is actually kept muddy wet 24 hours a day—edges, center and all—all the soil can soak up. The fine Mums and other crops, too, produced under these conditions besides offering a great saving in labor, teach the hose waterer the importance of lots of water. Lots of it!

2. **FEEDING.** Soil testing, easily done by any grower, is the best guide here. Biggest point in fertilizing is to avoid an excess, and occasional tests will prevent that. However, there are a few general practices that can be recommended. When benching Mums to fresh field soil, we add 4 lbs. per 100 sq. ft. of 20% superphosphate, a wheelbarrow load of cattle manure per 100 sq. ft., then rototill the soil to work this in. As Mums get into active growth, they will stand several light applications of a balanced fertilizer such as Vigoro. 1½ to 2 lbs. per 100 sq. ft. will be ample. Plants on raised beds will stand more feeding.

Where a soil is carried over from a previous crop and sterilized, soil tests are the only accurate basis for feeding.

Even here tho, experience shows that the application of phosphorous and manure once a year is helpful, and not an excess.

3. **SHADING.** Certainly any Mums benched during hot weather will get off to a better start with a fairly heavy shade, in fact failure to do so invites loss. Also, during the hot summer months, Mums most anywhere will do better if given some protection from the bright sun. Under glass, a light shade will do. Outdoor crops benefit greatly by cheesecloth covering. As light intensity drops in the fall, be sure to remove all shade.

4. **WETTING DOWN.** You can almost see a house of Mums "perk up" on a hot summer afternoon when you go over them with a light overhead watering with a hose. It's like a cooling shower. Beyond doubt, it helps them

thru the hottest weather and it certainly helps check spider. However, plant disease men are strongly against the practice—it helps spread such troubles as foliar nematode, septoria leaf spot, etc. It seems to us that the practical compromise is to wet them down till the first sign of these diseases appears.

5. **TEMPERATURES,** in summer are beyond our control except to keep all vents open unless storms threaten. And don't forget shading and syringing.

The standard winter night temperature for Chrysanthemums has always been 50 with 58 to 60 on cloudy days and 65 if clear. However, research has shown that buds may fail to form unless a minimum (night) temperature of 60 is held. How then have we been getting along all these years at 50? For one thing, many varieties set buds early enough in the fall to beat the cool nights. Then, too, some varieties it seems will set buds at 50 or 52 degrees sometimes. But, along with this, we must admit we have had Mums, especially very late ones, go blind or partly blind when grown at 50 degrees nights.

So to avoid blindness, especially on December flowering sorts, better provide a night reading of at least 55, better 60 degrees until buds are in sight. Watch the Garzas especially.

### PINCHING AND SELECTING THE BUD

We hear a lot these days about "time pinching"—following a carefully regulated date for the last pinch. It is certainly no more work or expense and, for spray Poms will give a much more desirable spray formation. Advantage of a correctly timed pinch compared to too early or too late





a pinch is that when time pinched all flowers in the spray will be at about one level. If pinched too early, the crown or center flower in the spike will be set low and the side buds will grow out above it. Too late pinching will cause the crown to be higher than the rest of the spray.

In the case of big Mums, a correctly timed pinch will usually avoid formation of a crown bud. The terminal that does form will give a straighter, more desirable neck.

Under our listing of varieties and prices, page 9, will be found correct pinching dates for all kinds flowered at normal dates. Under our CROP SCHEDULE, page 15, will be found correct pinching dates for all shaded and lighted crops. To time pinch, you must simply pinch the plant once, on the date given (except for pot plants—see pot plant Crop Schedule). Pinching plants previous to the date given, then re-pinching them on the correct date, will not produce desired results on cut flower crops. This double pinch produces a lot of small sprays which might be usable by retail growers or for pot culture, but a single time pinch will be much better for market growers.

Quality of Pompons will be definitely improved by removing all but the best 3, sometimes 4, breaks per plant. The plant then doesn't waste its strength in poor sideshoots. Uniformity is improved. Big Mums are usually grown two flowers per plant. Some retail growers might prefer three. Even if only one flower per plant is grown, follow the time pinching schedule and select the one best shoot.

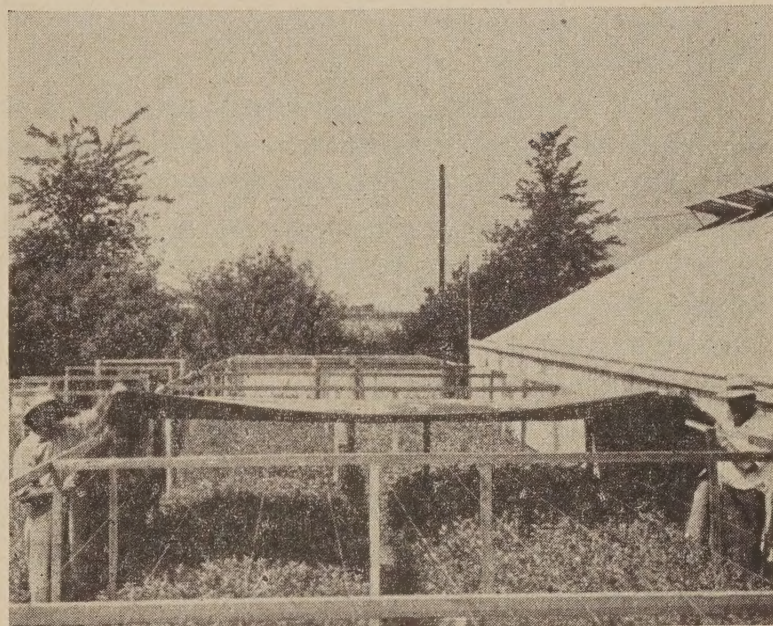
Best results will follow if you bench rooted cuttings, or if necessary, unpinched 2 1/4 inch plants *not checked*. Bench several weeks in advance of pinching date so that plant will have made enough growth for a good pinch. Never pinch into hard wood; poor breaks will result.

Now, as to selecting buds on standards. Mums produce two types of buds:

- a. CROWN. A flowering bud surrounded by non-flowering vegetative shoots.
- b. TERMINAL. A flowering bud surrounded by other flowering buds.

Mums with an early normal flowering date will usually throw a crown bud in August. If it is removed and the best of the vegetative side shoots "selected", it in turn will produce a terminal bud. Some quite early sorts benched early will even make two crowns successively, but a terminal will always follow. Correct time pinching will usually cause the Mum to send out a terminal first; no crown.

On early varieties not shaded, the safest rule is to remove crown buds that appear up to August 20, allowing the strongest side shoot to grow on. If crowns appear shortly



A new angle in black cloth shading with Sisalkraft paper. The 10 ft. bed is covered by strips of paper running from ground, over top, down to ground on other side. Strips are 13 1/2 ft. wide; 1 1/2 ft. overlap desirable to prevent light leak. To remove shade simply slide strips off one end. Cost about 1 1/4c per sq. ft. of paper. The paper will keep rain off in fall as blooms open.

after that date, they may be left on. Early crowns are generally safe on shaded Mums. On mid-season sorts the final flowering bud should have been selected by around September 1 to 10; on late ones by October 1 to 10. Terminal buds are always used on late sorts. On this whole matter, experience is the best teacher. Try a few earlier crowns and note results—in writing.

### WHEN TO CUT

Unlike Carnations and other flowers, a standard Mum cannot be cut half open and open in water. It will simply wilt within 24 hours and prove a big disappointment. Be sure the center is fully developed before cutting. Pomps should be cut when most of the flowers in the spray have opened. If you are shipping, check with your wholesaler after the first lot goes in. It will pay.

### BLACK CLOTH SHADING

Mums, being short day plants, can be very nicely brought into bloom about a month ahead of schedule by covering them with black cloth from 5 P.M. to 7 A.M. in late summer. This actually simulates the shorter days of fall. Some pointers:

1. BENCHING DATE: (Rooted cuttings) Must be 6-8 weeks prior to shading date, otherwise you won't get the necessary 12 to 18 inches of growth before shading starts (See Crop Schedule, page 15). Too late benching means short stems. This may be delayed several weeks by holding cuttings in 2 1/2 inch plant bands. Varieties which are to be



shaded at one date should be grouped together to simplify the shading.

2. HOW TO SHADE. Simplest way is to run a #9 wire above both sides of the bench, end to end. Between the two #9 lines, run a finer #18 wire about every foot down the bed. During shading, the cloth rests on these wires. 12-14 ft. strips of sateen can be simply draped over the whole bench, gathered together when shade is removed. Some growers rig up side curtains like a shower curtain and cover the top with a roll of cloth rolled around a stick.

On rainy nights or during very hot weather, it will help in disease prevention to remove the cloth after dark and replace it again before daylight. Watch this closely if you are having disease troubles. Be sure the covering is tight. A photographer's (Weston) meter should not read over 2 foot candles under the cover during sunny daylight. Black sateen, 64 x 104 mesh is best. For best results shade every night; missing one or two nights over the season won't be serious, but much more will simply delay flowering.

Continue shading until all buds on Poms show color. Buds on Standards should be the size of a nickel before shading is stopped.

Starting on page 15 will be found our Crop Schedule giving correct planting, pinching, shading, and flowering dates for varieties most suitable for shading. In most cases, complete dates are given to bring each variety into bloom on several different dates. In this way, retail growers can flower a batch of each important color at weekly intervals thru the season. It is generally more satisfactory to use one variety on three different shading schedules rather than to try to select three varieties with different flowering dates. Early and mid-season varieties are best for shading.

### OUTDOOR MUMS

Increasingly popular among mid-western and eastern growers, and done on a very large scale out west. For the eastern grower, it offers two big advantages on early crops: first, better exposure to outdoor air—getting out of the hot greenhouses. Second, it is much cheaper than using glass space.

Poms may be benched right outdoors, same as you would for shading under glass. For best results, provide a cheesecloth roof to break the full sun. It will give you cleaner better stock, and flower colors won't sunburn. Some extra care is required to hold the black cloth down in case of summer storms.

To flower big Mums outdoors in the East, some protection is needed especially during the actual flowering season. We have had good success with our so-called "Flexo-glass houses". We build up a framework same shape as a green-

house, using 1 or 1¼ inch pipe. Our houses are 24 ft. wide, 6 ft. gutters, and standard roof pitch. We like to provide cheesecloth over the plants during summer. Then, as color starts to show, we fit large sash of one of the many inexpensive glass substitutes over the house. By adding several lines of steam pipe, we are able to keep in production till well along in October. That permits use of some of the fine November flowering varieties. Quality generally is good with very little rotting of flowers.

Shading on these houses, by the way, was done over the roof. 14 ft. strips of Sisalkraft paper (\*) were run from the ridge down the roof, sides, and to the ground. At the ground end of each strip a 14 ft. pole (2 x 2 inch) was nailed to the paper. To roll the shade up, the paper is just rolled up on the pole to the ridge. This can be done mechanically. Using clothesline, fasten a rope at the ridge, under the paper. Run it down the roof and sides of the house to the ground, over the 2 x 2 pole, and back up the ridge on top of the paper. At the ridge, it is run thru a pulley then back to the ground. By simply pulling this loose end of the rope, the shade will then roll up. We also used this arrangement for shading a house of Pompons—using a simple wood frame to support the Sisalkraft paper. It is a great labor saver, and the paper is cheap. (See cut on page 5).

### AS POT PLANTS

Well grown, they make a handsome fast selling fall pot plant. Essentials of culture:

1. PLANTING. The modern method is to plant 3 or 4 rooted cuttings to a standard 6 inch pot. The good mid-season sorts are planted in early June; sooner, of course, for earlier ones or if they are to be shaded. You may first pot the cuttings to 2¼ inch pots; this enables you to sort out the weaker ones before final potting. Be sure the soil is high in organic matter either from well rotted manure or peat; it helps a lot both in watering and feeding.

2. PINCHING. While many growers only pinch pot Mums twice, three pinches seem to produce best shaped plants in the end. The Crop Schedule for Pot Varieties (page 20) gives final pinching dates for many sorts. Records of your own previous crops plus common sense are the biggest help.

3. CARE OF THE CROP. Moving pot Mums outdoors over the summer is a big boost to them, especially if cheesecloth shade is provided. The open air seems to produce a more vigorous husky growth. Also, pot Mums will require a good bit of feeding, best based on soil tests. Normally starting with fresh field soil, a teaspoonful of Vigoro

\*Sisalkraft Co., 205 W. Wacker Drive, Chicago, Ill. Cost about 1¼¢ per sq. ft.



A fine stand of shaded Good News. Photo taken Sept. 17. Joe Bezdek, Wilmette, Ill. was grower. He reports that rooted cuttings were benched directly May 23; shade applied July 8 to Aug. 22. Three flowers per stem.

or equivalent several times during the summer and fall will be needed. Ammonium sulfate may be used instead early in the summer.

To finish nice clean plants, they should be brought under glass again by Labor Day.

Some growers plant cuttings out to the open field in June, keep them pinched and in active growth over the summer. In early September, they are lifted and potted to 6's. Very careful protection from sun, and good watering are needed to avoid loss of lower leaves.

4. **VARIETIES.** Nearly all large standards or disbuds and anemones. They make a much showier plant than the button types. Current favorites: Blazing Gold, Marketeer, Sun Gold, and Yellow Beauty. Our new Granite State is an exceptionally fine pot strain, being quite dwarf. Also, it's foliage stays up close to the bloom—no long neck.

In general, avoid tall growers. For further suggestions, see Pot Plant Crop Schedule, page 20.

5. **SHADING** works fine on pot Mums. Same methods as for cut Mums. See page 20 for schedules.

### FLOWERING MUMS EVERY MONTH

Perfectly practical to do so. Only question is whether or not there will be a winter and spring market for them under your conditions. Cost per bunch will be higher

in spring than outdoor grown fall crops, of course, but all flowers are worth more than. For those unfamiliar with this year around flowering of Mums, it is a plan whereby our regular fall flowering Mums and Poms can be made to bloom during any week of the year. This is accomplished by either shortening the length of day (black cloth shade) or lengthening it (electric lights used at night), or both. For example, to make the Pompon Lakme flower September 1, you must apply black cloth shade 5 P.M. to 7 P.M. from June 18 till all buds show color. To bring the same variety into flower May 20, you must lengthen the winter days with electric lights from benching date to March 8, then shade March 8 till all buds show color. In this case lights are needed to prevent bud formation till stems are long enough, then, since days lengthen in March, black cloth shade is needed to force the variety into bud.

Cuttings used for fall and winter planting must have been light treated in the sand to prevent premature buds. We can furnish cuttings so treated. Lights, when called for should be 60 watt, 6 x 6 ft. and 3 ft. above the plants. Lights must be turned on the following hours. Up to February 15 light from 12:00 midnight to 4 A.M. February 15 to March 15 light from midnight to 2:30 A.M. Shading procedure is the same as described elsewhere in this catalog under Shading.

A night temperature of 60 degrees is required during bud formation to insure getting these off season crops to set bud. Also, soil must be kept on the wet side.

As to varieties, generally the whites and yellows stand the winter and spring flowering best; bronze and pinks are apt to fade. Some varieties of Mums may be used. Generally early flowering button Poms are best. Varieties listed under Crop Schedule have been tried for dates given.

While the project is a promising one, much is yet to be learned, especially regarding varieties. If you are interested, we suggest a fairly small trial the first season, including a maximum number of varieties. From these you can select those that do best under your conditions.

If interested, see Crop Schedule page 15. It gives dates for planting, lighting, shading, pinching and flowering of many varieties of Mums and Poms.

### INSECT CONTROL

A most important part of growing better Mums. The big trick here is always to anticipate trouble or, failing that, get really busy at the first sign of infestation.

1. **MIDGE**—One of the most serious and difficult to control. First, carefully select stock plants and cuttings free of it. Where infestation is already established, the most



effective control is sodium selenate, used as directed on container. Two applications at two week intervals will give excellent control but will cause some injury on some varieties. Most growers consider the control worth the injury. Loro is effective at 1 to 800 with a good spreader sprayed every 3 days for ten times, then weekly as preventative.

2. RED SPIDER can be a lot of trouble, especially in warm weather. Daily "wetting down" of foliage is real help. Loro 1 to 800 with Grasselli 1 to 1200 is good, but may injure some varieties, especially in warm weather. Vapotone has given good results but has been tried only on a few varieties. Try it on a few plants first. Since this material gives no control of eggs, three sprays at four day intervals are needed.

3. THRIP. Detex or any good DDT spray is very effective.

4. APHIS. Nicofume pressure fumigation is good. Nicofume liquid 1 to 300 with Grasselli spreader 1 to 1000 will give control. We find Vapotone very effective; see cautions under Red Spider above.

5. LEAF MINER. Nicofume liquid with soapy spreader; must be fairly strong.

6. MEALY BUG. Water syringing under good pressure is one of the best controls. Loro plus a good spreader and not too strong will give results. Vapotone with Santomerse S spreader at 1 to 2000 will give good kill but must be tried out on each variety on a small scale first.

7. LEAF ROLLER (tier) and cut worms. Detex or any good DDT spray.

8. FOLIAR NEMATODE. Select cuttings from clean plants and bench only in sterilized soil. Also, if infestation occurs, keep foliage dry at all times. Splashing water spreads the worms. Some infestations may be cleaned up with sodium selenate. Apply at strength recommended on container 2 weeks after planting. Then repeat in another 2 weeks. May injure some varieties.

9. GRASSHOPPERS. Hand picking, or arsenate of lead dust. Don't dust plants about to be cut.

### PRINCIPAL DISEASES

1. STUNT. A new disease having made its first serious appearance in the fall of 1947. Principal symptoms are dwarfing of plant and blooms to about  $\frac{1}{2}$  to  $\frac{2}{3}$  normal size, earlier bud and bloom formation, and on red varieties a notably paler color. Otherwise plants are normal; blooms are usually saleable as seconds. Stunt does not cause any shrivelling of leaves or rotting of the plant.

The disease has been identified as a virus. As such it can be spread from stunted to healthy plants by some such means as insects, soil transmission, etc.—not definitely known at this time. Altho time has not permitted thoro

investigation of stunt yet, a few general control measures can be outlined. Obviously you must bench only stunt free cuttings. In selecting stock plants for propagation, they must be taken from a lot free of stunt—and preferably from a house free of stunt. A plant infected late in its growth period may never show stunt symptoms, but will transmit it to its cutting progeny. Cuttings taken from stunt free stock plants, kept in sterilized soil, and kept free of insects thruout growth should normally flower stunt free the next fall. Aphis are suspected of being carriers of the virus. It may travel thru the soil from infected to clean plants. Like most diseases, it attacks certain varieties worse than others. And like Aster yellows (a virus), once a plant is infected, there is no cure.

Like any new disease, it will take several seasons to locate and thoroly test stunt free "parent" blocks—and to build up stock of them. Meanwhile, all possible is being done by scientists at the U.S.D.A., Cornell and other schools, and by research people at Yoder Brothers, Barberton, to establish definite control measures—and to provide cuttings free from stunt as is humanly possible.

Where growers are unable to obtain cuttings guaranteed stunt free, some help may be obtained by over-propagating suspected varieties say 50%. Cuttings are potted or banded and just prior to benching  $\frac{1}{3}$  of the weakest plants are discarded.

2. VERTICILLIUM (Seidewitz Disease) is a serious Mum problem. Starting at edges, leaves turn yellow, dry up—usually from the bottom of the plant first. Some varieties take it worse than others. Only known control is to plant cuttings which have been cultured against it—and be sure to use sterilized soil. Steam preferred.

3. SEPTORIA. Small dark brown spots, increasing in size, finally causing leaves to drop. Attacks lower leaves first. Most serious on outdoor plantings. Delay propagating till long shoots are available; take only a short cutting out of the tip. Dip cuttings in Fermate, 1 lb. per 100 gallons of water. Keep foliage dry in sand and clear thru growing period. After planting, spray plants with Fermate 1 lb. per 100 gallons every 10 days till plants are 18 inches high. Spraying is especially important on outdoor plantings in rainy seasons.

4. MILDEW. Sulfur dust is effective if no colored flowers are present. Malachite green spray may be used. Greenol (California Spray and Chemical Co.) with Santomerse S, 1 to 2000, has been recommended recently as being very effective.

5. RUST. Same spray program as was recommended for Septoria leaf spot.

*For cultural notes on Pot Mums, see page 21.*



# Instructions for Ordering

This catalog contains valuable cultural directions for the growing of Mums, both inside the greenhouse and outside under shade cloth.

## TERMS OF SALE

1. The minimum total order that can be accepted is 500 cuttings.
2. Fifty of each variety is the minimum that can be supplied.
3. More than 50 of a variety must be in multiples of 50.

All shipments will start about April 1st. Orders must be marked with a definite delivery date, such as May 10th—June 1st—etc. Orders marked "Early Delivery"—"Deliver when ready"—"Spring Delivery" are too indefinite.

Changes or cancellations on your order must be received at least 30 days before shipping time.

In making out your order please use special alphabetically arranged order blank enclosed with this catalog.

## SUBSTITUTIONS

We will substitute varieties as good or better for any items not listed in this catalog unless order is marked NO SUBSTITUTIONS.

## SHIPPING INFORMATION

Special shipping instructions and address if different from your regular mail address should be shown on your order. All cuttings are shipped Railway Express, Air Freight or Air Express Collect and are in perfect condition before being accepted by the Express Company. Therefore, if there is any damage enroute from being broken, heated or frozen, *call your express agent* to inspect the same, marking on express receipt the condition of the package and amount of damage, etc. *You must file claim*, as our responsibility ceases when Express Co. accepts shipment. We cannot be responsible for the safe arrival of your cuttings.

We, Geo. J. Ball, Inc., give no warranty, express or implied, as to the productiveness of any seeds, bulbs or plants we send out and we will not be in any way responsible for the crop. Our liability, in all instances, is limited to the purchase price of the seed, bulbs, or plants.

# Large Flowering Standards

Note carefully above instructions for ordering. No orders for less than 50 cuttings of a variety accepted.

S—Indicates varieties we find most suitable for shading. P—Indicates varieties suitable for Pot Plants. Pinching and flowering dates given here are for normal flowering without shading or lights.

## YELLOW

Name and Description	Size & Type	Pinching Date	Matures	Price per 1000
P GOLD LODGE. Light golden yellow	Int. Reflexed	July 4	Oct. 5	\$40.00
S YELLOW CHIEF. Sport of Pink Chief.	Int. Incurved	July 8	Oct. 15	42.50
GOLDEN OCTOBER. Deep lemon yellow	Int. Semi-Inc.	July 8	Oct. 15	47.50
P CELESTRA. Lemon yellow	S. Incurved	July 8	Oct. 15	40.00
SP MRS. KIDDER. Deep lemon yellow	L. Incurved	July 8	Oct. 20	40.00
P YELLOW AMBASSADOR. Light lemon yellow	L. Incurved	July 8	Oct. 20	42.50
SP BLAZING GOLD. Deep golden yellow	Int. Incurved	July 8	Oct. 20	42.50
S SUNGLOW. Golden yellow	L. Incurved	July 14	Oct. 25	40.00
CITRONELLA. Light buff yellow	Int. Incurved	July 16	Oct. 28	45.00
SP GOLDEN GLORY. Golden yellow	Int. Semi-Inc.	July 16	Nov. 1	42.50
S GOOD NEWS. Deep lemon yellow	Int. Incurved	July 16	Nov. 1	45.00
YELLOW TURNER. Light yellow	L. Incurved	July 19	Nov. 5	45.00
S INDIANAPOLIS YELLOW. Lemon yellow	Int. Incurved	July 20	Nov. 8	45.00
S YELLOW QUEEN (New). Yellow sport of Orchid Queen. See cover 2 for full description	L. Incurved	July 19	Nov. 10	80.00
P CARDONIA. Deep golden yellow	Int. Incurved	July 19	Nov. 10	37.50
SP PENROD. Golden yellow	Int. Incurved	July 19	Nov. 10	42.50
WHITTIER. Lemon yellow	L. Incurved	July 19	Nov. 10	40.00
P IMP. HONEY DEW. Yellow	Int. Incurved	July 22	Nov. 15	42.50
YELLOW MONUMENT. Light lemon yellow	L. Incurved	July 20	Nov. 10	40.00
S YELLOW MEFO. Lemon yellow	L. Incurved	July 24	Nov. 20	42.50



# Large Flowering Standards

## YELLOW—(Continued)

Name and Description	Size & Type	Pinching Date	Matures	Price per 1000
SP BONNAFFON DELUXE. Golden yellow	S. Incurved	July 25	Nov. 20	37.50
P FRIENDLY RIVAL. Deep chrome yellow	L. Incurved	July 25	Nov. 23	40.00
MARIE DEPETRIS. Deep golden yellow	L. Incurved	July 24	Nov. 23	40.00
HARVESTER. Deep canary yellow	L. Incurved	July 28	Nov. 25	75.00
P SUN GOLD. Lemon yellow	Int. Semi-Inc.	July 28	Nov. 25	42.50
S GOLDEN PEARSON. Light golden yellow	Int. Incurved	July 28	Nov. 25	37.50
IMPROVED YELLOW CHATTANOOGA	L. Incurved	July 28	Nov. 25	42.50
GOLDEN MRS. ROSS. Golden yellow	L. Incurved	July 28	Dec. 1	40.00
GOLDEN MISTLETOE. Light golden yellow	L. Incurved	Aug. 1	Dec. 10	40.00
P IMPROVED TOBIN'S YELLOW	Int. Semi-Inc.	Aug. 4	Dec. 15	42.50

## WHITE

SMITH'S EARLY WHITE	Int. Semi-Inc.	July 4	Oct. 5	37.50
S WHITE CHIEF. Sport of Pink Chief	Int. Incurved	July 8	Oct. 15	42.50
QUAKER MAID. White tinged pink	Int. Reflexed	July 8	Oct. 15	37.50
S SILVER SHEEN	Int. Incurved	July 8	Oct. 20	37.50
SP CHRISTINA.	S. Incurved	July 12	Oct. 20	40.00
P AMBASSADOR. Cream white	L. Incurved	July 8	Oct. 20	42.50
S ALBATROSS.	L. Incurved	July 14	Nov. 1	42.50
SP SNOW WHITE.	Int. Incurved	July 14	Nov. 1	37.50
S BETSY ROSS. Ivory white	L. Incurved	July 16	Nov. 1	40.00
WILLIAM TURNER. White	L. Incurved	July 19	Nov. 5	45.00
S INDIANAPOLIS WHITE.	Int. Incurved	July 20	Nov. 8	45.00
JEAN ELIZABETH.		July 24	Nov. 20	50.00
MONUMENT. Ivory white	L. Incurved	July 20	Nov. 10	40.00
SP MARKETEEER.	Int. Semi-Inc.	July 25	Nov. 18	40.00
S MEFO. Ivory white	L. Incurved	July 24	Nov. 20	42.50
P WHITE FRICK. White suffused pink	Int. Incurved	July 28	Nov. 25	50.00
CHATTANOOGA.	L. Incurved	July 28	Nov. 25	40.00
DECEMBER GLORY LARGE. Ivory white	Int. Incurved	July 31	Dec. 1	40.00
DECEMBER WHITE.	Int. Incurved	July 31	Dec. 5	70.00
IMP. DECEMBER BEAUTY	L. Incurved	Aug. 2	Dec. 8	42.50
WHITE MISTLETOE.	Int. Incurved	Aug. 1	Dec. 10	40.00
P SMITH'S LATE WHITE. Ivory white	Int. Semi-Inc.	Aug. 4	Dec. 15	42.50

## BRONZE AND RED

S INDIANOLA. Light reddish bronze	Int. Semi-Inc.	July 8	Oct. 15	42.50
S HILDA BERGEN. Dark reddish bronze	S. Incurved	July 8	Oct. 20	42.50
SP GLITTERS. Deep reddish orange	Int. Reflexed	July 16	Oct. 28	42.50
P IVANHOE. Reddish bronze	S. Incurved	July 16	Nov. 1	60.00
SP APRICOT QUEEN. Orange bronze	Int. Incurved	July 16	Nov. 1	42.50
S DETROIT NEWS. Reddish bronze	Int. Incurved	July 16	Nov. 1	45.00
S INDIANAPOLIS BRONZE. Buff bronze	Int. Incurved	July 20	Nov. 8	45.00
BRONZE ORCHID QUEEN. Apricot buff	L. Incurved	July 20	Nov. 10	50.00
S ANACONDA. Deep coppery red	Int. Incurved	July 22	Nov. 15	50.00
S MRS. ROY. Crimson	Int. Incurved	July 24	Nov. 15	47.50
GARNET KING. Dark red	Int. Reflexed	July 25	Nov. 18	50.00
GLADYS PEARSON. Light buff bronze	Int. Incurved	July 28	Nov. 25	37.50
OAK LEAF. Reddish bronze	Int. Incurved	July 28	Nov. 25	37.50
P BRONZE FRICK. Light bronze	Int. Incurved	July 28	Nov. 25	50.00
BRONZE MISTLETOE. Buff bronze	Int. Incurved	Aug. 1	Dec. 10	40.00



# Large Flowering Standards

## PINK

Name and Description	Size & Type	Pinching Date	Matures	Price per 1000
S PINK CHIEF. Lavender	Int. Incurved	July 8	Oct. 20	42.50
SP JUSTRITE. Light rose pink	S. Incurved	July 8	Oct. 15	45.00
MAJOR BOWES. Deep lavender	Int. Incurved	July 12	Oct. 20	45.00
OCTOBER ROSE. Light lavender	Int. Incurved	July 14	Oct. 25	40.00
PINK TURNER. Lavender	L. Incurved	July 19	Nov. 5	45.00
SP J. W. PRINCE. Rose pink	Int. Incurved	July 19	Nov. 5	37.50
RAYONNANTE. Pink	Spider	July 20	Nov. 5	45.00
S INDIANAPOLIS PINK. Deep lavender	Int. Incurved	July 20	Nov. 8	45.00
S DARK PINK ORCHID QUEEN. Mauve pink	L. Incurved	July 20	Nov. 10	70.00
S ORCHID QUEEN. Orchid pink	L. Incurved	July 20	Nov. 10	50.00
THANKSGIVING PINK. Amaranth	Int. Reflexed	July 24	Nov. 23	37.50
P HELEN FRICK. Rose pink	Int. Incurved	July 28	Nov. 23	45.00
EDWIN SEIDEWITZ. Lavender	Int. Incurved	July 28	Nov. 25	37.50
DISTINCTION. Pink	Med.	July 28	Nov. 25	42.50
PINK MISTLETOE. Lavender	Int. Incurved	Aug. 1	Dec. 10	40.00

# Pompons Singles and Anemones

Types are abbreviated as follows: Pom.—Pompon; Dec.—Decorative; Sgl.—Single; Anem.—Anemone. Size of flower is indicated by S.—Small; Int.—Intermediate; L—Large.

S—Indicates varieties we find most suitable for shading.  
P—Indicates varieties suitable for Pot Plants.

D—Indicates varieties suitable to grow as disbudded pompons.  
H—Hardy or garden types.

Pinching and flowering dates given here are for normal flowering without shading or lights.

Note carefully instructions for ordering on page 9. No orders for less than 50 rooted cuttings of a variety accepted. Your total order must be for not less than 500 rooted cuttings.

## YELLOW

Name and Description	Size & Type	Pinching Date	Matures	Price per 1000
H EARLY YELLOW. Light golden yellow	Short, S. Pom.	June 20	Sept. 15	47.50
H POMPONETTE. Light buff yellow	Med., Int. Pom.	June 20	Sept. 20	40.00
PH HONEYCOMB (New). Deep golden yellow				
See cover 2 for full description	Int. Pom.	July 10	Sept. 25	80.00
H KING MIDAS. Light lemon yellow	Med., Int. Dec.	June 30	Sept. 30	40.00
SH YELLOW IRENE. Light lemon yellow	Short, S. Pom.	July 8	Oct. 15	42.50
SH RODELL IMPROVED. Light lemon yellow	Short, Int. Pom.	July 8	Oct. 20	37.50
S YELLOW HAMMER. Golden yellow	Med., Int. Pom.	July 8	Oct. 20	40.00
S GOLDEN SPRAY. Deep lemon yellow	Med., Int. Pom.	July 12	Oct. 23	42.50
S GOLD COAST. Deep lemon yellow	Small Pom.	July 14	Oct. 25	60.00
SD GOLDEN HERALD. Deep golden yellow	Med., L. Dec.	July 14	Oct. 25	42.50
S YELLOW DOT. Yellow, bronze center	Med., Int. Pom.	July 14	Oct. 25	40.00
S YELLOW ARCADIA. Pernet yellow	Med., Int. Pom.	July 14	Oct. 28	40.00
S YELLOW DAISY. Deep lemon yellow	Med., Int. Sgl.	July 14	Nov. 1	42.50
SD MARY L. HALL. Lemon yellow	Tall, Int. Pom.	July 14	Nov. 1	40.00
D YELLOW SEA GULL. Light lemon yellow	Tall, Int. Pom.	July 16	Nov. 1	37.50
BARCAROLE. Golden yellow	Int. Pom.	July 20	Nov. 5	50.00
S NUGGETS. Light lemon yellow	Short, S. Pom.	July 20	Nov. 5	37.50
S CONSTELLATION (New). Yellow. See cover 2 for full description	Int. Dec.	July 20	Nov. 5	80.00
S YELLOW BUSHNELL. Pernet Yellow	Tall, Int. Pom.	July 20	Nov. 8	45.00



# Pompons Singles and Anemones

## YELLOW—(Continued)

Name and Description	Size & Type	Pinching Date	Matures	Price per 1000
S ILLINI GOLD. Deep golden yellow button. Flowers 1 1/4 in. in diameter .....	But. Pom.	July 19	Nov. 10	50.00
PIXIE. Deep golden yellow .....	Med., S. Pom.	July 20	Nov. 10	40.00
SPD YELLOW BEAUTY. Golden yellow .....	L. Pom.	July 19	Nov. 10	40.00
SD HELIOS. Deep golden yellow .....	Med., L. Anem.	July 19	Nov. 10	40.00
S PRINCETON. Orange yellow .....	Med., Int. Dec.	July 24	Nov. 15	42.50
S TALLY-HO (New). Clear yellow, similar otherwise to Princeton. See cover 2 for full description.....	Int. Pom.	July 24	Nov. 15	80.00
SD YELLOW FELLOW. Deep lemon yellow .....	Med., Int. Dec.	July 24	Nov. 15	45.00
P SUNRAY. Light lemon yellow .....	Med., Int. Anem.	July 20	Nov. 10	37.50
SD SUSANNE MILLER. Buff yellow .....	Tall, L. Anem.	July 24	Nov. 18	37.50
GOLDEN SURPRISE. Sulphur yellow .....	Med., Int. Pom.	July 25	Nov. 18	50.00
GOLDEN EMBLEM. Golden yellow .....	Int. Pom.	July 25	Nov. 23	70.00
HASEGAWA GOLD. Light golden yellow .....	Med., Int. Pom.	July 25	Nov. 23	45.00
D YELLOW ROLINDA. Light buff yellow .....	Med., Int. Anem.	July 25	Nov. 23	37.50
YELLOW BRISTOLITE. Sport of Bristolite .....	Int. Pom.	July 28	Nov. 25	50.00
SUNNYSIDE. Golden yellow .....	Med., Int. Pom.	July 28	Nov. 25	50.00
LODESTAR. Golden yellow .....	Med., Int. Sgl.	July 28	Nov. 25	70.00
D GOLDEN JANE. Brilliant golden yellow .....	Med., L. Sgl.	July 28	Nov. 28	40.00
P YELLOW CORDOVA. Lemon yellow .....	Med., Int. Dec.	July 28	Nov. 30	45.00
YELLOW CAMEO. Deep lemon yellow .....	Int. Pom.	Aug. 1	Dec. 5	60.00
OMEGA. Lemon yellow .....	Int. Pom.	Aug. 1	Dec. 10	80.00
D YELLOW SUPREME. Buff yellow .....	Med., L. Anem.	Aug. 2	Dec. 10	37.50
DECEMBER GOLD. Deep golden yellow .....	Med., Int. Dec.	Aug. 4	Dec. 15	45.00
YELLOW GARZA. Lemon yellow .....	Short, Int. Anem.	Aug. 4	Dec. 15	47.50
SUNKIST. Golden yellow .....	Int. Sgl.	Aug. 7	Dec. 20	70.00
VIBRANT. Deep lemon yellow .....	Med., Int. Dec.	Aug. 4	Dec. 20	42.50
YELLOW SNOW. Deep lemon yellow .....	Med., Int. Pom.	Aug. 7	Dec. 30	37.50
IVORY SNOW. Ivory yellow .....	Int. Pom.	Aug. 7	Dec. 30	70.00

## WHITE

H JEAN CUMMING. Ivory white .....	Med., Int. Dec.	June 20	Sept. 20	55.00
HP SERENITY (New). White Daisy. See cover 2.....	Sgl.	July 10	Sept. 25	80.00
AVALANCHE .....	Int. Dec.	July 4	Oct. 5	42.50
H UVALDA. Cream white .....	Med., Int. Pom.	July 4	Oct. 10	40.00
SP WHITE JEWELL .....	Short, S. Pom.	July 8	Oct. 15	40.00
SDH SILVER BALL .....	Med., L. Pom.	July 8	Oct. 15	37.50
SH IRENE .....	Short, S. Pom.	July 8	Oct. 15	40.00
S MINONG .....	Med., S. Pom.	July 8	Oct. 20	37.50
PINOCCHIO .....	S. Pom.	July 14	Oct. 25	60.00
P GRANITE STATE .....	L. Pom.	July 12	Oct. 25	60.00
S ARCADIA .....	Med., Int. Pom.	July 14	Oct. 28	40.00
SD SEA GULL. Cream white .....	Tall, Int. Pom.	July 20	Nov. 10	37.50
SD WHITE DOTY. Ivory white .....	Med., L. Pom.	July 14	Nov. 1	40.00
S BLANCHE .....	Med., Int. Anem.	July 16	Nov. 1	42.50
D WHITE ANEMONE .....	Tall, Int. Anem.	July 19	Nov. 5	45.00
S REV. BUSHNELL. Cream white .....	Tall, Int. Pom.	July 20	Nov. 8	45.00
SD SHASTA .....	Med., Int. Anem.	July 20	Nov. 8	40.00
S CRYSTAL JEWELL .....	Tall, S. Pom.	July 19	Nov. 8	40.00
VESPER .....	Int. Pom.	July 24	Nov. 15	50.00
SD WHITE MENSA. Ivory white .....	Med., Int. Sgl.	July 20	Nov. 10	37.50
SPD LITTLE AMERICA .....	Med., Int. Anem.	July 20	Nov. 10	37.50
SPD RICHARD MANDEL .....	L. Pom.	July 19	Nov. 10	37.50





# Pompons Singles and Anemones

## WHITE—(Continued)

Name and Description	Size & Type	Pinching Date	Matures	Price per 1000
CHICAGO PEARL. Ivory white	Med., Int. Pom.	July 22	Nov. 15	40.00
SD WHITE FREIDA. Yellow cushion	Med., L. Anem.	July 22	Nov. 15	40.00
D WHITE NORMA. White suffused with pink	Tall, L. Anem.	July 25	Nov. 18	37.50
MATCHLESS. White	Int. Pom.	July 28	Nov. 20	70.00
D LONG ISLAND BEAUTY. White, yellow cushion	Med., L. Anem.	July 24	Nov. 20	37.50
D NEVADA. White, green cushion	Med., Int. Anem.	July 25	Nov. 20	70.00
PEARL	Tall, Int. Pom.	July 25	Nov. 20	37.50
SEAFOAM	Med., Int. Pom.	July 24	Nov. 20	40.00
PRISCILLA	Int. Pom.	July 24	Nov. 23	50.00
WHITE USONA. Clear white	Med. Int. Pom.	July 28	Nov. 25	60.00
PD WHITE YULETIDE	Short, Int. Pom.	July 28	Nov. 28	37.50
P CORDOVA. Cream white	Med., Int. Dec.	July 28	Nov. 30	40.00
ROYAL QUEEN	Med., Int. Pom.	July 31	Dec. 5	37.50
CAMEO. Ivory white	Med., Int. Pom.	Aug. 1	Dec. 5	42.50
YUKON	Tall, Int. Sgl.	Aug. 1	Dec. 10	37.50
D WHITE SUPREME	Med., L. Anem.	Aug. 2	Dec. 10	37.50
POM. DECEMBER GLORY. Ivory white	Med., Int. Dec.	Aug. 4	Dec. 15	42.50
GARZA SUPREME	Short, Int. Anem.	Aug. 4	Dec. 15	47.50
SNOW. Ivory white	Med., Int. Pom.	Aug. 7	Dec. 30	37.50
REVELATION	Med., Int. Pom.	Aug. 7	Dec. 30	50.00

## PINK

Name and Description	Size & Type	Pinching Date	Matures	Price per 1000
H EARLY WONDER. Lavender	Med., Int. Dec.	June 20	Sept. 15	37.50
HP SPELLBOUND (New). Lavender pink. See cover 2 for full description	Int. Dec.	July 10	Sept. 25	80.00
H MRS. DUPONT. Peach pink	Med., Int. Dec.	July 4	Oct. 5	40.00
H LAVENDER LADY. Lavender	Med., Int. Dec.	July 4	Oct. 8	40.00
H ALLEGRO. Shrimp pink	Int. Dec.	July 8	Oct. 15	60.00
S JEWELL. Lavender	Med., S. Pom.	July 8	Oct. 15	40.00
DARK PINK JEWELL. Deep lavender	Med., S. Pom.	July 8	Oct. 15	45.00
S PINK PEARL. Rose pink	Med., S. Pom.	July 8	Oct. 20	47.50
S CAROLYN YOSICK. Lavender pink	S. Dec.	July 8	Oct. 20	70.00
S CAPT. COOK. Deep rose pink	Tall, Int. Pom.	July 8	Oct. 20	42.50
S JESSIE. Light lavender	Med., Int. Pom.	July 14	Oct. 25	40.00
S PINK DOT. Light pink	Med., Int. Pom.	July 14	Oct. 25	40.00
S OCTOBER PINK. Light lavender	Med., Int. Sgl.	July 14	Oct. 28	47.50
SD LILLIAN DOTY. Light rose pink	Med., L. Pom.	July 16	Nov. 1	40.00
W. H. BUCKINGHAM. Rose pink	Short, Int. Sgl.	July 16	Nov. 3	42.50
S MRS. BULKELEY. Light rose	Tall, Int. Pom.	July 20	Nov. 8	45.00
DARK PINK BULKELEY. Dark rose pink	Tall, Int. Pom.	July 20	Nov. 8	45.00
SPD THYRA. Lavender	Med., L. Pom.	July 19	Nov. 10	40.00
SPD QUEEN OF PINKS. Lavender	L. Pom.	July 19	Nov. 10	37.50
SPD MASTERPIECE. Tourmaline pink	Med., Int. Pom.	July 20	Nov. 10	37.50
ORCHID BEAUTY. Orchid, golden cushion	Med., Int. Anem.	July 22	Nov. 15	37.50
SD FREIDA. Light lavender, yellow cushion	Med., L. Anem.	July 22	Nov. 15	40.00
S BROCADE. Cameo pink	Int. Sgl.	July 24	Nov. 15	70.00
SD NORMA. Pink petals, salmon cushion	Tall, L. Anem.	July 25	Nov. 18	37.50
SD DARK PINK NORMA. Deep lavender	Tall, L. Anem.	July 25	Nov. 18	37.50



# Pompons Singles and Anemones

## PINK—(Continued)

Name and Description	Size & Type	Pinching Date	Matures	Price per 1000
MINUET. Mauve to rose pink.....	Med., Int. Pom.	July 28	Nov. 25	70.00
USONA. Lavender .....	Med., Int. Pom.	July 28	Nov. 25	50.00
HASEGAWA PINK. Lavender .....	Med., Int. Sgl.	July 28	Nov. 25	37.50
PD BEAUTIFUL LADY. Deep lavender .....	Short, L. Anem.	July 28	Nov. 25	40.00
UNEEDA. Lavender .....	Int. Pom.	July 28	Nov. 25	37.50
D VALENCIA. Orchid pink .....	Tall, L. Sgl.	July 28	Nov. 28	37.50
D DARK PINK VALENCIA. Orchid pink .....	Tall, Int. Sgl.	July 28	Nov. 28	37.50
D ENCHANTRESS. Deep pink .....	Med., L. Anem.	Aug. 1	Dec. 5	37.50
P RIVIERA. Luminous pink .....	Int. Dec.	Aug. 1	Dec. 10	50.00
D DARK PINK SUPREME. Lavender .....	Med., L. Anem.	Aug. 2	Dec. 10	37.50
PINK TREASURE ISLAND. Light lavender .....	Med., Int. Dec.	Aug. 7	Dec. 20	50.00
ROSALIND. Rose pink .....	Tall, Int. Sgl.	Aug. 7	Dec. 20	40.00

## BRONZE AND RED

H EARLY BRONZE. Orange bronze .....	Short, S. Pom.	June 20	Sept. 15	47.50
BURGUNDY. Wine red .....	Med., Int. Dec.	July 4	Oct. 5	40.00
RUBY POMPON. Ruby crimson .....	Int. Pom.	July 4	Oct. 5	40.00
RED VELVET. Velvety crimson .....	Int. Dec.	July 4	Oct. 8	40.00
H AVIATOR. Coppery red .....	Int. Dec.	July 4	Oct. 10	60.00
ROMAN BRONZE .....	Tall, Int. Pom.	July 12	Oct. 20	42.50
S ADELAIDE. Dark reddish bronze .....	Med., S. Pom.	July 12	Oct. 23	47.50
SD JEMIMA. Dark reddish bronze .....	Med., Int. Pom.	July 12	Oct. 23	45.00
S BRONZE DOT. Excellent sport of Pink Dot for early shading .....	Med. Int. Pom.	July 12	Oct. 25	40.00
H NATOMA. Flame scarlet .....	Short, Int. Dec.	July 12	Oct. 25	45.00
S FIRE BIRD. Dark reddish bronze .....	Med., Int. Dec.	July 14	Oct. 25	45.00
OCTOBER BRONZE. Light bronze .....	Med., Int. Sgl.	July 16	Oct. 28	47.50
S SENECA (New). Orange bronze. See cover 2 for full description .....	Int. Dec.	July 14	Nov. 1	80.00
BRONZE DAISY. Light bronze .....	Med., Int. Sgl.	July 16	Nov. 1	42.50
BRONZE BUCKINGHAM. Light orange bronze .....	Short, Int. Sgl.	July 16	Nov. 3	42.50
CASSANDRA. Orange bronze .....	Med., Int. Pom.	July 20	Nov. 5	42.50
S ROBIN HOOD. Dark red .....	Med., S. Pom.	July 19	Nov. 5	42.50
NAVAHO. Deep crimson .....	Med., Int. Pom.	July 20	Nov. 5	50.00
S RED RUST. Reddish bronze .....	Large Pompon	July 20	Nov. 5	70.00
S RED DAISY. Deep red .....	Med., Int. Sgl.	July 14	Nov. 5	47.50
BITTERSWEET. Bittersweet red .....	Int. Sgl.	July 24	Nov. 15	50.00
BRONZE BULKELEY .....	Tall, Int. Pom.	July 19	Nov. 8	45.00
SYLVANNA. Orange bronze .....	Med., Int. Sgl.	July 19	Nov. 10	40.00
SD EUROPA. Cardinal red .....	Short, L. Sgl.	July 19	Nov. 10	45.00
D THE TITAN. Scarlet crimson .....	Med., L. Anem.	July 19	Nov. 10	40.00
PD RED MELBA. Light red .....	Short, L. Sgl.	July 19	Nov. 10	40.00
S NEW YORK. Reddish bronze .....	Med., S. Pom.	July 22	Nov. 13	40.00
SPD BRONZE MASTERPIECE. Rosewood bronze .....	Med., Int. Pom.	July 22	Nov. 15	37.50
S RED PRINCETON. Brazil red .....	Med., Int. Dec.	July 24	Nov. 15	42.50
P GYPSY. Light reddish bronze .....	S. Anem.	July 22	Nov. 15	37.50
P NOVEMBER BRONZE. Orange bronze .....	Med. Int. Pom.	July 23	Nov. 18	50.00
RUSTICON. Rust red .....	Int. Pom.	July 25	Nov. 20	80.00
CATHERINE. Light reddish bronze .....	Med., Int. Dec.	July 25	Nov. 20	37.50
LEGAL TENDER. Bronze and gold .....	Med., Int. Dec.	July 24	Nov. 20	37.50
PD RED ROLINDA. Deep reddish bronze .....	Med., Int. Anem.	July 24	Nov. 23	37.50
BRISTOLITE. Orange bronze .....	Int. Pom.	July 28	Nov. 25	50.00



Pompons Singles and Anemones

BRONZE AND RED—(Continued)

Table with 5 columns: Name and Description, Size & Type, Pinching Date, Matures, Price per 1000. Lists varieties like YOLANDA, ARGO, JANE, etc.

Crop Schedule

This table may be used in planning

1. BLACK CLOTH SHADED CROPS—to flower in Sept. The date under "Plant" is correct time to bench rooted cuttings.

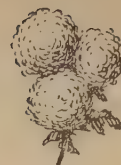
2. CROPS TO FLOWER AT NORMAL DATE. To determine correct date for benching, pinching, etc., turn to normal flowering date of variety, find group in which it is listed and read desired dates.

3. YEAR 'ROUND MUMS (winter and spring flowering, mostly). To determine correct dates, turn to flowering

date desired, select desired variety, and for that group read appropriate planting, pinching, lighting, and shading dates. Where a "lights off" date is given, cutting must be lighted at once (same day) as benched—and lights used nightly till "lights off" date.

A SUGGESTION: Often only one or two varieties are given in each color for each flowering period. There are undoubtedly many others that will be equally satisfactory, but which have not been tried out under various lighting and shading combinations.

Table with 6 columns: To Flower, Plant, Pinch, Lights Off, Shade, Varieties. Lists planting and shading schedules for various mum varieties.



### Crop Schedule — continued

To Flower	Plant	Pinch	Lights Off	Shade	Varieties
Sept. 15-24	May 22	June 12	...	July 19	<i>Pompons:</i> Pristine, Minong, Wh. Jewell, Jewell, Caroline Yosick, Capt. Cook. <i>Standards:</i> Blazing Gold, Silver Sheen, Pink Chief, Hilda Bergen.
	May 17	June 7	...	July 14	<i>Pompons:</i> Gold Coast, Golden Herald, Yel. Arcadia, Yel. Daisy, Yel. Dot, Mary L. Hall, Pinocchio, Arcadia, Pink Dot, Oct. Pink, Jessie, Seneca, Fire Bird, Red Daisy. <i>Standards:</i> Sunglow, Albatross, Oct. Rose.
	May 13	June 3	...	July 9	<i>Pompons:</i> Barcarole, Pixie, Yel. Bushnell, Constellation, Sunray, Nuggets, Yel. Fellow, Shasta, Wh. Mensa, Lakme, Rev. Bushnell, Sea Gull, Little America, Dk. Pk. Bulkeley, Masterpiece, Cassandra, Navaho, Red Rust. <i>Standards:</i> Ind. White, Ind. Pink, Dk. Pk. Orchid Queen, Ind. Yellow, Ind. Bronze.
Sept. 25- Oct. 4	May 31	June 21	...	July 29	<i>Pompons:</i> Pristine, Minong, Wh. Jewell, Jewell, Caroline Yosick, Capt. Cook. <i>Standards:</i> Blazing Gold, Silver Sheen, Pink Chief, Hilda Bergen.
	May 26	June 16	...	July 24	<i>Pompons:</i> Gold Coast, Golden Herald, Yel. Arcadia, Yel. Daisy, Yel. Dot, Mary L. Hall, Pinocchio, Arcadia, Pink Dot, Oct. Pink, Jessie, Seneca, Fire Bird, Red Daisy. <i>Standards:</i> Sunglow, Albatross, Oct. Rose.
	May 22	June 12	...	July 19	<i>Pompons:</i> Barcarole, Pixie, Yel. Bushnell, Constellation, Sunray, Nuggets, Shasta, Wh. Mensa, Lakme, Rev. Bushnell, Sea Gull, Little America, Dk. Pk. Bulkeley, Masterpiece, Cassandra, Navaho, Red Rust. <i>Standards:</i> Ind. White, Ind. Pink, Dk. Pk. Orchid Queen, Orchid Queen, Ind. Bronze, Ind. Yellow.
	May 17	June 7	...	July 13	<i>Pompons:</i> Princeton, Yel. Fellow, Tally-Ho, Susanne Miller, Seafoam, Priscilla, Vesper, Brocade, Red Princeton, Bittersweet. <i>Standards:</i> Yel. Mefo, Mefo, Jean Elizabeth, Mrs. Roy.
Oct. 5-14	June 9	June 30	...	Aug. 8	<i>Pompons:</i> Pristine, Minong, Wh. Jewell, Jewell, Caroline Yosick, Capt. Cook. <i>Standards:</i> Blazing Gold, Silver Sheen, Pink Chief, Hilda Bergen.
	June 4	June 25	...	Aug. 3	<i>Pompons:</i> Gold Coast, Golden Herald, Yel. Arcadia, Yel. Daisy, Yel. Dot, Mary L. Hall, Pinocchio, Arcadia, Pink Dot, Oct. Pink, Jessie, Fire Bird, Seneca, Red Daisy. <i>Standards:</i> Sunglow, Albatross, Oct. Rose.
	May 31	June 21	...	July 29	<i>Pompons:</i> Barcarole, Pixie, Yel. Bushnell, Constellation, Sunray, Nuggets, Shasta, White Mensa, Lakme, Rev. Bushnell, Sea Gull, Little America, Dk. Pk. Bulkeley, Masterpiece, Cassandra, Navaho, Red Rust. <i>Standards:</i> Ind. White, Ind. Pink, Dk. Pk. Orchid Queen, Orchid Queen, Ind. Bronze, Ind. Yellow.
	May 26	June 16	...	July 23	<i>Pompons:</i> Princeton, Yel. Fellow, Tally-Ho, Susanne Miller, Seafoam, Priscilla, Vesper, Brocade, Red Princeton, Bittersweet. <i>Standards:</i> Yel. Mefo, Mefo, Jean Elizabeth, Mrs. Roy.
Oct. 15-24	June 17	July 8	...	...	<i>Pompons:</i> Pristine, Minong, Wh. Jewell, Jewell, Caroline Yosick, Capt. Cook. <i>Standards:</i> Yel. Ambassador, Mrs. Kidder, Blazing Gold, Silver Sheen, Ambassador, Pink Chief, Hilda Bergen.
	June 14	July 5	...	Aug. 13	<i>Pompons:</i> Gold Coast, Golden Herald, Yel. Arcadia, Yel. Daisy, Yel. Dot, Mary L. Hall, Pinocchio, Arcadia, Pink Dot, Oct. Pink, Jessie, Seneca, Fire Bird, Red Daisy. <i>Standards:</i> Sunglow, Albatross; Oct. Rose.
	June 10	July 1	...	Aug. 8	<i>Pompons:</i> Barcarole, Pixie, Yel. Bushnell, Constellation, Sunray, Nuggets, Shasta, Wh. Mensa, Lakme, Rev. Bushnell, Sea Gull, Little America, Dk. Pk. Bulkley, Masterpiece, Cassandra, Navaho, Red Rust. <i>Standards:</i> Ind. White, Ind. Pink, Dk. Pk. Orchid Queen, Orchid Queen, Ind. Bronze, Ind. Yellow.
	June 4	June 25	...	Aug. 2	<i>Pompons:</i> Princeton, Yel. Fellow, Tally-Ho, Susanne Miller, Seafoam, Priscilla, Vesper, Brocade, Red Princeton, Bittersweet. <i>Standards:</i> Yel. Mefo, Mefo, Jean Elizabeth, Mrs. Roy.
Oct. 25- Nov. 4	June 23	July 14	...	...	<i>Pompons:</i> Gold Coast, Golden Herald, Yel. Arcadia, Yel. Daisy, Yel. Dot, Mary L. Hall, Pinocchio, Arcadia, Wh. Doty, Pink Dot, Oct. Pink, Jessie, Seneca, Fire Bird, Red Daisy. <i>Standards:</i> Sunglow, Albatross, Snow White, Oct. Rose.
	June 19	July 10	...	Aug. 18	<i>Pompons:</i> Barcarole, Pixie, Yel. Bushnell, Constellation, Sunray, Nuggets, Shasta, Wh. Mensa, Lakme, Rev. Bushnell, Sea Gull, Little America, Dk. Pk. Bulkeley, Masterpiece, Cassandra, Navaho, Red Rust. <i>Standards:</i> Ind. White, Ind. Pink, Dk. Pk. Orchid Queen, Orchid Queen, Ind. Bronze, Ind. Yellow.
	June 14	July 5	...	Aug. 12	<i>Pompons:</i> Princeton, Yel. Fellow, Tally-Ho, Susanne Miller, Seafoam, Priscilla, Vesper, Brocade, Red Princeton, Bittersweet. <i>Standards:</i> Yel. Mefo, Mefo, Jean Elizabeth, Mrs. Roy.
	June 8	June 29	...	Aug. 6	<i>Pompons:</i> Sunnyside, Golden Jane, Yel. Cordova, Cordova, Valencia, Dk. Pk. Valencia, Anemone Valencia, Has. Pink, Apricot Valencia, Yolanda. <i>Standards:</i> Golden Pearson.



### Crop Schedule — continued

To Flower	Plant	Pinch	Lights Off	Shade	Varieties
Nov. 5-14	June 29	July 20	...	...	<i>Pompons:</i> Barcarole, Pixie, Yel. Bushnell, Constellation, Sunray, Nuggets, Shasta, Wh. Mensa, Lakme, Rev. Bushnell, Sea Gull, Little America, Dk. Pk. Bulkeley, Masterpiece, Mrs. Bulkeley, Linda Lou, Cassandra, Navaho, Red Rust. <i>Standards:</i> Yel. Monument, Yel. Queen, Ind. White, Monument, Ind. Pink, Dk. Pk. Orchid Queen, Orchid Queen, Ind. Bronze, Br. Orchid Queen, Ind. Yellow.
	June 24	July 15	...	Aug. 23	<i>Pompons:</i> Princeton, Yel. Fellow, Tally-Ho, Susanne Miller, Seafoam, Priscilla, Vesper, Brocade, Red Princeton, Bittersweet. <i>Standards:</i> Yel. Mefo, Mefo, Jean Elizabeth, Mrs. Roy.
	June 18	July 9	...	Aug. 17	<i>Pompons:</i> Sunnyside, Golden Jane, Yel. Cordova, Cordova, Valencia, Dk. Pk. Valencia, Anemone Valencia, Has. Pink, Apricot Valencia, Yolanda. <i>Standards:</i> Golden Pearson.
Nov. 15-24	June 13	July 4	...	Aug. 11	<i>Pompons:</i> Yel. Cameo, Omega, Cameo, Yukon, Riviera, Debonair.
	July 6	July 27	Sept. 8	...	<i>Pompons:</i> Wh. Mensa, Shasta, Masterpiece, Br. Masterpiece. <i>Standards:</i> Yel. Queen, Orchid Queen, Br. Orchid Queen.
	July 3	July 24	...	...	<i>Pompons:</i> Princeton, Yel. Fellow, Tally-Ho, Susanne Miller, Seafoam, Priscilla, Vesper, L. I. Beauty, Brocade, Red Princeton, Bittersweet, Legal Tender, Red Rolinda. <i>Standards:</i> Yel. Mefo, Marie DePetris, Mefo, Jean Elizabeth, Thanks. Pink, Mrs. Roy.
	June 28	July 19	...	Aug. 27	<i>Pompons:</i> Sunnyside, Golden Jane, Yel. Cordova, Cordova, Valencia, Dk. Pk. Valencia, Anemone Valencia, Has. Pink, Apricot Valencia, Yolanda. <i>Standards:</i> Golden Pearson.
	June 22	July 13	...	Aug. 21	<i>Pompons:</i> Yel. Cameo, Omega, Cameo, Yukon, Riviera, Debonair.
	June 16	July 7	...	Aug. 14	<i>Pompons:</i> Vibrant.
Nov. 25- Dec. 4	July 14	Aug. 4	Sept. 18	...	<i>Pompons:</i> Wh. Mensa, Shasta, Masterpiece, Br. Masterpiece. <i>Standards:</i> Yel. Queen, Orchid Queen, Br. Orchid Queen.
	July 10	July 31	Sept. 12	...	<i>Pompons:</i> Seafoam, Priscilla, Vesper, Brocade. <i>Standards:</i> Yel. Mefo, Mefo, Jean Elizabeth, Thanksgiving Pink, Mrs. Roy.
	July 7	July 28	...	...	<i>Pompons:</i> Sunnyside, Golden Jane, Yel. Cordova, Cordova, Valencia, Dk. Pk. Valencia, Anemone Valencia, Has. Pink, Apricot Valencia, Yolanda. <i>Standards:</i> Golden Pearson, Imp. Yel. Chatt., Golden Mrs. Ross, Chattanooga, Ed. Seidewitz, Helen Frick, Distinction, Oak Leaf, Gladys Pearson.
	July 1	July 22	...	Aug. 31	<i>Pompons:</i> Yel. Cameo, Omega, Cameo, Yukon, Riviera, Debonair.
Dec. 5-14	July 21	Aug. 11	Sept. 28	...	<i>Pompons:</i> Wh. Mensa, Shasta, Masterpiece, Br. Masterpiece. <i>Standards:</i> Yel. Queen, Orchid Queen, Br. Orchid Queen.
	July 18	Aug. 8	Sept. 22	...	<i>Pompons:</i> Seafoam, Priscilla, Vesper, Brocade. <i>Standards:</i> Yel. Mefo, Mefo, Jean Elizabeth, Thanksgiving Pink, Mrs. Roy.
	July 14	Aug. 4	Sept. 16	...	<i>Pompons:</i> Sunnyside, Golden Jane, Yel. Cordova, Cordova, Valencia, Dk. Pk. Valencia, Anemone Valencia, Apricot Valencia, Yolanda. <i>Standards:</i> Golden Pearson, Imp. Yel. Chatt., Golden Mrs. Ross, Chattanooga, Oak Leaf, Gladys Pearson.
	July 11	Aug. 1	...	...	<i>Pompons:</i> Yel. Cameo, Omega, Cameo, Yukon, Riviera, Enchantress, Debonair, Cavalcade, Br. Enchantress. <i>Standards:</i> Wh. Mistletoe, Golden Mistletoe, Pink Mistletoe, Br. Mistletoe.
	July 24	Aug. 14	Oct. 2	...	<i>Pompons:</i> Seafoam, Priscilla, Vesper, Brocade. <i>Standards:</i> Yel. Mefo, Mefo, Jean Elizabeth, Thanksgiving Pink, Mrs. Roy.
Dec. 15-24	July 21	Aug. 11	Sept. 26	...	<i>Pompons:</i> Sunnyside, Golden Jane, Yel. Cordova, Cordova, Valencia, Dk. Pk. Valencia, Anemone Valencia, Apricot Valencia, Yolanda. <i>Standards:</i> Golden Pearson, Imp. Yel. Chatt., Golden Mrs. Ross, Chattanooga, Oak Leaf, Gladys Pearson.
	July 18	Aug. 8	Sept. 20	...	<i>Pompons:</i> Yel. Cameo, Omega, Cameo, Yukon, Riviera, Enchantress, Debonair, Br. Enchantress.
	July 14	Aug. 4	...	...	<i>Pompons:</i> Vibrant, Dec. Gold, Yel. Garza, Garza Sup. <i>Standards:</i> Imp. Tobin's Yellow, Smith's Late White.
	July 8	July 29	...	Sept. 6	<i>Pompons:</i> Yel. Snow, Snow, Revelation.
	July 25	Aug. 15	Sept. 30	...	<i>Pompons:</i> Yel. Cameo, Omega, Vibrant, Cameo, Yukon, Riviera, Debonair.
Dec. 25- Jan. 4	July 17	Aug. 7	...	...	<i>Pompons:</i> Yel. Snow, Snow, Revelation.
	July 25	Aug. 15	Sept. 30	...	<i>Pompons:</i> Yel. Cameo, Omega, Vibrant, Cameo, Yukon, Riviera, Debonair.
Jan. 5-14	Aug. 2	Aug. 23	Oct. 11	...	<i>Pompons:</i> Yel. Cameo, Omega, Vibrant, Cameo, Yukon, Riviera, Debonair.
	July 24	Aug. 14	Sept. 27	...	<i>Pompons:</i> Yel. Snow, Snow, Revelation.
Jan. 15-24	Aug. 9	Aug. 30	Oct. 21	...	<i>Pompons:</i> Yel. Cameo, Omega, Vibrant, Cameo, Yukon, Riviera, Debonair.



BETTER MUMS

Geo. J. Ball  
INC.

FOR FLORISTS



### Crop Schedule—continued

To Flower	Plant	Pinch	Lights Off	Shade	Varieties
	Aug. 1	Aug. 22	Oct. 7	...	<i>Pompons:</i> Yel. Snow, Snow, Revelation.
Jan. 25- Feb. 4	Aug. 17	Sept. 7	Oct. 31	...	<i>Pompons:</i> Yel. Cameo, Omega, Vibrant, Cameo, Yukon, Riviera, Debonair.
	Aug. 8	Aug. 29	Oct. 17	...	<i>Pompons:</i> Yel. Snow, Snow, Revelation.
Feb. 5-14	Aug. 24	Sept. 14	Nov. 11	...	<i>Pompons:</i> Yel. Cameo, Omega, Vibrant, Cameo, Yukon, Riviera, Debonair.
	Aug. 15	Sept. 5	Oct. 28	...	<i>Pompons:</i> Yel. Snow, Snow, Revelation.
Feb. 15-24	Sept. 4	Sept. 25	Nov. 27	...	<i>Pompons:</i> Sunnyside, Golden Jane, Yel. Cordova, Cordova, Valencia, Dk. Pk. Valencia, Anemone Valencia, Apricot Valencia, Yolanda.
	Sept. 1	Sept. 22	Nov. 21	...	<i>Pompons:</i> Yel. Cameo, Omega, Vibrant, Cameo, Yukon, Riviera, Debonair.
	Aug. 23	Sept. 13	Nov. 7	...	<i>Pompons:</i> Yel. Snow, Snow, Revelation.
Feb. 25- Mch. 4	Sept. 12	Oct. 3	Dec. 7	...	<i>Pompons:</i> Sunnyside, Golden Jane, Yel. Cordova, Cordova, Valencia, Dk. Pk. Valencia, Anemone Valencia, Apricot Valencia, Yolanda.
	Sept. 7	Sept. 28	Dec. 1	...	<i>Pompons:</i> Yel. Cameo, Omega, Vibrant, Cameo, Yukon, Riviera, Debonair.
	Aug. 29	Sept. 19	Nov. 17	...	<i>Pompons:</i> Yel. Snow, Snow, Revelation.
Mch. 5-14	Sept. 18	Oct. 9	Dec. 15	...	<i>Pompons:</i> Sunnyside, Golden Jane, Yel. Cordova, Cordova, Valencia, Dk. Pk. Valencia, Anemone Valencia, Apricot Valencia, Yolanda.
	Sept. 13	Oct. 4	Dec. 9	...	<i>Pompons:</i> Yel. Cameo, Omega, Vibrant, Cameo, Yukon, Riviera, Debonair.
	Sept. 4	Sept. 25	Nov. 25	...	<i>Pompons:</i> Yel. Snow, Snow, Revelation.
Mch. 15-24	Sept. 29	Oct. 20	Dec. 31	...	<i>Pompons:</i> Tally-Ho, Seafoam, Priscilla, Vesper, Brocade, Bittersweet.
	Sept. 24	Oct. 15	Dec. 25	...	<i>Pompons:</i> Sunnyside, Golden Jane, Yel. Cordova, Cordova, Valencia, Dk. Pk. Valencia, Anemone Valencia, Apricot Valencia, Yolanda.
	Sept. 21	Oct. 12	Dec. 19	...	<i>Pompons:</i> Yel. Cameo, Omega, Cameo, Yukon, Riviera, Debonair.
	Sept. 11	Oct. 2	Dec. 5	...	<i>Pompons:</i> Yel. Snow, Snow, Revelation.
Mch. 25- April 4	Oct. 6	Oct. 27	Jan. 10	...	<i>Pompons:</i> Tally-Ho, Seafoam, Priscilla, Vesper, Brocade, Bittersweet.
	Oct. 2	Oct. 23	Jan. 4	...	<i>Pompons:</i> Sunnyside, Golden Jane, Yel. Cordova, Cordova, Valencia, Dk. Pk. Valencia, Anemone Valencia, Apricot Valencia, Yolanda.
	Sept. 28	Oct. 19	Dec. 29	...	<i>Pompons:</i> Yel. Cameo, Omega, Vibrant, Cameo, Yukon, Riviera, Debonair.
April 5-14	Oct. 19	Nov. 9	Jan. 27	...	<i>Pompons:</i> Barcarole, Pixie, Yel. Bushnell, Shasta, Wh. Mensa, Lakme, Rev. Bushnell, Linda Lou, Mrs. Bulkeley, Masterpiece, Br. Masterpiece, Cassandra.
	Oct. 14	Nov. 4	Jan. 21	...	<i>Pompons:</i> Princeton, Tally-Ho, Seafoam, Priscilla, Vesper, Brocade, Bittersweet.
	Oct. 9	Oct. 30	Jan. 14	Jan. 14	<i>Pompons:</i> Sunnyside, Golden Jane, Yel. Cordova, Cordova, Valencia, Dk. Pk. Valencia, Anemone Valencia, Apricot Valencia, Yolanda.
April 15-24	Nov. 8	Nov. 29	Feb. 11	...	<i>Pompons:</i> Gold Coast, Golden Herald, Yel. Arcadia, Mary L. Hall, Pinocchio, Arcadia, Pink Dot.
	Oct. 31	Nov. 21	Feb. 6	Feb. 6	<i>Pompons:</i> Barcarole, Pixie, Yel. Bushnell, Shasta, Wh. Mensa, Lakme, Rev. Bushnell, Linda Lou, Mrs. Bulkeley, Masterpiece, Br. Masterpiece, Cassandra.
	Oct. 22	Nov. 12	Jan. 31	Jan. 31	<i>Pompons:</i> Princeton, Tally-Ho, Seafoam, Priscilla, Vesper, Brocade, Bittersweet.
	Oct. 17	Nov. 7	Jan. 25	Jan. 25	<i>Pompons:</i> Sunnyside, Golden Jane, Yel. Cordova, Cordova, Valencia, Dk. Pk. Valencia, Anemone Valencia, Apricot Valencia, Yolanda.
April 25- May 4	Nov. 28	Dec. 19	Feb. 26	...	<i>Pompons:</i> Pristine, Capt. Cook.
	Nov. 21	Dec. 12	Feb. 21	Feb. 21	<i>Pompons:</i> Gold Coast, Golden Herald, Yel. Arcadia, Mary L. Hall, Pinocchio, Arcadia, Pink Dot.
	Nov. 15	Dec. 6	Feb. 16	Feb. 16	<i>Pompons:</i> Barcarole, Pixie, Yel. Bushnell, Shasta, Wh. Mensa, Lakme, Rev. Bushnell, Linda Lou, Mrs. Bulkeley, Masterpiece, Br. Masterpiece, Cassandra.
	Nov. 6	Nov. 27	Feb. 10	Feb. 10	<i>Pompons:</i> Princeton, Tally-Ho, Seafoam, Priscilla, Vesper, Brocade, Bittersweet.

**BETTER MUMS***Geo. J. Ball*  
INC.**FOR FLORISTS**

## Crop Schedule—continued

To Flower	Plant	Pinch	Lights Off	Shade	Varieties
May 5-14	Dec. 12	Jan. 2	Mch. 8	Mch. 8	<i>Pompons:</i> Pristine, Minong, Capt. Cook.
	Dec. 5	Dec. 26	Mch. 3	Mch. 3	<i>Pompons:</i> Gold Coast, Golden Herald, Yel. Arcadia, Mary L. Hall, Pinocchio, Arcadia, Pink Dot.
	Nov. 27	Dec. 18	Feb. 25	Feb. 25	<i>Pompons:</i> Barcarole, Pixie, Yel. Bushnell, Constellation, Sunray, Shasta, Wh. Mensa, Lakme, Rev. Bushnell, Linda Lou, Masterpiece, Mrs. Bulkeley, Cassandra, Br. Masterpiece.
	Nov. 20	Dec. 11	Feb. 20	Feb. 20	<i>Pompons:</i> Princeton, Tally-Ho, Seafoam, Priscilla, Vesper, Brocade, Bittersweet.
May 15-24	Dec. 25	Jan. 15	Mch. 18	Mch. 18	<i>Pompons:</i> Pristine, Minong, Capt. Cook.
	Dec. 18	Jan. 8	Mch. 13	Mch. 13	<i>Pompons:</i> Gold Coast, Golden Herald, Yel. Arcadia, Mary L. Hall, Pinocchio, Arcadia, Pink Dot.
	Dec. 12	Jan. 2	Mch. 8	Mch. 8	<i>Pompons:</i> Barcarole, Pixie, Yel. Bushnell, Constellation, Sunray, Shasta, Wh. Mensa, Lakme, Rev. Bushnell, Linda Lou, Masterpiece, Mrs. Bulkeley, Cassandra, Br. Masterpiece.
May 25- June 4	Jan. 8	Jan. 29	Mch. 28	Mch. 28	<i>Pompons:</i> Pristine, Minong, Capt. Cook.
	Jan. 1	Jan. 22	Mch. 23	Mch. 23	<i>Pompons:</i> Gold Coast, Golden Herald, Yel. Arcadia, Mary L. Hall, Pinocchio, Arcadia, Pink Dot.
	Dec. 25	Jan. 15	Mch. 18	Mch. 18	<i>Pompons:</i> Barcarole, Pixie, Yel. Bushnell, Constellation, Sunray, Shasta, Wh. Mensa, Lakme, Rev. Bushnell, Linda Lou, Masterpiece, Mrs. Bulkeley, Cassandra, Br. Masterpiece.
June 5-14	Jan. 24	Feb. 14	April 8	April 8	<i>Pompons:</i> Pristine, Minong, Capt. Cook.
	Jan. 17	Feb. 7	April 3	April 3	<i>Pompons:</i> Gold Coast, Golden Herald, Yel. Arcadia, Yel. Daisy, Mary L. Hall, Pinocchio, Arcadia, Pink Dot, Oct. Pink.
	Jan. 10	Jan. 31	Mch. 29	Mch. 29	<i>Pompons:</i> Barcarole, Pixie, Yel. Bushnell, Constellation, Sunray, Shasta, Wh. Mensa, Lakme, Rev. Bushnell, Linda Lou, Masterpiece, Mrs. Bulkeley, Cassandra, Br. Masterpiece.
June 15-24	Feb. 7	Feb. 28	April 18	April 18	<i>Pompons:</i> Pristine, Minong, Wh. Jewell, Jewell, Caroline Yosick, Capt. Cook.
	Jan. 31	Feb. 21	April 13	April 13	<i>Pompons:</i> Gold Coast, Golden Herald, Yel. Arcadia, Yel. Daisy, Yel. Dot, Mary L. Hall, Pinocchio, Arcadia, Pink Dot, Oct. Pink.
	Jan. 24	Feb. 14	April 8	April 8	<i>Pompons:</i> Barcarole, Pixie, Yel. Bushnell, Constellation, Sunray, Shasta, Wh. Mensa, Lakme, Rev. Bushnell, Linda Lou, Masterpiece, Mrs. Bulkeley, Cassandra, Br. Masterpiece.
June 25- July 4	Feb. 22	Mch. 15	April 28	April 28	<i>Pompons:</i> Pristine, Minong, Wh. Jewell, Jewell, Caroline Yosick, Capt. Cook.
	Feb. 15	Mch. 8	April 23	April 23	<i>Pompons:</i> Gold Coast, Golden Herald, Yel. Arcadia, Yel. Daisy, Yel. Dot, Mary L. Hall, Pinocchio, Arcadia, Pink Dot, Oct. Pink.
	Feb. 7	Feb. 28	April 15	April 18	<i>Pompons:</i> Barcarole, Pixie, Yel. Bushnell, Constellation, Sunray, Shasta, Wh. Mensa, Lakme, Rev. Bushnell, Linda Lou, Masterpiece, Mrs. Bulkeley, Cassandra, Br. Masterpiece.
July 5-14	Mch. 8	Mch. 29	May 5	May 8	<i>Pompons:</i> Pristine, Minong, Wh. Jewell, Jewell, Caroline Yosick, Capt. Cook.
	Mch. 1	Mch. 22	April 25	May 3	<i>Pompons:</i> Gold Coast, Golden Herald, Yel. Arcadia, Yel. Daisy, Yel. Dot, Mary L. Hall, Pinocchio, Arcadia, Pink Dot, Oct. Pink, Jessie.
	Feb. 22	Mch. 15	April 15	April 28	<i>Pompons:</i> Barcarole, Pixie, Yel. Bushnell, Constellation, Sunray, Nuggets, Shasta, Wh. Mensa, Lakme, Rev. Bushnell, Dk. Pk. Bulkeley, Cassandra.
July 15-24	Mch. 20	April 10	May 5	May 18	<i>Pompons:</i> Pristine, Minong, Wh. Jewell, Jewell, Caroline Yosick, Capt. Cook.
	Mch. 14	April 4	April 25	May 13	<i>Pompons:</i> Gold Coast, Golden Herald, Yel. Arcadia, Yel. Daisy, Yel. Dot, Mary L. Hall, Pinocchio, Arcadia, Pink Dot, Oct. Pink, Jessie.
	Mch. 8	Mch. 29	April 15	May 8	<i>Pompons:</i> Barcarole, Pixie, Yel. Bushnell, Constellation, Sunray, Nuggets, Shasta, Wh. Mensa, Lakme, Rev. Bushnell, Dk. Pk. Bulkeley, Cassandra.
July 25- Aug. 4	Mch. 31	April 21	May 5	May 28	<i>Pompons:</i> Pristine, Minong, Wh. Jewell, Jewell, Caroline Yosick, Capt. Cook.
	Mch. 25	April 15	April 25	May 23	<i>Pompons:</i> Gold Coast, Golden Herald, Yel. Arcadia, Yel. Daisy, Yel. Dot, Mary L. Hall, Pinocchio, Arcadia, Pink Dot, Oct. Pink, Jessie.



BETTER MUMS

Gro. J. Ball  
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FOR FLORISTS



### Crop Schedule—continued

To Flower	Plant	Pinch	Lights Off	Shade	Varieties
July 25- Aug. 4	Mch. 20	April 10	April 15	May 18	<i>Pompons:</i> Barcarole, Pixie, Yel. Bushnell, Constellation, Sunray, Nuggets, Shasta, Wh. Mensa, Lakme, Rev. Bushnell, Dk. Pk. Bulkeley, Cassandra.
Aug. 5-14	April 12	May 3	May 5	June 8	<i>Pompons:</i> Pristine, Minong, Wh. Jewell, Jewell, Caroline Yosick, Capt. Cook.
	April 7	April 28	April 25	June 3	<i>Pompons:</i> Gold Coast, Golden Herald, Yel. Arcadia, Yel. Daisy, Yel. Dot, Mary L. Hall, Pinocchio, Arcadia, Pink Dot, Oct. Pink, Jessie.
	April 1	April 22	April 15	May 29	<i>Pompons:</i> Barcarole, Pixie, Yel. Bushnell, Constellation, Sunray, Nuggets, Shasta, Wh. Mensa, Lakme, Rev. Bushnell, Dk. Pk. Bulkeley, Cassandra.
Aug. 15-24	April 23	May 14	May 5	June 18	<i>Pompons:</i> Pristine, Minong, Wh. Jewell, Jewell, Caroline Yosick, Capt. Cook.
	April 18	May 9	April 25	June 13	<i>Pompons:</i> Gold Coast, Golden Herald, Yel. Arcadia, Yel. Daisy, Yel. Dot, Mary L. Hall, Pinocchio, Arcadia, Pink Dot, Oct. Pink, Jessie, Seneca.
	April 12	May 3	April 15	June 8	<i>Pompons:</i> Barcarole, Pixie, Yel. Bushnell, Constellation, Sunray, Nuggets, Shasta, Wh. Mensa, Lakme, Rev. Bushnell, Dk. Pk. Bulkeley, Cassandra.

## Crop Schedule for Pot Plant Varieties

To Flower	Last Pinch	Shade	Varieties
Aug. 25- Sept. 4	June 28	June 28	<i>Standards:</i> Gold Lode, Celestra, Mrs. Kidder, Yellow Ambassador, Christina, Ambassador, Early October, Justrite.
	June 23	June 23	<i>Pompons:</i> Granite State, White Izola, Pk. Izola, Br. Izola, Red Izola. <i>Standards:</i> Blazing Gold, Golden Glory, Snow White, J. W. Prince, Ivanhoe.
	June 18	June 18	<i>Pompons:</i> Little America, Thyra, Red Melba. <i>Standards:</i> Cardonia, Imp. Honey Dew, Yellow Beauty, Richard Mandel, Queen of Pinks.
Sept. 5-14	July 9	July 9	<i>Standards:</i> Gold Lode, Celestra, Mrs. Kidder, Yellow Ambassador, Christina, Ambassador, Early October, Justrite.
	July 4	July 4	<i>Pompons:</i> Granite State, White Izola, Pk. Izola, Br. Izola, Red Izola. <i>Standards:</i> Blazing Gold, Golden Glory, Snow White, J. W. Prince, Ivanhoe.
	June 29	June 29	<i>Pompons:</i> Little America, Thyra, Red Melba. <i>Standards:</i> Cardonia, Imp. Honey Dew, Yellow Beauty, Richard Mandel, Queen of Pinks.
Sept. 15-24	July 19	July 19	<i>Standards:</i> Gold Lode, Celestra, Mrs. Kidder, Yellow Ambassador, Christina, Ambassador, Early October, Justrite.
	July 14	July 14	<i>Pompons:</i> Granite State, White Izola, Pk. Izola, Br. Izola, Red Izola. <i>Standards:</i> Blazing Gold, Golden Glory, Snow White, J. W. Prince, Ivanhoe.
	July 9	July 9	<i>Pompons:</i> Little America, Thyra, Red Melba. <i>Standards:</i> Cardonia, Imp. Honey Dew, Yellow Beauty, Richard Mandel, Queen of Pinks.
	July 4	July 4	<i>Pompons:</i> Sunray, Orchid Beauty, Gypsy, Red Rolinda, Legal Tender. <i>Standards:</i> Bonaffon De Luxe, Helen Frick, Thanksgiving Pink.
	July 29	July 29	<i>Standards:</i> Gold Lode, Celestra, Mrs. Kidder, Yellow Ambassador, Christina, Ambassador, Early October, Justrite.
	July 24	July 24	<i>Pompons:</i> Granite State, White Izola, Pk. Izola, Br. Izola, Red Izola. <i>Standards:</i> Blazing Gold, Golden Glory, Snow White, J. W. Prince, Ivanhoe.
Sept. 25- Oct. 4	July 19	July 19	<i>Pompons:</i> Little America, Thyra, Red Melba. <i>Standards:</i> Cardonia, Imp. Honey Dew, Yellow Beauty, Richard Mandel, Queen of Pinks.
	July 13	July 13	<i>Pompons:</i> Sunray, Orchid Beauty, Gypsy, Legal Tender. <i>Standards:</i> Bonaffon De Luxe, Helen Frick, Thanksgiving Pink.
	July 8	July 8	<i>Pompons:</i> Yellow Cordova, White Yuletide, Cordova, Beautiful Lady, <i>Standards:</i> Sungold, R. M. Calkins, White Frick, Bronze Frick.





Crop Schedule—Pot Plant Varieties

Table with 4 columns: To Flower, Last Pinch, Shade, Varieties. It lists various mum varieties and their corresponding flowering and shading schedules.

A GOOD POT MUM PROGRAM FOR RETAIL GROWERS

Following program for growing pot Mums has been worked out from past experience by Hans Zoerb of the La Crosse Floral Co. It should be a good starting place for any retail grower in selection of varieties, dates for potting, pinching and shading. The La Crosse Floral pot Mums have been uniformly good. All are grown 3 rooted cuttings in a 6 inch pot.

1ST SHADING starts July 3 (Cuttings received May 10). Granite State, Blazing Gold, Gypsy.

1st pinch May 23 2nd pinch June 13 3d pinch July 3 In bloom early September.

2ND SHADING starts July 17 (Cuttings received May 20). Blazing Gold, Yellow Beauty, Bonnaffon Deluxe, Gypsy, Granite State.

1st pinch June 11 2nd pinch June 29 3d pinch July 17 In bloom mid-September.

3D SHADING starts August 10 (Cuttings received June 10).

Yellow Beauty, Bonnaffon Deluxe, Little America, Gypsy, Queen of Pinks.

1st pinch June 21 2nd pinch July 11 3d pinch Aug. 10 In bloom mid to late October.

NO SHADING (Cuttings received July 5)

Table with 4 columns: Variety, 1st pinch, 2d pinch, 3d pinch. Lists varieties like Blazing Gold, Cardonia, Bonnaffon Deluxe, Sun Gold, Granite State, Gypsy, Queen of Pinks, Beautiful Lady, and Smith's Late White with their respective pinching dates.

In bloom at natural season (refer to catalog listings).



BETTER MUMS

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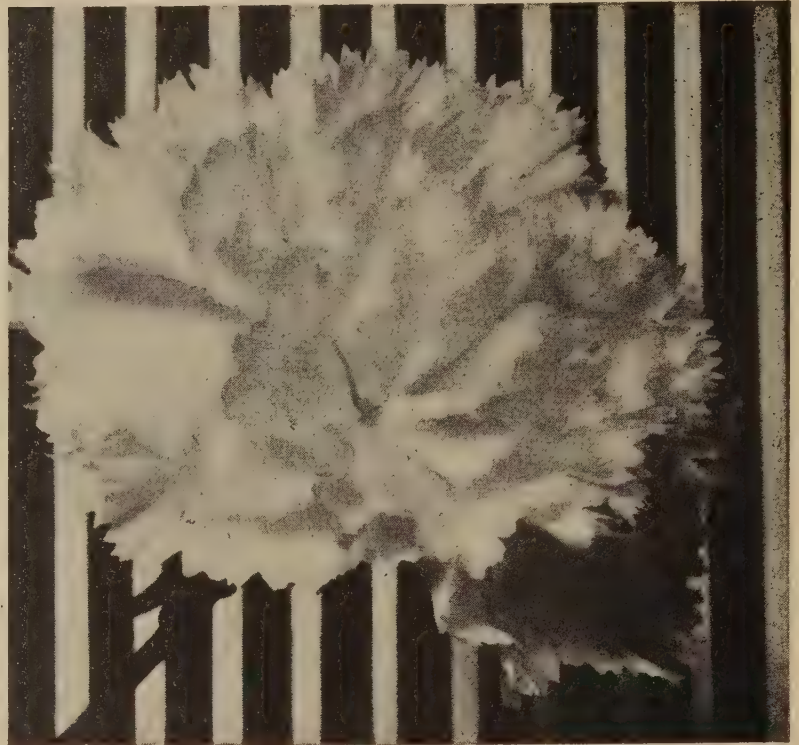
# Carnation Cuttings

The necessity of clean, healthy Carnation cuttings is fully as important to the grower as Mum cuttings that he can depend upon. Because we are cut flower growers ourselves, as well as dealers in Carnation cuttings, we realize how vital good stock is to our customers.

With this thought foremost in our mind we have spared no effort to obtain the very best possible sources of supply for our Carnation cuttings. However, we cannot stress too strongly the importance of ordering early if you want real quality. For example, the new variety "Netta", with practically no advertising, has sold 400,000 cuttings and no more will be available until the winter of '48-'49.

If your stock is disease infested or if you've been wanting to try several of those better new varieties right now is the time to give us your order. We'll give it our very best attention.

**Minimum order 100 of a variety. 250 cuttings of a variety at the 1000 rate. Prices subject to change.**



## New Introductions

	Rooted Cuttings	
	Price per	
	100	1000
<b>Netta.</b> (Restricted). Color, delicate flesh pink. Large full flower on long stiff stems. It flowers early and seldom splits. 400,000 cuttings sold by July 1st— <b>sold out</b> for balance of this season. Place your orders now for 1948-49 delivery .....	\$20.00	\$150.00
<b>Mrs. Virginia Irwin.</b> Giant double sport of Virginia Rose. Color deeper than Hercules Virginia; production equal to Virginia. (Restricted). Limited quantity .....	20.00	150.00

## Standard Varieties

### WHITE

	Rooted Cuttings	
	Price per	
	100	1000
<b>Arundel.</b> Similar in form to Olivette. Many growers prefer it to Olivette .....	12.00	100.00
<b>Casablanca</b> (Patented). Large, fragrant, stiff stems .....	20.00	150.00
<b>Colonel Blimp.</b> New white, originated with Peter Beuerlein's Sons .....	20.00	150.00
<b>Mercury.</b> Pure white, sport of Giant Fisher; stem like Fisher, good shipper, free flowering, fine keeper. No restrictions.....	15.00	125.00
<b>Northland.</b> A large fragrant white. Most in demand of all whites today.....	15.00	125.00

<b>Olivette.</b> One of the better whites. It is noted for steady winter production, symmetrical and spicy flowers, and sturdy medium length stems .....	8.50	75.00
<b>Patrician.</b> A good large white.....	8.50	75.00
<b>White Briry.</b> Fine sport of John Briry but freer flowering. (Restricted).....	15.00	125.00

### LIGHT PINK

	Rooted Cuttings	
	Price per	
	100	1000
<b>Hercules Virginia.</b> Giant light pink sport of Virginia, having the growing qualities of its parent .....	15.00	125.00
<b>St. Louis Pink.</b> Excellent free flowering pink .....	8.50	75.00
<b>Spirit of St. Louis.</b> (Restricted until Dec. 1949). An early, long stemmed variety of the Virginia color, producing a heavy continuous crop .....	17.50	150.00
<b>Virginia.</b> Noted for its steady winter production, lack of splitting, and its clean stems which require very little disbudding.....	8.50	75.00

### SALMON PINK

<b>Charm.</b> (Patented). A quality salmon-pink. Stems are long and sturdy, the flowers large and the calyx is strong.....	20.00	150.00
<b>Ida.</b> Sport of Eleanor; light pink, a shade deeper than its parent.....	8.50	75.00
<b>Pollyanna.</b> (Patented). A steady winter producer of average length; sturdy stems.....	15.00	125.00
<b>Salmon Virginia.</b> A good salmon sport of Virginia .....	12.00	100.00



BETTER MUMS

Geo. J. Ball INC.

FOR FLORISTS



for '47-'48 Season

MEDIUM PINK

Rooted Cuttings Price per 100 1000

Rooted Cuttings Price per 100 1000

Table listing carnation varieties under 'MEDIUM PINK' such as Dorothy Napier, Peter Fisher, Pink Treasure, Rosalie, and Virginia Rose with their respective prices.

Table listing carnation varieties under 'MEDIUM PINK' such as No. 16 Red, Red Charm, Red Seth Parker, Tom Knipe, Victory Red, and William Sim with their respective prices.

DARK PINK

Table listing carnation varieties under 'DARK PINK' such as Chalfant, Dark Pink Fisher, John Briry, Virginia Miller, and Canup's Pride with their respective prices.

Table listing carnation varieties under 'CRIMSON' such as C. W. Weld, Olympic, Seth Parker, and Beuerlein's Crimson with their respective prices.

RED

Table listing the carnation variety King Cardinal with its price.

YELLOW

Table listing the carnation variety Miller's Yellow with its price.

MISCELLANEOUS

Table listing miscellaneous carnation varieties such as Golden Wonder, Pelargonium, Scarlet King, Sylvia, and Frosted Patrician with their respective prices.

Avoid those hundreds of broken Carnations every year with the new "CARNATION PACK." This new flat pack eliminates nearly all breakage, saves packing time, allows about 20% more bunches per box and presents your Carnations more effectively on the market.

PRICES F.O.B. New York

Table showing prices for 1000, 5000, 10,000, and 50,000 carnations per M.

Printing in one color on face of pack \$3.00 per 1000 extra. In amounts of 10,000 or more, one color printing free. (Please state clearly name, address, etc. to be used).

\$8.50 per 100 \$75.00 per 1000



BETTER MUMS

Geo. J. Ball INC.

FOR FLORISTS



General Index

1948 Novelties ... Cover 2, 1
Growing Better Mums ... 2
Instructions for Ordering ... 9
Price List All Varieties ... 9
Crop Schedule ... 15
Carnation Cuttings for '47-'48 Season ... 22
Storm King Cloth Houses ... Inside back
Plant Bands ... Inside back

INDEX OF VARIETIES

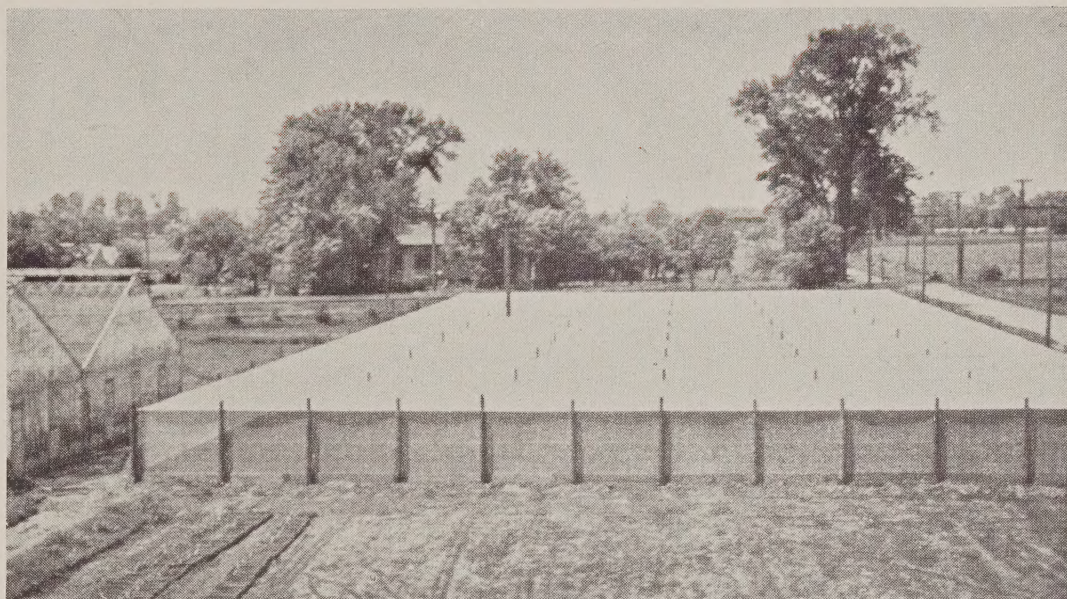
Table with 4 columns: Variety Name, Page, Variety Name, Page. Includes sections A through Y listing various mum varieties and their corresponding page numbers.

# STORM KING CLOTH HOUSES

When You Construct  
That Cloth House  
Use This  
Double-Reinforced  
STORM KING CLOTH

THESE NEW FEATURES  
WILL CONVINCING YOU  
THAT THIS CLOTH  
DOES PROVE  
MOST ECONOMICAL  
IN THE LONG RUN

Available February 1st.



Instead of six to nine spaces of reinforcement to the square yard, we have placed 16 9-inch reinforced squares to each square yard, giving you that necessary added tensile strength to withstand heavy winds and rain storms. The sidewalls are woven 6-foot widths. A 33-foot house will have ten seams in the top. Where the STORM KING CLOTH is sewed together, the heavy selvedge has been rolled and stitched with heavy thread. A new patented aluminum clasp to fasten the cloth to the baseboard every nine inches at the intersection of the heavy selvedge and reinforcement assures proper anchorage. This method also eliminates rotting from dampness.

## AMERICAN BLACK-OUT DRILL CLOTH

*Lightproof and Waterproof  
for  
Shading and Sterilizing*

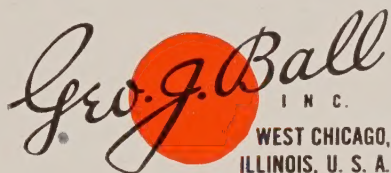
AVAILABLE NOW!  
Order Your Supply

PRICES BLACK-OUT CLOTH  
F.O.B. MILLS

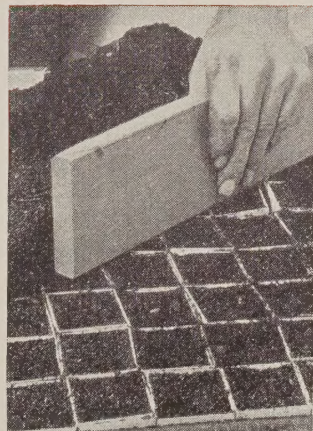
250 square yards.....	<b>\$133.75</b>
500 square yards.....	<b>265.00</b>
1000 square yards.....	<b>525.00</b>

### PRICES STORM KING CLOTH F.O.B. MILLS

250 square yards.....	<b>\$ 52.50</b>	1000 square yards.....	<b>\$195.00</b>
500 square yards.....	<b>102.50</b>	5000 square yards.....	<b>950.00</b>



## Fill Your Growing Needs *with* Ball Better Plant Bands



**EASY TO OPEN**  
Bands come completely assembled. A putty knife quickly opens them.

**EASY TO FILL**  
Lots quicker and more economical than filling small pots one at a time.

Don't forget those Wood Veneer Flats that hold 12 smaller size bands for retail plant sales. Write for full information and samples of bands or flats.

- Made of specially prepared decay-resisting veneer
- Double galvanized-wire stapled to really hold
- Easy to open; come completely assembled
- Easy to fill; lots faster than small pots one at a time
- Transplanting insurance; plants take hold more quickly and with less loss
- Better growth; a band holds more soil than a pot of equal size—no root binding
- Uniform moisture; close fitting wood bands dry out less rapidly than clay pots
- Bands come packed in valuable greenhouse flats at no extra cost to you.

### BALL BETTER PLANT BANDS

Ball Better Bands are made of decay-resisting wood veneer double-stapled with galvanized wire. Aeration and drainage of these bands are important points. Prices are F.O.B. our midwestern factory. Specify whether to ship by express or freight. Bands shipped in units of 2000 each, packed in 2 rot-resistant greenhouse flats. Please order in units of 2000 only. Smaller quantities, in corrugated boxes at 10% additional. Write for special prices on large quantities. Remember—a flat with every thousand bands.

Size	Price per 2000-unit	Size	Price per 1000-unit	These sizes packed in units of 250	Price Per 1000	Bottoms for following sizes	Price Per 1000
2x2	\$ 8.20	3x4	\$ 6.70	3x4	\$ 3.25	3x4	\$ 3.25
1 3/4 x 2 1/2	8.40	4x3	6.70	4x3	3.75	4x3	3.75
2x2 1/2	9.40	4x4	7.75	6x6	\$21.00	4x4	4.50
2x3	9.90	4x6	15.80	6x9	28.00	4x6	5.90
2 1/2 x 2 1/2	10.20					6x6	9.90
2 1/2 x 3	10.60					6x9	15.80
3x3	11.50						

### BIRD FIBER PLANT BANDS

Bird Fiber Bands are of waterproof composition which requires less frequent but more careful watering. Sold in units of 1000 only. Prices F.O.B. East Walpole, Mass., or West Chicago, Ill. Quantity Discounts: 1000 to 49,000 net; 50,000 to 200,000 5%; over 200,000 10%.

Vita-Band 40	1 1/2 x 2 1/2	1 3/4 x 2 1/2	2x2 1/2	2x3	2 1/2 x 3	3x3	3x4
Vita-Band 10	\$2.70	\$4.25	\$4.70	\$5.05	\$5.50	\$6.30	\$7.35
		2.90	3.25	3.75	4.15	4.55	5.90

*Geo. J. Ball*  
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WEST CHICAGO,  
ILLINOIS, U. S. A.



### *Pinocchio*

Offered by us in '46, it has proven the last word in hard, paper white Pompons. As choice for shading as for normal late October flowering. The stock we offer of Pinocchio and all other varieties is from plants that were inspected by us last fall and showed no indications of "stunt."

Price \$6.00 per 100;  
\$60.00 per 1000.

*Geo. J. Ball.*