Flowers Every Day in the Year

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Peonies at South Dakota State College

HORTICULTURE DEPARTMENT
AGRICULTURE EXPERIMENT STATION
SOUTH DAKOTA STATE COLLEGE OF
AGRICULTURE AND MECHANIC ARTS
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FLOWERS EVERY DAY IN THE YEAR

N. E. Hansen

To have flowers on the table every day in the year is a dream of beauty that can be realized in South Dakota. It is done with bulbs during the winter and early spring, perennials in the spring, summer and fall, and annual flowers and summer bulbs during the summer and early fall. During the past twenty-nine years at this station, the writer has experimented with hundreds of varieties of these various flowers. A brief account of the main successes will be of interest for the prairie planter at this time. The flower specialists would like a full account of the failures as well, but this would not be as interesting to read as an account of the successes.

The indoor flower season begins with the Paper White Narcissus and Golden Paper White Narcissus bulbs. These are imported from Europe as early as the bulbs are ripe in the fall. The Paper White Narcissus is easily the best of the early bulbs. As soon as received the bulbs are planted in pots or flats and put away for six or eight weeks in a
dark place, as in a pit or outdoor potato cellar. Here they are covered with leaves or straw and kept until the roots are well formed and then they are gradually brought up to the light, a flat or two at a time, to provide for succession of bloom. During the winter come many kinds of yellow and white Narcissus and Daffodils. Narcissus Von Sion is one of the best of the double yellow. The early blooming Tulips come next, followed by the Darwin Tulips which come on into spring. Full directions for growing bulbs are given by the seedsman or florist who furnishes the bulbs. Late in the fall before the ground freezes, the Dutch tulips should be planted as soon as received from Holland. Plant both the single and double tulips in as many varieties as possible. The bed should be mulched with straw over winter. In the spring they will furnish a brilliant and wonderful display. Darwin tulips should not be omitted. Some of the Darwins do not force well and are best grown outdoors. The Cottage and Breeder tulips are desirable also.

Mrs. F. C. Berven of Turner County, South Dakota, told of her experience with tulips to the South Dakota State Horticultural Society as follows:

"Tulip time is paradise in my garden—first the early ones, hundreds of them in 25 named varieties planted in separate colors. Next come the Darwin, Breeder and Cot-
tage tulips, the most gorgeous imaginable in their rich reds, rose, yellow, bronze, purple, lavender, white, growing 2 to 3 feet tall with blooms as large as cups. These are nearly always in bloom by Mother's Day."

Of the Japanese lilies, *Lilium speciosum rubrum* is one of the easiest flowers grown for indoor use, and the bulbs are now carried over in cold storage to furnish a constant supply for florists and amateurs throughout the year.

During the winter many varieties of Geraniums do well and are common household favorites. There are many good varieties such as S. A. Nutt, Poitevine, Ricard, Gloede and Madame Buchner. These are some of the choicest standard sorts. If there could be only one blooming plant in the bay window most people would probably select the Geranium.
A few foliage plants are needed for jardinieres to use in floral decorations. Two that stand the ordinary house air as well as anything are the *Aspidistra lurida* and Bow-string Hemp (*Sansevieria zeylanica*). Both are members of the Lily family.

Various ferns do well, especially the Boston Fern. There are many other house plants, but the above will be a good first selection.

**Annual Flowers**

Along in March preparation must be made for the annual flowers by repairing old flats and making new ones in which to sow the seeds.

Zinnias have been improved to wonderful size and beauty the last few years. To secure better harmony of colors, it is best to sow seed of each color by itself, rather than mixed seed. The Zinnia will give more bloom for the money perhaps than any other flower. Sow the seed in flat boxes and transplant once before setting in the field the first of June. Zinnias do quite well from seed sowed outdoors after danger of frost is past.
Perennial Phlox

The Aster is a standard favorite with florists and amateurs. The seed of choice varieties is expensive, so it is best to sow the seed in flats and transplant.

Tall Nasturtiums can be grown without support as they pile up into a low hedge when sown in single rows. These give more abundant blossoms on poor sandy soil than on soil that is too rich.

The Calendula has been improved greatly in recent years. The rich orange color of Calendula Orange King makes it a general favorite, so much so that it is now being grown by florists to supply the market during the winter.
Sweet Peas are indispensable in every garden. They have been developed to marvelous size in recent years, both for indoor and outdoor planting. It is well to plant Sweet Pea seed early and the season may be lengthened by planting a few seeds in pots and transplanting into the garden as soon as danger of frost is over.

Bachelor's Buttons, *Centaurea Cyanus*, are indispensable in a flower garden, as they furnish the deep blue color which is so useful in bouquets.

Candytuft and Sweet Alyssum are annuals that do well by sowing at intervals in the garden, and furnish an abundance of small fragrant white flowers.

Balsams are obtainable in many colors and do well from seed sown outdoors.

Snapdragons have been greatly improved in recent years and make a wonderful display both in garden and greenhouse.

California Poppy (*Eschscholtzia*) should be included in every garden to furnish the deep orange color. There are several other colors now obtainable.

French Marigolds do very well from seed sown in the open. Mignonette is readily grown and the small fragrant flowers in rather neutral colors are useful in bouquets.
Portulaca is especially good for dry sandy places in full sunlight.

Cosmos when first introduced from Mexico was too tall and blossomed too late, but in recent years early dwarf varieties can be obtained. The fragrant flowers are very acceptable in late summer. Cosmos plants may be taken up and potted to finish their blooming inside if desired. The long stems and sweet fragrance make them acceptable on the large city flower markets.

Nicotiana affinis is a near relative of the Tobacco plant. It has large white flowers of pleasing fragrance and is easily grown. The plants can be taken up in the summer and potted for the window garden.

Four O'Clock (Mirabilis Jalapa) is an old favorite. The roots may be taken up in the fall, stored in sand in the root cellar over winter and transplanted in the spring.

Pansies are indispensable in the garden and may be easily started from seed and then transplanted to the garden. The Pansy has been improved greatly in recent years.

Celosia or Cockscamb has been greatly improved, the Chinese Wool Flower being one of the latest. They are good for flower beds.
The Everlastings are annual flowers which are indispensable. There are many varieties which are highly prized for winter bouquets. Helichrysum or Straw Flower is one of the best. The flowers intended for winter use should be gathered before they are fully open, tied in bunches and hung on a line in a warm dark room where they will dry thoroughly in about ten days. They can then be put away in pasteboard boxes in a dry place.

The writer has tested over three hundred kinds of annuals, most of which can be grown successfully in South
Dakota gardens. It will not be necessary to include a full list at this time. No two persons would agree on a list of the best annual flowers. The above list includes some of the best. In sowing most flower seeds outdoors, make the soil fine and mellow, press seeds firmly into the moist soil with the hand, cover very lightly with loose earth; in other words, have a firm seed bed with loose earth on top to prevent baking. Plant large seeds deeper. To prevent baking and a crust forming which hinders the germination of seeds, a strip of burlap, lath or muslin is useful as partial shade until the plants appear.

Peonies at the Corner of a Brookings Residence

**Herbaceous Perennials**

These are plants whose roots live over from year to year indefinitely, and the tops die down every winter. Nearly 3,000 varieties may be obtained from the specialists in perennials. Several hundred varieties of perennials have been tried at this station. Among such a large list it is difficult to make a choice.

**Peony**

The Peony is undoubtedly the best herbaceous perennial for general cultivation. The Japanese Tree Peonies are shrubs and winterkill in the Northwest. We have several hundred varieties of Peonies under trial here in the station
gardens. An effort is being made by the American Peony Society to reduce the number of varieties. One can cover the range of colors in perhaps about sixty varieties. For small gardens, the moderate priced old varieties in white, pink and red should be included. Some varieties cost $10.00 or more per root. They are the named varieties selected from thousands of seedlings. The demand for some of the fancy varieties increases faster than it is possible to propagate them. Of some of the older varieties one can get very good colors for fifty cents to one dollar per plant, but it will be hard to refrain from buying some of the choicest sorts that are higher priced. There are some extensive collections now in South Dakota. The main thing to remember is that the common Peony is a native of Siberia, which perhaps explains the hardiness. The Peony is hardy in the Dakotas and far north into Canada.

**Other Perennials**

The Iris is the national flower of France and can be obtained in hundreds of varieties. The Japanese Iris are not hardy, but the Siberian Iris and German Iris are hardy. The new varieties are high priced but very desirable. How-

Balloon Flower (Platycodon)
ever, a splendid showing can be made with the older and less expensive standard sorts.

The third most important perennial is the Phlox, which can be obtained in various colors, especially of pink, white and red, and furnishes an abundance of bloom later in the season.

The Gas Plant or Fraxinella is an old garden favorite which has proven very hardy and is a free bloomer. One variety has rosy purple flowers and the other has white flowers.

The Balloon Flower, Platycodon, a native of East Asia and Japan, is noteworthy for its large blue flowers which are inflated in bud, hence the name Balloon Flower. There is a white variety also. Both are hardy and desirable.

Oriental Poppies have blossoms of brilliant colors and gigantic size, but must be mulched over winter.

The small creamy white flowers of Bocconia cordata or Plume Poppy are useful in bouquets and the plant is good for a group in a corner.

Baby's Breath (Gypsophila paniculata) is very useful for adding grace and beauty to a bouquet with its multitude of small white flowers.

Other choice perennials have done well here. The following are promising for general cultivation: Golden Glow (Rudbeckia laciniata fl. pl.), Aquilegia, Day Lily or Lemon Lily (Hemerocallis), Delphinium, Gaillardia aristata, Tiger Lily, Papaver, Dicentra, Coreopsis. Hollyhocks need heavy winter mulching.

Many of the native South Dakota perennials, such as Penstemon or Beard-tongue, lilies, Blazing Star, Sunflowers (especially Helianthus Maximiliani), Yucca and many others deserve a place in the garden. Bear-grass or Indian Soapweed (Yucca glauca, Nutt.), is common in the uplands, especially on bluffs from the Missouri valley to the Black Hills.

Mrs. R. L. Cheney has experimented largely in perennials in the upland prairie region west of Pierre at Milesville, Haakon County. In the Dakota Farmer for March 1, 1924, Mrs. Cheney describes the following as having done well at Milesville: Gypsophila paniculata (Baby's Breath); Hemerocallis (Day or Lemon Lily); Hesperis matronalis (Sweet Rocket); Liatris (Blazing Star), the native variety; Linum perenne (Blue Flax); Lilium tenuifolium (Siberian
Gladiolus Show at South Dakota State College. Part of a Collection of Over 500 Varieties.
Coral Lily); Lychnis chalcedonica; Lychnis viscaria splen-dens; Lythrum roseum superbum; Malva moschata (Musk Mallow); Mertensia (Blue Bells or Lungwort); Nepeta mus-sini; Oriental Poppies; Physostegia virginiana (False Dragon Head); Platycodon mariesii (Balloon Flower); Platycodon grandiflora; Platycodon Japonica fl. pl.; Pyrethrum roseum (Chrysanthemum coccineum); Saponaria (Bouncing Bet); Statice latifolia; Valeriana officinalis (Garden Heliotrope); Verbascum (Mullein); Veronica (Speedwell).

**Summer Bulbs**

The best summer bulb for South Dakota gardens is the Gladiolus. The Gladiolus in the hands of plant breed­ers of Europe and America has now reached most wonderful development. About three thousand varieties have been named. Many of these are no longer in cultivation, having been superseded by newer varieties. Our State College collection comprises over 500 varieties. The past three years Gladiolus shows have been held at the State College and at the State Fair at Huron. The first planting is made about the middle of May, followed by another planting every ten days until the last week in June. This will provide for a succession of flowers clear up until frost. As soon as the leaves are touched by frost in the fall the bulbs should be dug, the tops cut off, and the bulbs stored along with po­ta­toes in an outdoor root cellar. Dahlias may be treated the same way, and are perhaps next in importance to Gladiolus. The roots are stored in much the same way as Gladiolus.

**Choice Hardy Shrubs**

During the summer many hardy shrubs will furnish flowers for the table. The following will all furnish abun­dant flowers: Spirea Van Houttei; Tartarian and Siberian Bush Honeysuckles; Siberian Rosa rugosa; Tetonkaha rose; Harison’s Yellow rose; Golden Currant; Siberian Pea Tree (Caragana arborescens); Common Lilac; Persian Lilac; Vil­losa Lilac; Snowball; Juneberry; Siberian Dogwood; Western Sand Cherry; Siberian Almond; Mock Oranges; Coton­easter acutifolia; Silver Berry, Burning Bush; Tamarix Amurensis; High Bush Cranberry; Snowberry; Buffaloberry; Viburnum Lentago; Siberian Sand Thorn; Elderberry. In ornamental trees, the Hopa Red Flowered Crab and Cathay Crab; Stanapa and Cistena, the Purple Leaved Sand Cher­ries, and Champa Sand Cherry.
Flowers at a Church Wedding

The Arrangement of Flowers

For cut flowers it is best to have a vase or low bowl with a glass flower holder into which the stems may be inserted. In using these low bowls, try the Japanese plan of not having the stems all the same length. If they are all the same length it gives more of a "cabbage head" effect, while if they are of different lengths the flowers are displayed much more effectively. Try displaying the flowers in one, three, five or seven stems, and note the effect. Study color harmony. If the flowers are orange or yellow, try using a blue vase or bowl. In the fall these low bowls are useful for displaying sprays bearing the fruit. The native Waxwork or Bittersweet and Highbush Cranberry are effective used in this way.

The foregoing list will furnish flowers every day in the year. It is well to have some of the dried and prepared foliage and greens to fill in between times when the home supply is not available and there is no greenhouse nearby. The soil and climate of South Dakota are favorable to the production of a large variety of flowers.

"Say It With Flowers"

This slogan has been adopted by the florists of the United States. All through life flowers express the message of friendship and love.

"He who careth for flowers, careth also for Him."