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# LIBEX  * FEB 25192 加 <br> U. S. Deparixemt of Agroantute. Catalogue of <br> ROCKMONT $\mathcal{F} U R S E R Y$ 

Including New or Noteworthy Plants


Euploca, Wild Heliotrepe, - Seeds

## D. M. ANDREWS

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\text { P. O. Box } 493
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Boulder, Colorado

## News of the Nursery

When I make a mistake I like to discover it for myself. The next best is for the one who makes the discovery to come directly to me for correction, rather than-well, let's not follow that idea any farther.

Last fall, during the busiest of the shipping season, a small order from New Jersey was wrapped up for parcel post and the tag correctly addressed, except the name of the state, which was written New York instead of New Jersey. After about a week the parcel came back for "Better Address," and supposing it would have to be refilled with fresh plants it laid on my desk over the week end without attention. When it was unpacked, imagine my agreeable surprise to find every plant in perfect condition, ready for the journey back to the correct address in New Jersey where it undoubtedly arrived safely a few days later. Perhaps it was worth while to make such a mistake-just once-to learn that my packing was even better than I supposed.

Sever times I have spoken of irrigation, which is such a necessary feature in the successful cultivation of plants in this semi-arid climate with an annual rainfall of only fifteen to eighteen inches. Besides the use of ditch water, which is conducted alongside the rows of plants, part of my fields are under the Skinner System of overhead irrigation which supplies "Rain when you want it." This has proven so satisfactory that I have added to it from time to time, putting an added burden each time upon the old pump and motor. This winter marks the installation of a new supply plant, including storage for a magnificent spring of pure mountain water, a new pump-house and electric pump of much greater capacity. The point is that "Rain when you want it" and as much as you want, is an eminently practical solution of one phase of the ever-present problem of "Better Plants" for my customers.

Several thousand miles of travel last summer over the les:sfrequented roads of Colorado and Wyoming secured for trial in the nursery a goodly number of exceedingly attractive new plants which promise much indeed for American Rock Gardens. If all goes well and the plants themselves prove able to thrive under ordinary garden conditions, you may look for a more extended announcement in the fall catalogue.

My slogan, New or Noteworthy Plants, must not imply that mere novelty is the key to a place on my plant lists. I find myself more and more critical of plant values and more inclined to emphasize the "worth" in Noteworthy, and so arrive at the conclusion that Beauty and Dependability must needs go hand in hand; and that beanty and charm without dependability cannot for long establish the fairest flower in our gardens.

Sincerely,
DARWIN M. ANDREWS.

## Nursery Extension Service

My ambition as owner-manager of Rockmont Nursery is to make sure that its best service shall be extended, at your convenience, to you and your garden, as closely as modern facilities will permit.

The latest catalogue (note the date) is your guide book to give information and save your time and mine. It is mailed free to all who occasionally declare a receptive mood, without obligation to buy. If it is of no use to you and not likely to be in the future, will you kindly inform me, and I will correct my records accordingly.

Easy to Order. If you are entitled to credit you can merely jot down a memorandum of what you want, mentioning quantity and grade, and upon receipt, your order will be acknowledged and placed on file for delivery at the proper season. Bill will be rendered following delivery, including transportation cost if parcel be mailed.

Cash Earns Free Delivery. To indicate my appreciation of cash business, which eliminates the need for accounting and billing, I am announcing free delivery, anywhere in the United States, of everything in the catalogue for cash with order, except evergreens and shrubs. Evergreens and shrubs are to be shipped by express, purchaser paying charges.

Note. Free delivery items if included with an express shipment, or if ordered by express, are not subject to a discount or price reduction, but heavier stock or extra count will be given in compensation.

Safe Delivery is assured and guaranteed in the ordinary course of parcel post and express. An immediate report of loss or damage with full particulars is required for adjustment. Where terminal inspection is maintained, delays or losses incident to the regulations of receiving states are to be assumed by the purchaser.

Moisture-proof wrapping materials which are used for all packing make it easy to retain all the natural freshness of our superior irrigation-grown plants to the end of the road, and at the same time eliminate unnecessary weight.

## Terms and General Information

This is the General Catalogue of Rockmont Nursery for the season, 1928, including New or Noteworthy Plants and Seeds. The supply of stock is expected to be sufficient and available, both spring and fall, without change in price, except such change as shall be indicated in the Fall Catalogue which will be issued about September. The Fall Catalogue will include additional offerings of seasonable stock, particularly Rock Plants and Alpines, Peonies and Lilies.

Very Important. In making up your order this spring, please do not include items from the fall catalogue, nor from any old catalogue. The catalogues are all plainly dated so you need make no mistake.

Special Items. Because I list so many unusual plants, there come to my desk inquiries, from advanced collectors who want other rare species to complete their collections, or requiring information, or plants for experimental or other uses. I would gladly comply with these requests, but my facilities and time do not permit. To go out and gather wild plants not listed in the catalogue is practical only when a large quantity of one kind is required.

Canadian and European correspondents who receive this catalogue are requested to limit their orders to seeds, remitting cash in full with order.

Time of Delivery. Seeds can be furnished at any time during the entire season. The spring shipping season for plants opens in March, subject to weather conditions, and continues through the month of April, ending May 1st to May 15th, evergreens comprising the bulk of late shipments. Lilacs and other plants which start growth early should be ordered early enough to permit delivery before April 15th.

I aim to time deliveries to suit the convenience of purchasers, but the inevitable rush season can be partly overcome if patrons will order early and accept delivery when most practicable. When delivery is required at a particular date it should be clearly stated in your order.

Errors._-Report errors or other claims promptly. Promptness will assist in making corrections that will be satisfactory. Always keep a copy of your order for comparison.

Substitution. I do not substitute without permission, except to close small balances of less than one dollar. Price of stock that cannot be furnished will be refunded to cash customers as promptly as an accounting can be made immediately following the shipping season. Those who will mention a few substitute items may depend upon liberality in case it becomes necessary to make use of them.

Address communications and make checks payable to D. M. Andrews. P. O. Box 493, Boulder, Colorado.

## Culture of Mountain Flowers

Most garden flowers grow well in Colorado, and, conversely, most Colorado mountain flowers that I can grow at Rockmont Nursery should grow well in all the Northern and New England states. Reports come in from east and west proving that little difficulty is experienced by those who have fairly good facilities.

Water and sunshine are universal and their relation to plant growth is much the same everywhere. With soil it is different, and the secret of success, if it can be called a secret, is almost entirely a matter of soil. The best guide to soil for any plant is a study of the natural soil in which each species thrives. Like other investigations involving much study the answer is simple, and is based upon the preference of the plant for soil which is acid or alkaline.

A few plants flourish in alkaline soil. The majority of garden plants, both shrubs and flowers, make their best growth in soil that is nearly neutral, that is neither very acid nor very alkaline. If they seem to have no preference they are classed as indifferent or tolerant. A very important group of plants including many of the Rocky Mountain alpines and subalpines, grow in soil composed partly of humus, with a granite base, and which has a definite acid reaction. While some of these plants may prove indifferent, it is safe to assume that they will thrive best in an acid soil which may be produced by adding humus in the form of leafmold or granulated peat; or if it is known to contain much lime it may be replaced with the right mixture. A soil basis of sandy loam having good drainage will accommodate the largest number of species so far as texture is concerned. Commercial tannic acid dissolved in water may be used two or three times a year on acid-requiring plants at the rate of an ounce or less to the square yard, but occasional soil tests should be made to avoid excess.

Most of the mountain flowers have a preference for acid soil, but not many demand more than minimacid, which is just a turn from neutral, pH values 6.5 to 6.0 . Among those of acid preference quite certainly are Aconitum, Anemone patens, Aquilegia coerulea, Bistorta, Caltha, Clematis, Dodecatheon, Erigeron, Erythronium, Gentiana, Mertensia, Primula, Polemonium, Ranunculus, Synthyris, Trollius, Valeriana and Zygadenus. Among shrubs should be included Betula glandulosa, Holodiscus, Jamesia, Pachistima and the alpine species of Salix. With a few exceptions the other plants of this catalogue may be understood to prefer a neutral soil unless otherwise stated.

For additional suggestions and details of rock gardening and the culture of alpines, various books are obtainable, especially those of Mrs. Louise Bebee Wilder and Mr. Herbert Durand, which are dependable for American conditions and supply from actual experience the information needed by the average grower.

Seed Planting. The same suggestions for soil preparation apply to the seed bed. Soil of a fine sandy texture facilitates drainage, prevents crusting, retains moisture and tends to develop fiberous roots.

The time for sowing seeds may depend upon local conditions or may be perhaps a matter of personal preference or convenience. Very early spring has its advocates, but in this climate late frosts
often damage the tender growth, so it has become my practice to sow during the early summer which has resulted in better stands and aroids the first crop of weeds which may be destroyed before planting the seeds. I make the beeds four feet wide, over which are supported lath shades 15 inches abore the bed. They are watered from a fine orerhead spray. I use a planting board which indents the rows, three at one time, six inches apart. The mark is very shallow for fine seeds and they are covered very thinly with fine sifted sand. Temperatures must not reach a high degree, and in our dry climate this is easily regulated by sprinkling, which cools quickly by evaporation. In a humid or very hot climate seeds may be planted earlier or later to avoid the extreme heat of midsummer.

It frequently happens that some kinds do not germinate for several months after planting, but the same care, irrigation and careful weeding is exactly the right treatment for the slow ones. Large seeds should be covered deeper; I use the fine sand in all cases, but a different planting board to mark the furrows deeper. I am a firm believer in shallow planting with careful attention to watering, and I am sure that much failure results from too deep planting or from the crust that forms when covered with heavy soil.

Most shrub seeds and a few perennials known to germinate slowly, I plant late in the fall and mulch with sphagnum or excelsior. The use of coldframes or a greenhouse may sufficiently adrance many seedling perennials to induce flowering the first season.

A British author gives the following "Hints on the Management of Choice Seeds. Sow in well-drained pans, in finely sifted sandy, leafy sōil. Scarcely corer small seeds. Place in shaded close frame or cool greenhouse. Water from below or with fine rose. * * * Many seeds germinate in a few weeks, some in a few days, while others take one or even two years. * * * Many valuable seeds are ruined by slugs, also by allowing them to get dry during the critical period of germination."

## Evergreens

Few people realize the time it takes to grow evergreens in the nursery. Trees with well developed roots and tops take from seren to ten years to grow. At that time they will be two, three or four feet in height. Such trees carefully transplanted are ready to make rapid progress, because they have reached the size when growth becomes more rapid, and having been several times transplanted the earth ball encloses practically the entire root system. "Collected" wild trees from the mountains have poorly furnished tops and inferior roots.

There are two seasons in which evergreens can be transplanted with safety,-spring and fall. The spring-planting season begins about March 15th and lasts till May 15th, with a little variation on account of season and weather. The fall-planting season should not start before September 15th and may conllnue through November. Early planting at either season is advantageous. Fall planting is not advisable in localities much exposed to wind during winter.

Planting and care. Good intentions make an excellent starting point in tree planting, but very often they stop short of the goal. A good tree, well grown, deserves nothing less than to be well
planted and to have suitable care for at least two seasons. To neglect watering in the dry climate of Colorado is far more serious than where rainfall is plentiful, and one such failure may cost the life of the tree.

Specimen evergreens should be delivered with a firm ball of earth enclosing and protecting the roots, and this should be securely wrapped with burlap. Dig the hole somewhat larger and deeper than the dimensions of the ball and fill back only enough to let the tree stand an inch or two lower than when growing in the nursery. Partly fill space around the ball, making sure that the tree stands erect and faces to the best advantage, then tamp firmly. Now cut the burlap away from the top of the ball or turn it down and finish filling, tamping firmly and leaving a depression to aid in watering. If the earth is moist, water only after the planting has been finished, applying enough to thoroughly soak the ground to the depth of the ball. Water regularly in the same thorough manner all the first season; once in ten days during cool weather of April and May, once a week for ordinary summer weather, and twice a week when extremely warm. Late July and August is the most critical period and many trees die from neglect at that time but the harm is not discovered until they fail to start the following spring, and then it is too late. After August water less often, finishing with one in November if the season is dry. The amount of water to apply at one time must depend upon conditions including the texture of soil: the basin should be filled one or more times, after which a test may be made by pushing down a slender wire rod, which should go easily where the earth is moist. Care during the second season should be a repetition of the first but the requirements are not quite so exacting; and so on for subsequent years, the rapidity of growth depending very much upon the care received.

Prices. For the reason that evergreens are grown principally for a local trade, the prices are quoted for trees at the nursery and do not include transportation or delivery. The prices are based on first grade stock, dug with ball and burlaped. When necessary to box or crate for shipment the cost of same is additional and an estimate, if desired, will be furnished. The weight of large trees should be considered if shipping a long distance as the transportation charge may equal the cost of stock. Delivery by motor truck is advised where service is available. Trees selected in the nursery and reserved will be charged for according to value, which may be more or less than the printed prices.

Juniperus pfitzeriana. Pfitzer's Juniper. A low, broad evergreen of plumose habit with blue-green healthy foliage. Spread, 12 inches, $\$ 2.00$.

Juniperus sabina. Savin Juniper. A low-spreading, manybranched evergreen with dark green foliage. The half-ascending poise of the branches, dwarf habit and the ease of culture all combine exceptional value with no faults. Spread, 3-4 feet, \$5.00.

Juniperus scopulorum. Colorado Silver Juniper. Of formal, compact upright habit, it is particularly pleasing for the feathery texture and silvery-blue luster of its foliage. Its color and freshness is retained well through the winter and the tree holds its lower branches and symmetrical form longer than other types. This is the superior type found only in the higher foothills of northern

Colorado. Height, 18 inches, $\$ 2.00 ; 24$ inches, $\$ 3.00 ; 30$ inches, $\$ 4.00$; 36 inches, $\$ 5.00 ; 42$ inches, $\$ 6.00 ; 48$ inches, $\$ 7.50 ; 60$ inches, $\$ 10.00$; 72 inches, $\$ 12.50$.

Picea pungens. Colorado Spruce. One of the hardiest and most universally successful of spruces. Green and slightly blue form. 24 inches, $\$ 3.50 ; 30$ inches, $\$ 4.50 ; 36$ inches, $\$ 6.00$.

Picea pungens glauca. Colorado Blue Spruce. My selected blue specimens are often equal in color to the Koster variety and are more symmetrical than when grafted. The blue color does not reappear at its best after transplanting till the trees are fully established. 24 inches, $S 6.00 ; 30$ inches, $\$ 8.00 ; 36$ inches, $\$ 10.00 ; 42$ inches, \$12.50; 48 inches, $\$ 15.00$.

Picea canadensis. Black Hills Spruce. One of the hardiest of. all spruces, symmetrical, compact, dark green. Easily grown and fine for contrast. 30 inches, $\$ 4.00 ; 3$ feet, $\$ 5.00 ; 4$ feet, $\$ 7.50 ; 5$ feet, $\$ 10.00$.

Pinus flexilis. Limber Pine. One of the best and most easily grown of the native pines; dark green foliage of soft texture; of the White Pine group. Two feet tall, $\$ 3.00 ; 3$ feet, S5.00; 4 feet, $\$ 7.50$.

Pinus Mughus. Dwarf Mugho Pine. One of the most desirable of dwarf evergreens; only small stock can be furnished; twice transplanted, 10-12 inches spread, $\$ 1.75$.

## New or Noteworthy Shrubs

Many of the following are native species of hte Rocky Mountain region. All are hardy without snow or other protection to twenty degrees below zero. Everything offered is first class nursery-grown stock. Probably all the shrubs except those listed for rock gardens are indifferent to acid or alkaline soil; at least they thrive under a variety of conditions and exactly the same conditions required by the majority of deciduous shrubs. Nearly all grow best under full sum exposure and are now growing in nursery rows, cultivated and irrigated, no longer "wild" but very tame and tractable. I recommend them both for novelty and utility.

Not prepaid. The shrubs of this list are not priced prepairl. Light but efficient packing makes low transportation cost which is to be paid by purchaser at destination.

Each Per 10
Alnus tenuifolius, Western Alder, 2-3 feet_-------------S. . 75 \$6.50

This and several other small shrubs described under "Rock Plants."

Low bushy native tree along streams.
Betula glandulosa, Dwarf Birch. Small clumps_-_---- . 75 6.50

Clematis ligusticifolia, Western V. B._----------------. . 75 6.50
A leafy vine of vigorous growth, noteworthy for its voluminous seed plumes in early autumn; flowers white, early.
Clematis oriertalis, Yellow Clematis
.75
6.50

Low leafy climber, equally valuable as a rock trailer, bearing in profusion all summer the 2 -inch yellow flowers followed by silvery seed plumes; extremely valuable for a dry sunny place.
Cornus stolonifera Coloradensis. 2-3 feet_-_-.--.-.-.-. . 75
6.50

A compact rounded bush, well furnished with foliage which assumes beautiful autumn tints. The small white flowers are followed by clusters of pearl-white berries in an all-summer succession. The twigs are dark blood-red in winter, unsurpassed in color by any other shrub.
Crataegus coloradensis, Colorado Hawthorn_-_-_-_-_-_ 1.50
A full branched symmetrical tree with foliage of heavy texture, showy clusters of white flowers followed by dark scarlet fruit; one of the best.
Crataegus erythropoda, 3-4 feet-------------------------1.00
Small tree forming thickets, foliage glossy, fruit dark red.
Crataegus mollis, Downy H.------------------\$1.50 to $\$ 2.50$
Very large palatable fruit, ripening very early.
Crataegus monogyna, English H., 3-4 feet_---------------1.50
Crataegus rivularis, Black Thorn, 4-6 feet----------------1.50
A distinct western type with black fruit, glossy foliage, showy flower umbels and excellent symmetrical habit. A gem among small trees and easily grown.
Crataegus saligna, Gunnison Thorn. Large_-----------1.50
A rare black-fruited species of strict upright habit, narrow glossy foliage and red twigs in winter.
Forestiera neomexicana, Mountain Privet, 3-4 feet_--- . $75 \quad 6.50$ An erect shrub of the Privet family, leaves small and dark green, berries black. Because of its twiggy habit, upright growth, extreme hardiness and easy culture it seems to qualify perfectly as a hedge plant; it is also ornamental as a specimen shrub. Smaller size stock for hedging or for lining out, $\$ 30.00$ per hundred.
Jamesia americana, Wild Mockorange. Clumps_-_---1.00 9.00
Pachistima myrsinites, Mountain Myrtle _------------1.00 1.00

Physocarpus opulifolius nanus, 3-4 feet_--------------1.00 A dwarf form having smaller, less lobed, dark green leaves, and valuable for its small and neat habit.
Physocarpus ramaleyi, Ramaley N., 2-3 feet_--------- $.75 \quad 6.50$ One of the most attractive for both foliage and flowers and easily grown. Other kinds not available this season.
Potentilla fruticosa, Cinquefoil, 1-2 feet_--------------- . 75
Prunus besseyi, Western Sandcherry, 2-3 feet_--------- . 75
Prunus glandulosa, Pink Flowering Almond, 2 feet_---- 1.25
Believing that the superiority of own-root stock will be promptly recognized, I have grown this lot from cuttings, a slower method than budding, but the price is reasonable and sprouting from the understock is avoided.
Prunus melanocarpa, Chokecherry, 3-4 feet_------------ . 75
Few thicket-forming shrubs are more valuable than this, a profuse bloomer and showing a luxuriance of growth where few shrubs could survive.
Prunus pumila, Sandcherry, $3-4$ feet--------------------- $75 \quad 6.50$
Quercus gambelli, Gambell Oak, 3-4 feet--------------1.00 9.00 A large shrub with deeply lobed foliage, drought-resistant and thrives apparently without regard to soil or moisture conditions. All my stock of Oaks is grown from seeds and transplanted, so that no difficulty will be experienced in planting them.

A dwarf spreading diffusely branching bush, the leaves trifoliate, of smooth thick texture, dark green. The fruit in clusters is bright scarlet, ripens in early summer and makes a vivid contrast with the foliage. Healthy, hardy and easily grown.
Robinia kelseyi, Kelsey Locust, 3-4 feet_-------------- $1.00 \quad 9.00$
One of the most beautiful of June flowering shrubs in our collection with its myriads of pink blossoms gracefully poised along the slender stems. The colored pods which follow are almost equally attractive.
Robinia neomexicana luxurians, 4-6 feet_-------------- $1.00 \quad 9.00$
Unsurpassed among flowering trees for the abundance, fragrance and charm of the pink flower clusters in early summer. Smaller sizes can be mailed at the same prices.
Rosa lucida alba, White Brier Rose, 2-3 feet_---------- $1.00 \quad 9.00$ Single blossoms of pure white, green stems and light green foliage turning yellow in autumn; rare and very choice.
Rosa lucida inermis, Thornless Rose, 2-3 feet_--------- . 75
6.50

A natural sport entirely free from thorns, own-root plants. A valuable and desirable type with bright red twigs in winter.
Rosa melina, Black Canyon Rose, 1-2 feet------------- $1.00 \quad 9.00$
Forming compact clumps with stout stems, but not wide-spreading like some other wild types. Flowers dark rose with a spicy fragrance; one of the most valuable of all brier roses.
Rosa spinosissima, Scotch Rose, 2 feet _-------------. . 75
6.50

Exceptionally beautiful brier rose, with small dark green leaves and creamy-white single flowers.
Rosa stellata, Desert Rose, field-grown_-------------- $1.00 \quad 9.00$
In appearance, very unique; profusely branching, the twigs are spiny and coated with a $f$ elt of stellate hairs. Flowers deep rose, followed by purplish bur-like fruits, the leaves minute, five-parted and dark green. Hardy, and blooms through a long season; a dry, sunny position is recommended.
Rubus deliciosus, Rocky Mt. Bramble.
Salix repens argentea, Silver WillowEach
Per 10
Low, with slender arching branches and silver foliage.

A beautiful hybrid of dwarf stocky habit with splendid foliage. Valuable small shrub for many purposes.
Shepherdia argentea, Buffalo Berry, 2-3 feet_-_-_----. . 75
A tall hardy shrub withstanding extremes of cold and drought. Its silver-gray foliage is excellent for contrast, and the scarlet berries add a touch of color in early autumn.
Symphoricarpos occidentalis, Wolfberry, 11/2-2 feet---- . 75
A valuable low shrub for covering dry or rocky slopes, both in point of endurance and attractive appearance. A select stock producing large full clusters of pearly-white berries.

Dense bushy plant with slender wide-spreading branches.
Symphoricarpos utahensis, Utah S., 3-4 feet_-_-----. . 75
Tall vigorous habit and excellent foliage, as refined as a spiraea and as graceful. Small pink flowers are followed by snow-white berries.
Symphoricarpos vaccinioides, $11 / 2-2$ feet ---------------- $75 \quad 6.50$

Symphoricarpos vulgaris leucocarpa, $11 / 2-2$ feeti----------- $.75 \quad 6.50$
An albino type of the Coralberry with creamy-white berries and
light-green foliage; as hardy and vigorous as the type.

## Lovelier Lilacs

In the improvement of the old-fashioned lilac, a favorite from time immemorial, much credit is due French hybridists, particularly the late Victor Lemoine of Nancy, France.

These superb creations are marked by both single and double flowers, individually of large size and produced in very ample clusters. Their wide range of color, delightful fragrance, lasting texture and extended flowering season combine to increase the popularity of an old-time favorite.

Culture. Instead of having a delicate constitution, the hybrid lilacs are hardier, withstand spring frosts with more certainty, are every way more dependable and bloom at an earlier age than the oldfashioned lilac. Particularly is this true when they are propagated upon their own roots instead of by grafting on privet or some inferior lilac which is apt to cause trouble by sprouting. I supply none but own-root lilacs. A little more time is required for ownroot propagation but there are advantages. Own-root lilacs remain always true to type and cannot produce sprouts of a different kind. They are long-lived, sturdy of stem, have a perfect root system and bloom while very young. Years of satisfaction will many times repay your investment in this class of stock.

Lilacs like sun and air and require plenty of moisture with rather free drainage. They will repay good care, yet often give splendid results under seeming neglect. In land of moderate fertility freedom of bloom is likely to increase with the age of the plant, and with plenty of room very little pruning is required; in any case avoid cutting the ends of strong branches which would sacrifice flower buds.

The size of bushes will average 18 to 24 inches in height, usually
with sereral branches from the base. The actual strength of the plant is not measured in inches, as with a natural root system, plenty of room in the nursery and with perfect climatic conditions I am producing a better grade of stock than I have been able to buy at any price or from any source. Where "small plants" are offered the size furnished will be less than 18 inches, but thoroughly well established stock.

Any lilac will be sent by mail prepaid, but I advise express, so that larger bushes can be sent.

Alphonse Lavelle. Lilac-blue, large full truss, medium dwarf. $\$ 2.00$ each.

CharTes Joly. Dark crimson-purple, long narrow panicle, vigorous upright habit, very free, one of the best dark varieties. $\$ 1.50$ each.

Congo. Single; very large broad panicle, bright red-purple, profuse bloomer. \$2.50 each.

Edouard Andre. Clear mauve pink, buds rose pink, dwarf habit, free flowering, very beautiful. \$2.50 each.

Ellen Willmott. A grand white with immense panicles and individual flowers, midseason to late, rated as the best late white, fine stock. \$2.50 each.

Emile Lemoine. Pale persian-lilac color with pink-lilac buds, very distinct color, extra bloomer, late. $\$ 2.00$ each.

Frau Bertha Dammann. Single, pure white, early. \$2.00 each.
Hugo Koster. Single, early, large full truss of bluish violet. $\$ 2.00$ each.

Ludwig Spath. Single, very rich dark purple, very long panicle of large flowers. \$2.00 each.

Mme. Casimir Perier. Large creamy white, very free blooming. $\$ 2.00$ each.

Mme. Antoine Buchner. Panicle very large, the flowers developing slowly, showing at the same time large rosy-mauve flowers, and carmine pink buds, very double, late blooming. \$2.00 each.

Mme. Lemoine. A very fine pure white, large flower and truss, very double, early. \$2.50 each.

Marie Le Graye. Single, free blooming early white; one of the best of the older varieties. Small bushes, $\$ 2.00$.

President Grevy. Very handsome soft blue-lilac flowers of large size, very double; panicle on established bushes nearly a foot long; extremely vigorous habit; considered the best of its color. \$1.50 each.

Princess Alexandra. Single, midseason white; a good growec and free bloomer. Small bushes, $\$ 2.00$.

Rene Jary des Loges. Large panicle of light bluish mauve; dwarf habit. \$3.00 each.

Senator Volland. Double; one of the darker varieties described by a French grower as Fuchsia-red. Small, \$2.00.

Virginite. Clear mauve-pink, fine large truss. \$3.00 each.
Viviand Morel. Large elongated truss, flowers large, double, clear bluish lilac, the buds purple. A vigorous grower and profuse bloomer. \$1.50 each.

Volcan. Single; open flower rose-purple, bud rosolane purple; dwarf, exceedingly free bloomer, early. \$3.00 each.

Waldeck Rosseau. Double, medium dwarf, late, fragrant; flowers in large trusses, lilac-rose with paler center; choice variety. Small bushes, \$2.50.

## The Rock Garden

Responding to the interest and convenience of many, this list of plants, alpines and diminutive shrubs suitable for the rock garden has been brought together under a separate section. The majority are native western species, but all are entirely hardy in the northern and New England States.

Although rock gardens are often designed more or less in miniature, they are most attractive when showing definite sheets or mats of color. Such effects are obtained by grouping together several plants of one kind. Conforming to this principle, in the following list where the price each is not given, three plants of one kind is the smallest quantity sold. Everything in this section is priced prepaid in the U. S.

Anchusa Myostidiflora. Entirely distinct and different, growing but 10 to 12 inches high and as broad, with sprays of clear blue Forget-me-not-like flowers in April and May; half-shade. 50 cents each, 3 for \$1.25.

Aster apricus. A new, distinct summer-flowering aster. Foliage ample, at the base of short, stocky stems bearing several large flower heads with violet-lavender rays. Less than a foot in height, it is exceptionally vigorous and easily grown; clumps, 75 cents each.

Bistorta bistortoides. Mountain Buckwheat. Slender stems a foot or two tall, with glossy green basal leaves and showy clusters of small white flowers in May. Will succeed in any good soil, full sun; plant 6 inches apart in colonies where other plants will not crowd. Three for 75 cents, 10 for $\$ 2.00$.

Caltha rotudifolia. White Marshmarigold. The two-inch white flowers appear in early spring among the rounded basal leaves of dark green. At home in boggy meadows, it will thrive in halishade if well supplied with moisture during the growing season. Flowering clumps. Three for $\$ 1.00,10$ for $\$ 2.75$.

Campanula petiolata. Western Harebell. (C. rotundifolia of former lists.) Evidently the Colorado Harebell is distinct from the eastern form in its stronger and more floriferous habit, the exquisite bells of blue in utmost profusion for a long season; a satisfactory and valuable rockplant. Three for 90 cents, 10 for $\$ 2.50$.

Clematis Fremontii, Fremont's Leatherflower. Less than a foot tall, bushy, with flower bells in shades of lavender and violet, leaves oval with entire margins; very distinct species of easiest culture. 75 cents each, three for $\$ 2.00$.

Clematis Scottii, Scott's Leatherflower. A foot or two tall, glaucus pinnate foliage, flowers urn-shaped, the tips scarcely spreading, large, bluish-violet, beautiful and distinct. \$1.00 each.

Delphinium Geyeri. Geyer Larkspur. Very showy flower of the foothills with grayish foliage and long spikes of most intense blue flowers in June. Easily cultivated; suitable for dry ground, nonacid soil. Three for 90 cents, 10 for $\$ 2.50$.

Erigeron salsuginosus, Subalpine Daisy. The most charming of this varied family, stems a foot tall with 2 -inch flower heads composed of rather broad rays of rosy-violet with yellow centers; moist soil, partial shade. Three for $\$ 1.00,10$ for $\$ 3.00$.

Filipendula hexapetala fl. pl. Dropwort, Herbaceous Spiraea.

Fern-leaved, with 15 -inch stems bearing corymbs of small double white flowers; 40 cents each, three for $\$ 1.00$.

Filipendula ulmaria plena. Meadowsweet. Exquisite foliage and low stems bearing plumes of snowy flowers; 40 cents each, 10 for $\$ 3.00$. The other Filiperdulas are too rank for a small rock garden.

Geum ciliatum. Western Rosy Avens. A little gem of early spring with rosy-pink flowers followed by tinted seed plumes. Three for $\$ 1.00$, 10 for $\$ 2.50$.

Heuchera brizoides. Alum-root. A vigorous species or perhaps a hybrid with broad rosettes of dark foliage and charming sprays of pink flowers for a long season; 50 cents each, three for $\$ 1.25$.

Heuchera, Ondine. A hybrid with white flowers, the buds tinted pink. 50 cents each, three for $\$ 1.25$.

Iberis sempervirens, Rockmont. A selected strain of the Perennial Candytuft grown from cuttings and excellent for borders because of its uniform growth. Three for $\$ 1.00$, 10 for $\$ 2.50$.

Iris Missouriensis. The native iris or flag of meadows and mountain valleys, usually wet till after the flowering season in May, later become very dry. A foot tall, forming large clumps, the lavender or pale blue flowers comparatively large and showy. Three for 75 cents, 10 for $\$ 2.00$.

Iris Missouriensis Bluebird. Similar to the type, but flowers Bradley's violet, falls veined lighter. 75 cents each, 10 for $\$ 6.00$.

Iris Missouriensis Snowbird. Pure white without veining. \$1.50 each, 10 for $\$ 12.50$.

Iris pumila. Dwarf Bearded Iris. The diminutive varieties named below are useful in the rock garden and are nearly evergreen, adding materially to their value.

Iris pumila coerulea, cerulean blue. Three for 75 cents, 10 for $\$ 2.00$.

Iris pumila cyanea, lavender-purple. Three for 50 cents, 10 for $\$ 1.25$, $\$ 8.00$ per hundred.

Iris pumila Orange Queen, pure yellow. Three for 60 cents, 10 for $\$ 1.50$.

Iris pumila Royal Purple, deep purple. Three for 60 cents, 10 for $\$ 1.50$.

Iris pumila Schneekuppe, pure white. Three for 60 cents, 10 for $\$ 1.50$.

Leucocrinum montanum. Sandlily or Starlily. Very early spring flower of crystal-white appearing in succession from a rosette of grass-like foliage. A plant not unlike Crocus, very floriferous and easily grown in a sunny well-drained position and loamy soil. Small clumps, three for $\$ 1.00$.

Lewisia rediviva. Bitter-root. The state flower of Montana. Elegant rockplant for a warm sunny slope or crevice in soil of turfy_loam and gravel. Flowers two inches or more broad, composed of many narrow petals, the pink or white stars arising from a rosette of succulent foliage which disappears at flowering time; northern stōk which is entirely hardy, but requires good drainage. Three for 75 cents, 10 for $\$ 2.00$.

Liatris ligulistylis. Rocky Mountain Gayfeather. A dwarf early species with very large showy heads of rosy purple or pale lilac. Three for 90 cents, 10 for $\$ 2.50$.

Liatris punctata. Dotted Gayfeather. Suitable for the dry
Colorado
Boulder,
Order Blank for Plants-Keep a copy of your order
D. M .

Name

Do not write in
this space
rockery, several slender spikes less than a foot tall. Three for 90 cents, 10 for $\$ 2.50$.

Hardy Lilies. My home-grown, freshly dug lilies are supplied in early autumn, long before imported stocks arrive. Small-growing kinds look well in the rock garden and a number of these will be offered in the fall catalogue.

Oenothera brachycarpa, Yellow Evening Primrose. Rosetteforming plant for lime-soil on dry slopes. Each rosette bears a succession of stemless 4 -inch yellow flowers which age to orangescarlet. Colony plantings are most effective. Three for 90 cents, 10 for $\$ 2.50$.

Pentstemon albidus. White Pentstemon. A low-growing native of sandy plains, easily grown and rather more permanent in cultivation than others. Flowers white. Three for 90 cents, 10 for $\$ 2.50$.

Pentstemon angustifolius, (Syn. coeruleus) Sky-blue P. Very dwarf and early, the sky-blue racemes carrying a tint of rose in the buds and flower tubes. Three for 75 cents, 10 for $\$ 2.00$.

Pentstemon stenosepalus, Turtlehead P. A subalpine easily grown forming rather large clumps, the stems leafy, a foot tall, foliage dark green. Flowers rather large, dark purple or nearly white, the albino form nearly as common as the color. Three for 90 cents, 10 for $\$ 2.50$.

Primula Parryi, Parry Primrose. A very robust subalpine a foot or more tall with rosettes of broad foliage producing large umbels of very showy crimson flowers with yellow centers. Moist humus or peat, partial shade. Three for $\$ 1.25,10$ for $\$ 3.50$.

Primula polyantha. Hybrid English Primrose. Improved hybrids, unsurpassed for their flowers of largest size and wide range of color. Few hardy flowers of early spring persist for so long a season. Thrives best in moist loam in partial shade. Strong plants from the open ground ready to bloom. Three for $\$ 1.25,10$ for $\$ 3.00$.

Primula veris. English Cowslip. Umbels $4-8$ inches high from a leafy rosette grown from a select strain in a fine range of color. Splendid rockplant for partial shade. Strong plants from the open ground. Three for $\$ 1.00,10$ for $\$ 2.50$.

Pyrethrum Hybrids. (Chrysanthemum coccineum) Persian Daisy. An improved strain of this grand old-fashioned perennial with flowers of large size in a color range from pure white, light and deep pink to crimson. A well enriched garden loam gives best results. Strong plants from the open ground. 'Three for $\$ 1.00,10$ for $\$ 2.50$.

Ranunculus adoneus, Alpine Buttercup. Found in wet glacialhumus soil at the edge of snowbanks, large yellow flowers; best in partial shade. Three for $\$ 1.25,10$ for $\$ 3.50$.

Scabiosa caucasica. Blue Bonnet. The flowers of clear lavenderblue are borne in large heads on slender stems all summer; one of the few perpetual bloomers among hardy plants. A good cutflower. Three for $\$ 1.00,10$ for $\$ 2.50$.

Sedum Ewersii. Stonecrop. Handsome rock creeper with flat foliage and clusters of pink flowers in late summer. Three for $\$ 1.00$.

Sedum Kamtschaticum. Orange Stonecrop. Broad-leaved creeper, foliage redish purple in winter; flowers deep golden yellow. Three for $\$ 1.00,10$ for $\$ 2.50$.

Sedum Maximowiczi. Amur Stonecrop. Erect stems a foot high with yellow flowers in broad terminal clusters. Three for $\$ 1.00$.

Sedum Rhodiola. (Rhodiola integrifolia) Ruby Stonecrop. An alpine of the Colorado mountains for moist soil and partial shade. Forms neat little clumps, the low stems terminating in small clusters of dark ruby-red flowers which last a long time. Clumps, 75 cents each.

Sedum rhodanthum. (Clementsia rhodantha) Clements' Stonecrop. A native subalpine in moist soil and prefers half shade. Under best conditions it forms clumps a foot in height, with terminal clusters of salmon-pink flowers. Three for $\$ 1.25,10$ for $\$ 3.00$.

Synthyris plantaginea, Kittentails. An attractive rockplant of easy culture, silky spikes of bluish flowers in early spring from a rosette of broad foliage. Three for $\$ 1.00,10$ for $\$ 3.00$.

Synthyris reniformis, Kidneyleaf. Round evergreen dentate leaves and violet-blue flower spikes in early spring. A charming plant for humus soil and shade. Three for $\$ 1.00$, 10 for $\$ 3.00$.

Synthyris rotundifolia, Roundleaf. Same culture and rosette forming habit as reniformis, the flowers light blue in smaller but more numerous spikes, often during mild weather in mid-winter. Three for $\$ 1.00$, 10 for $\$ 3.00$.

Tellima grandiflora. False Mitrewort. A charming Saxifrage of the Northwest which grows like a very thrifty Heuchera. Flower stems a foot or more tall, the fringed flowers opening green, soon turning to red. Prefers shade and humus. Strong clumps, 75 cents each, three for $\$ 2.00$.

Trollius albiflorus, White Globeflower. A desirable subalpine for a moist peaty soil in partial shade. It blooms early, the flowers quite large, sulfur, fading to pure white. Clumps with several flowering crowns, three for $\$ 1.25,10$ for $\$ 3.50$.

Valeriana acutiloba, Valerian. A very charming alpine or rockplant which will thrive under ordinary garden conditions. Forms a nearly evergreen leafy tuft, producing a succession of flowing' stems from very early spring till June, and often in autumn. The small white flowers are disposed in rather close heads and the plant resembles a miniature Garden-heliotrope. A rigidly tested novelty of exceptional worth. Three for $\$ 1.00,10$ for $\$ 2.50$.

Viola belidifolia, Alpine Violet. Low tufts among rocks with blue flowers. Clumps, three for $\$ 1.00,10$ for $\$ 2.50$.

Viola pedatifida, Bird-foot Violet. Finely cut foliage and showy blue flower of large size. Three for 75 cents, 10 for $\$ 2.00$.

Yucca coloma, (Colorado-Oklahoma) Soaproot. Best of all the yuccas for the rock garden because of its small size, it is proving to be in the East a most satisfactory grower, originating as it does in a climate of more abundant rainfall than the desert types. With its miniature rosettes of stiff blue-green foliage and slender flower spikes, no hardy species is more beautiful. Strong established plants, 65 cents each, three for $\$ 1.50,10$ for $\$ 4.50$.

Yucca filamentosa variegata. Of two or more variegated yuccas, this narrow-leaved type is entirely hardy and is a thrifty grower. The leaves have very narrow stripes of green and creamy white in summer, but in winter the white stripe becomes strongly tinged with red and is then the most beautiful variegated plant I have ever seen. Strong field-grown plants, 75 cents each, three for $\$ 2.00$, 10 for $\$ 6.00$.

Yucca glauca, Soaproot Yucca. Narrow glaucus stiff foliage and stout flower spikes. Thrives best in a dry soil. Three for $\$ 1.00,10$ for \$2.50.

Zygadenus elegans, Star Hyacinth. A lilaceous plant for moist soils with slender stems and racemes of white flowers. Three for 75 cents, 10 for $\$ 2.00$.

Miniature Shrubs which do not eventually grow too large, are a valuable feature in rock garden design, and for this purpose the following are indispensable; priced prepaid.

Amorpha nana. Dwarf Indigo. Clumps to $11 / 2$ feet with attractive pinnate dark green foliage and terminal spikes of garnet-red flowers in July. Each, 75 cents and $\$ 1.00$, 10 for $\$ 6.50$.

Betula glandulosa. Dwarf Birch. Rather large for the small rock garden, attaining 3 feet. Extremely hardy, forming rounded clumps with excellent foliage and easily grown. Each, 75 cents.

Caragana aurantiaca. Dwarf Pea-Shrub. Bushy and spreading with showy orange flowers and minute dark green foliage. A very slow-growing diminutive shrub for a limited space and thrives in dry, sunny position; entirely hardy. Each, 75 cents and $\$ 1.00 ; 10$ for $\$ 6.50$.

Jamesia Americana. Wild Mockorange. A handsome shrub of moderate growth with velvety foliage and clusters of waxy-white fragrant flowers. Best in a well-drained humus soil with partial shade. Each, $\$ 1.00$, three for $\$ 2.75$.

Pachistima Myrsinites. Mountain Myrtle. An exquisite miniature evergreen shrub of shaded slopes growing in humus soil. Its absolute hardiness, attractive Myrtle-like foliage and diminutive size, usually less than 12 inches, are its recommendation, and it grows easily in partial shade with good drainage. Established plants, $\$ 1.00$ each.

Potentilla fruticosa. Cinquefoil. A variable dwarf shrub of northern latitudes. The Colorado form is semiprostrate, a free and quite continuous bloomer and will thrive in dry soil; by far the best type for the rock garden; 75 cents each, three for $\$ 2.00$.

Rosa foliolosa. Pixy Rose. A diminutive Texas species with white flowers, the foliage of dark green narrow leaflets. Distinct from all other roses, its neat appearance, non-weedy habit and very small size characterize it as a gem for the rock garden. Each, 75 cents, three for $\$ 2.00$, 10 for $\$ 6.00$.

Salix brachycarpa. Rollins Willow. An acclimated alpine species, very dwarf, with silvery foliage and yellow twigs; 75 cents each, three for $\$ 2.00$.

Salix glaucops. Arctic Willow. Quite similar to brachycarpa but of larger growth, seldom exceeding two feet; 75 cents each, three for $\$ 2.00$.

Symphoricarpos vaccinioides. Small-leaved Snowberry. An elegant miniature of the Snowberry, but of light graceful habit and attractive appearance. Each, 75 cents, three for $\$ 2.00$.

Symphoricarpos vaccinioides decumbens. This variety is identical with the species except for its decumbent habit, drooping over rock work in a graceful manner. Each, 75 cents, three for $\$ 2.00$.

## Iris

## Price List of Surplus Varieties and of Introductions

For use in breeding and for comparison, rather than as a commercial collection, I have assembled fine varieties of Iris. The list which follows represents a surplus which will be ready for distribution immediately following the breeding season of this year in early August. The prices are for summer or fall delivery, but not for this spring unless so indicated. You may order now, enclose a deposit of one-fourth of the amount, the balance to be paid upon delivery. In case current prices fall below these quoted, I will meet proper competition, but no attention can be given to erratic quotations. You are invited to submit your list of wants for an estimate Varieties marked with an asterisk (*) can be supplied at wholesale, also others not listed. Healthy young stock from recent plantings, all priced prepaid.

|  | Each | Three |
| :---: | :---: | :---: |
| Alabaster (Andrews 1926) Spring or fall | \$ 7.50 | \$20.00 |
| Ambassadeur* (Vilm. 1920) | . 75 | 2.00 |
| Amerind (Andrews 1926) Spring or fall | 7.50 | 20.00 |
| Anna Farr* (Farr 1913) |  | 1.00 |
| Ann Page (Hort 1919) | 2.50 |  |
| Argentina (Mohr) | 5.00 |  |
| Autumn King (Sass) | 2.00 |  |
| Ballerine* (Vilm. 1920) | . 75 | 2.00 |
| Black Prince* (Perry 1900) | . 60 | 1.50 |
| Bruno (Bliss 1922) | 12.50 |  |
| Candlelight (Andrews 1926) Spring or fall | 10.00 |  |
| Caterina (Foster 1909) |  | 1.00 |
| Chalice (Sturt. 1924) | 3.00 | 7.50 |
| Edith Cavell (Denis 1921) | 5.00 |  |
| Edouard Michel* (Verdier 1904) |  | 1.00 |
| George J. Tribolet (Longfield 1926) | 5.00 |  |
| Gold Imperial (Sturt. 1924) | 6.00 |  |
| Inner Glow (Sturt. 1924) | 2.50 |  |
| Kashmir White (Foster 1913) | . 75 | 2.00 |
| Lady Foster (Foster 1913) | . 65 | 1.50 |
| Lent A. Williamson (Williamsōn 1918) | . 65 | 1.50 |
| Lord Lambourne (Perry 1923) | 5.00 |  |
| Lord of June *(Yeld 1911) |  | 1.00 |
| Magnifica* (Vilmorin 1920) | 1.00 | 2.50 |
| Mary Gibson (Perry 1923) | 10.00 |  |
| Medrano (Vilmorin 1920) | . 75 | 2.00 |
| Mother of Pearl (Sturt. 1917) | . 75 | 2.00 |
| Mrs. Chas. Pierson (Perry 1923) | 4.00 |  |
| Mrs. H. F. Bowles (Perry 1923) | 4.00 |  |
| Ophir Gold* (Andrews 1925) Spring or fall | 2.00 | 5.00 |
| Odaroloc (Andrews 1924) | 3.50 | 10.00 |
| Pandora (Sturt. 1922) | . 75 | 2.00 |
| Pioneer (Bliss 1924) | 12.50 |  |
| Primrose (Sturt.) 1923) | 7.50 |  |
| Prospero (Yeld 1920). | . 75 | 2.00 |
| Queen Caterina (Sturt. 1918) | . 75 | 2.00 |
| San Gabriel (Dean 1921) | 2.50 |  |

Saul (Denis) ..... 1.00
Seminole (Farr 1920) ..... 1.002.50
Shekina (Sturt. 1918) ..... 1.00
Soledad (Mohr 1924) ..... 1.00
Souv. de Mme. Gaudichau (Millet 1914) ..... 1.25 ..... 3.002.50
Taj Mahal (Sturt. 1920) ..... 5.00 ..... 12.50
Tansy (Andrews 1925) Spring or fall ..... 1.00 ..... 2.50
Virginia Moore (Shull 1921) ..... 75 ..... 2.00
Wedgewood (Dykes 1923) ..... 10.00
Wild Rose (Sturt. 1921) ..... 2.50
Zua (Crawford 1914) ..... 75
.752.00
IRIS COLLECTION
"A Study in Yellow"

This collection will bring real thrills to all who love yellow in Iris, the cream of the world's best. For the Iris breeder it is a veritable mine of yellow gold. For a comparative study one should not be satisfied with less. No change or substitution can be permitted. The price,-but judge for yourself; for August delivery, $\$ 20.00$ prepaid. A deposit of $\$ 5.00$ will reserve it, balance on delivery. The stock is limited to about fifteen collections. Nine varieties are included, as follows: Amerind, Chalice, Gold Imperial, Ophir Gold, Primrose, Shekina, Tansy, Virginia Moore and Seedling No. 87. Amerind, of course, is not a pure yellow, but a rich yellow-bronze. My No. 87 is a clear pale yellow of fair size and height. I am putting it out on trial. After blooming I wish to have your report. If sufficiently favorable it will then be introduced with a name.

## Descriptions of Andrews Introductions

Alabaster. (Andrews 1926) Pure white flower, medium to large, of exceptionally fine form; well arched broad standards slightly ruffled, meeting at the tips. Falls broadly flaring, rather wide with slightly ruffled tips. Beard nearly white, shading to yellow within, styles white. The purity of its whiteness, the absence of veining and the beautiful lasting texture of the flower will doubtless set a new standard in white Iris. Received 1st prize for white, Cleveland show, 1927. Price $\$ 7.50$ each.

Amerind. (Andrews 1926) Metallic bronze in nearly a self color, the standards slightly more golden than the falls. Stems low-branched, nearly four feet tall, carrying ten to twelve flowers of large size and excellent substance. Exceedingly vigorous, with ample foliage, increases well and has a long blooming season from midseason to very late. Price $\$ 7.50$ each.

Candlelight. (Andrews 1926) A Caterina x Aurea cross, with large flowers of pale pinkish lavender strongly illuminated from within with a rich golden glow, at once difficult to describe but very lovely. The glow extends nearly to the tips of standards and falls, which afford just enough contrast to give a lively yet soft color effect. The name Candlelight is realistically descriptive. The plant is tall, nearly four feet, and a vigorous grower. Price \$10.00 each.

Odaroloc. (Andrews 1924)Anagram of Colorado. Although resembling a pallida, its parentage was a nearly white plicata seedling crossed with a Germanica-Variegata white seedling, an unique combination of three distinct Iris races. Of vigorous growth with moderate
increase, it makes well balanced clumps to 4 feet in height and does not too soon become overcrowded. The 8 or 9 magnificent blooms are carried high and well spaced for best display. The flower is well arched, symmetrical, with flaring falls, all the segments broad and of remarkable substance. It is unusually prolific of flower stems and because of its durability it is among the best for cutting. The color is a pure light mauve, of even tone with a slight suffusion of pink; beard orange. Reported favorably by every grower east and west, without exception. Price $\$ 3.50$ each, three for $\$ 10.00$, 12 for $\$ 35.00$.

Ophir Gold._-(Andrews 1925) Golden-yellow flowers of pure color without veining on 33 -inch stems. Growth vigorous, a profuse bloomer, late-midseason variety. A little taller and later than tansy. Each $\$ 2.00$, three for $\$ 5.00$.

Tansy. (Andrews 1925) One of my first seedlings, perhaps a Neubronner-Albicans cross. It has a purity and evenness of color, chrome yellow, not attained in any other Iris. Its additional charm is the slender stem with open inflorescence, a welcome departure from the stiffness characteristic of the Neubronner type. Some of Miss Sturtevant's splendid yellows are larger and will rate higher, but I am sure that this will find favor with discerning gardeners. Each $\$ 1.00$, a dozen for $\$ 10.00$.

## New or Noteworthy Perennial Plants

## Including Colorado Mountain Flowers

Plants best for the rock garden will be found in another section. The following flowers are suitable for the hardy border, provide a long season of bloom and afford a wealth of material for cutting. All my plants are from the open ground; no potted stock half-established, with tender tops.

Price of plants. Our field-grown, freshly dug plants are moderately priced to include prepaid delivery by parcel post. However, except for small orders, I urge express shipment so that larger and stronger plants can be sent. Where the price each is not given, three plants of that kind is the smallest quantity sold. Refer to the seed list for kinds of which plants cannot be furnished. Additional kinds will be included in the fall catalogue.

Aquilegia coerulea. Rocky Mountain Columbine. Four-inch blossoms of blue and white with long spurs; large size and purity of color are assured by planting my true native stock. Stock of plants limited this spring, three for $\$ 1.00$.

Aquilegia hybrida, Rainbow Blend. Rainbow Columbine. An unsurpassed strain in habit, vigor of growth, length of spur and size of flower. It surpasses all other strains in variety and brilliancy of coloring, in the predominance of colorful shades of pink and rose, scarlet, velvety reds and purples, including tints heretofore unknown. A steady improvement has been made by introducing into the strain size from our own A coerulea, and intensity of color that will surprise the most experienced growers. This season I have strong thrifty seedlings raised from my latest improved stock, 25 for $\$ 2.50$, 100 for $\$ 10.00$. Seed, $1 / 4$ ounce for $\$ 1.00$.

Aruncus sylvester. (Syn. Spiraea aruncus) Forming elegant clumps three feet or taller, graceful in outline, the creamy white
flowers arranged in large terminal panicles; favors moist half-shade. Each 50 cents, three for $\$ 1.25$.

Asclepias incarnata alba. White Milkweed. A pure white sport from the rose-colored species, the showy umbels on 3 -foot stems. Three for \$1.00.

Asclepias tuberosa. Butterflyweed. Prairie flower of the middlewest, the brilliant orange umbels displayed on two-foot stems for several weeks in midsummer; warm sunny position. Three for $\$ 1.00$, 10 for $\$ 2.50$.

Astilbe hybrids. So-called Spiraea of the florists, forced for Easter, and equally valuable for the garden in partial shade with abundance of moisture. Named varieties in white, pink or rose, each labeled, 50 cents each, three for $\$ 1.25,10$ for $\$ 3.50$.

Centaurea rigidifolia. A rare oriental species growing three feet tall with crimson heads for many weeks in summer and autumn; lacks the coarseness of most species; 50 cents each, 10 for $\$ 4.50$.

Clematis Davidiana. Tubular flowers of clear blue in whorls from the two-foot erect stems; fragrant; valuable bush type; 50 cents each, 10 for $\$ 4.50$.

Clematis integrifolia. Low bush, flowering for a long succession, the handsome blue flowers having petals two inches in length. A most valuable and satisfactory plant. Flowering plants, three for $\$ 1.00$; clumps, $\$ 1.00$ each.

Clematis recta. The white bush clematis has elegant foliage and terminal flower clusters not unlike C. paniculata. 50 cents each, three for $\$ 1.25$.

Clematis Simsii, Sims' Leatherflower. Handsome vigorous climber with herbaceous stems, producing all summer its dark purple bells and silky seed clusters; Texas. 50 cents each, 10 for $\$ 4.00$.

Clematis Texensis, (C. coccinea) Scarlet Leatherflower. A hardy herbaceous climber which starts from the ground each season, grows rapidly and blooms constantly from June till frost. The flowers are broadly urn-shaped, brilliant scarlet, and are followed by the silky seed plumes; hardy and exceptionally valuable. 75 cents each, 10 for $\$ 6.00$.

Convallaria majalis. (Parsons' Var.) Lily of the Valley. A stout garden type with extra large bells on long stems followed by showy scarlet fruit; selected pips, ten for $\$ 1.00$, $\$ 7.50$ per hundred.

Desmodium penduliflorum. (Syn. Lespedeza) Tree Clover. Graceful plant, the branches pendulous in late summer with their weight of flowers; deep purple or crimson, 5 feet tall. 75 cents each, three for $\$ 2.00$.

Dictamnus fraxinella. Gas Plant. Very showy but infrequent border perennial forming a bush two feet tall; aromatic foliage and spikes of orchid-pink flowers in June. Best in a moderately heavy soil and open sunny position where it will thrive if undisturbed a score of years. Three for $\$ 1.00$; strong clumps, 75 cents each.

Dryopteris filix-mas. The Colorado Malefern is one of the most valuable of hardy ferns with fronds two feet tall of firm texture, nearly evergreen, easily grown. Native of a dry climate, it stands wind and lack of humidity better than most species. Strong husky rhizomes, three for $\$ 1.00$, 10 for $\$ 3.00$.

Filipendula. The principal group of plants formerly referred to Herbaceous Spiraea. See also, Aruncus, Astilbe and Gillenia.

Filipendula Camtschatica. Large sprays of white flowers in August; 4 feet. Three for $\$ 1.00,10$ for $\$ 2.75$.

Filipendula hexapetala (Syn. Spiraea filipendula) Single-flowered variety with fern-like foliage and clusters of tinted flowers. Three for $\$ 1.00$. The double-flowered form is dwarfer and is listed under Rock Garden section.

Filipendula purpurea. (Syn. Spiraea palmata) Siberian MeadowSweet. Exceedingly showy rose-red plumes; 4 feet. This, like most of the others, does best in a moderately heavy loam in the open. Three for $\$ 1.00$, 10 for $\$ 2.75$.

Filipendula purpurea elegans._ Flowers white with pink anthers; charming effect. Three for $\$ 1.00,10$ for $\$ 2.75$.

Filipendula rubra. Queen of the Prairie. Native of the prairies of Ninnesota, with very beautiful rose-colored plumes. Three for $\$ 1.00,10$ for $\$ 2.75$.

Filipendula ulmaria plena. Double, pure white, dwarf. Three for $\$ 1.00,10$ for $\$ 3.00$.

Geranium pratense. Blue Cranebiil. Two feet tall, handsome blue flowers of a desirable shade. Three for $\$ 1.00$.

Geranium pratense album. White Geranium. Three for $\$ 1.00$.
Geranium sanguineum. Red Geranium. Low clumps with viola-ceous-red flowers and splendid foliage turning red in autumn. Three for $\$ 1.00$.

Gillenia trifoliata. Bowmanroot. Very elegant plant like an herbaceous Spiraea with sprays of rosy-white flowers. Easily grown, permanent in habit and does not spread at the root. 50 cents each.

Helenium Hoopesii. Orange Daisy. Early flowering with daisylike heads on 18 -inch stems. Distinct from the fall-blooming types. Three for $\$ 1.00$.

Iris spuria aurea. Yellow Flag. A yellow iris on the order of pseudacorus but less rampant, the flowers more prominent because of shorter foliage. Three for $\$ 1.00$, 10 for $\$ 2.50$.

Iris ochroleuca. Yellow-banded Iris. Tall, late blooming, magnificent clumps which flower best if undisturbed for long intervals. Three for $\$ 1.00$, 10 for $\$ 2.50$.

Iris orientalis, Emperor. Two feet, violet. 75 cents each.
Iris, Perry's Blue. (Siberica) Chinese-blue shades with white; very beautiful. 75 cents each.

Lilium. The hardy Lilies are best planted in the fall. I supply dependable kinds of my own growing, freshly dug, sound bulbs, ready to plant before the imported bulbs arrive. Offered at moderate prices in the fall catalogue.

Manfrieda virginica. False Aloe. Succulent foliage resembling an Aloe or Yucca and entirely hardy. 50 cents each, three for $\$ 1.25$.

Mertensia ciliata. Mountain Bluebells. A luxuriant plant of graceful habit with fine glaucus foliage, the drooping sprays of pale blue flowers continue in bloom for a long period. Flowering roots. Three for 90 cents, 10 for $\$ 2.50$.

Mertensia pratensis. A large plant from the Spanish Peaks, with green foliage and blue flowers. Three for $\$ 1.00,10$ for $\$ 3.00$.

Phlox hybrid, Silverton. (Named for a town in Colorado for its silver-lavender color.) Among several garden phlox hybrids which have appeared among seedlings grown in the nursery, this has the largest individual flowers exceeding $13 / \nmid$ inches. Color (Ridgeway)
is clear pale lavender, at first suffused light mauve, eye light phloxpurple, with a very light halo. Of medium height and a strong grower. Transplanted field grown roots, $\$ 2.00$ each.

Potentilla perfecta plena. Double flowers like miniature roses, orange, mingled yellow. 50 cents each, three for $\$ 1.25$.

Rudbeckia montana. Coneflower. Dark purplish-black cones three or four inches long without rays is the unique fetaure of this Colorado species; 3 feet. Three for $\$ 1.00$.

Salvia azurea, Azure Sage. If limited to one blue flower, it would be the Salvia in its several shades of blue. It never fails, thrives almost without care, is true blue and has a long season of bloom. Excessive moisture and fertility are to be avoided, as a rank growth results in loppy stems and inferior bloom. Three for 75 cents, 10 for $\$ 2.00$.

Salvia Pitcheri. Dark-azure Sage. Later blooming and much darker blue, but otherwise identical with S. azurea. The stems grow three feet tall and are well adapted for cutting. Try growing both Salvias in a rather dry position. Three for $\$ 1.00$, 10 for $\$ 2.50$.

Veronica amethystina. Speedwell. One-foot clumps, the beautiful amethyst-blue flowers hiding the foliage in June; one of the few that thrive in a dry position. Three for $\$ 1.00$, 10 for $\$ 2.75$.

## Seeds of New or Noteworthy Plants

It is well known that mature plants of certain hardy flowers do not transplant easily. More persons each season are planting seeds of our western flowers, finding them a logical medium of distribution and experiencing pleasure in watching their development.

There is no point in asking for kinds not listed, as obviously they would be listed if I could supply them. While some of the seeds are saved from plants growing in the nursery, and can be supplied nearly every season, others are gathered here and there on long collecting or exploring trips and are merely incidental to more than 10,000 miles annual travel over roads or mere trails where it may not be necessary or desirable to go again. Do not delay ordering nor wait for the new crop, as the item may not appear again.

When to Order. You may order from this list at any time during 1928. Late in the year a few substitute items should be named, or if you do not wish substitution I will refund postage stamps for small amounts. If convenient, please write your seed order on a separate sheet from your plant order.

Size of Packets. For convenience in ordering and to avoid confusion, seeds are offered this season in packets of one style only, and at a uniform price. There are no "trade packets." The packets will contain enough for the ordinary garden, except in scarce or rare varieties, which at the uniform price will necessarily have fewer seeds. To increase your planting order by weight, or order additional packets.

Price of Seeds. Packets of all seeds listed on the following pages will be sold as follows: one, two, three or four at 25 cents per packet; five packets or more in any assortment at 20 cents per packet; 50 packets or more in any assortment to one address, 171/2 cents per packet. Seeds quoted by weight are sold also in packets.

Guaranty. I supply seeds which I believe to be of sound quality and able to germinate under proper conditions. They are sold at a nominal price. Successful culture depends upon conditions not under my control. Upon these considerations, please do not ask for replacement or reimbursement in case of failure.

For culture, see Culture of Mountain Flowers at the beginning of this catalogue.

## Five Charming Annuals for the Rock Garden

Five packets of seed, one each, of the following choice annuals for $\$ 1.00$. See descriptions in the list which follows. Blitum capitatum, Corydalis montana, Eriogonum annum, Euploca convolvulacea (Wild Heliotrope, see cover) and Othake sphacelata. Sow early in pans and transplant to fill blank spaces. Acceptable as a gift to a friend.

Anemone patens Nutt. American Pasqueflower. Silky buds in spring expand into showy flowers of pale lilac.

Aquilegia coerulea. Rocky Mountain Columbine. Four-inch blossoms of blue and white with long spurs. One-fourth ounce, $\$ 1.00$, ounce $\$ 3.00$.

Aquilegia hybrida, Rainbow Blend. Rainbow Columbine. Surpasses other hybrid strains in variety and brilliancy of coloring and in the predominance of colorful shades of pink, rose, scarlet, velvety reds and purples. White, yellow and pale tints are reduced to their proper proportion. One-fourth ounce, $\$ 1.00$.

Arenaria Hookeri. Sandwort. A low, tuft-forming rockplant of stony hillsides with a profusion of star-like white flowers in early spring; the foliage remains green ail summer.

Argemone hispida. Dwarfest of the Prickly Poppies with large white flowers of satiny texture and bluish green foliage.

Asclepias incarnata. Rose Milkweed. Early flowering western form from moist meadowlands, 3 feet, rose-pink umbels.

Astragalus Drummondii. Milk Vetch. Foot-high clumps with silvery foliage and spikes of creamy pea blossoms.

Blitum capitatum. Strawberry-blite. Annual, low herb with strawberry-colored fruit clusters.

Campanula petiolata. Western Harebell. The blue bells on slender stems are borne in utmost profusion for a long season.

Clematis crispa hybrida. Low vine with pale lavender bells, most of which will show distinctly their crossing with C. Texensis in the rosy tinting of the flowers; slow to germinate.

Clematis Davidiana. Bush, two feet, fragrant blue flowers in whorls. \$1.00 per quarter ounce.

Clematis integrifolia. Crisped Blue Clematis. Low bushy plant producing an abundance of broad, deep blue flowers for a long season; Asiatic. Ounce, $\$ 2.00$.

Clematis ligusticifolia. Western Virgins-bower. (Vine)
Clematis Orientalis. Yellow Clematis. (Vine)
Clematis recta. Bush Virgins-bower. Splendid perennial two feet tall, with paniculate white flowers. Ounce, $\$ 2.00$.

Clematis recta graniflora. Magnificent clumps, foliage finely
cut, dark green, each stem producing 25 or more fragrant white flowers two inches across.

Clematis Simsii. Vine from Texas, purple bells.
Clematis Texensis. (C. coccinea) Scarlet Clematis. Scarlet bells in great profusion, all summer, herbaceous climber, seeds slow to germinate. Ounce, $\$ 2.00$.

Corydalis montana. Golden C. Profusely blooming annual forming low mats for filling spaces in the rock garden.

Delphinium Geyeri. Geyer Larkspur. Grayish foliage from which arise slender spikes of most intense blue; succeeds best in a dry, sunny position.

Delphinium Nelsoni. Nelson's Larkspur. Early April flower, dark blue, racemes a foot high, from a fascicled tuber; exquisite rockplant for well-drained half-shade.

Delphinium Penardii. White Larkspur. Slender spike of white flowers from tuberous root for dry sunny position.

Dictamnus fraxinella. Gasplant. Border perennial meriting more general culture. Ounce, $\$ 3.00$.

Drymocallis glandulosa. Potentilla. Low yellow-flowered rock plant for dry soil.

Eriogonum annuum. Slender annual a foot or two tall with broad sprays of white or pinkish flowers.

Eriogonum umbellatum. Sulphur-plant. Half-evergreen creeper with showy yellow umbels on six-inch stems.

Euploca convolvulacea. (Heliotropum) Wild Heliotrope. Low tufted annual a few inches tall of the Heliotrope family, the satinywhite fragrant flowers like a miniature morning glory, and blooms for a long period. Grows in dry sandy soil in full sun and should be treated like Portulaca. One-sixteenth ounce, $\$ 1.25$.

Frasera speciosa. American Columbo. Gentianaceous biennial of columnar growth to three feet, cruciform flowers an inch broad.

Gaillardia aristata. Blanket-flower. The original wild type is preferred by some for its smaller center and less flashy color.

Gaura coccinea. Gaura. Low plant of dry ground with slender racemes of fragrant white flowers turning red with age.

Gentiana elegans. Western Fringed-gentian. Deep azure blue fringed flowers, plant biennial, growing in wet subalpine meadows.

Gentiana Parryi. Parry's Gentian. Large fiowers of deepest blue on stems a foot tall.

Harbouria trachypleura. Golden Parsley. Slender stems with foliage delicate as a fern, and showy umbels of golden flowers; a valuable rockplant for dry sunny place.

Hedysarum pabulare. Jointpod. Sprays of rosy pink pea blossoms on stems a foot tall; dry limestone slopes.

Helenium Hoopesii. Orange Sneezeweed. An orange daisy of excellent appearance, early flowering, distinct from other Heleniums.

Helianthella quinquenervis. Sunwort. Early flowering Composite with tall slender stems and yellow-rayed flowers.

Heuchera bracteata. Alum-root. Small tufted species for filling rock crevices.

Ipomoea leptophylla. Giant Bush Morning Glory. Low bushy plant growing in deep dry soil from an enormous root; file through shell before planting.

Iris missouriensis. Blue-flag. Native spring-flowering iris of pale blue. Ounce, $\$ 2.00$.

Iris missouriensis, Bluebird. Seed saved from Bluebird; color may vary.

Iris missouriensis, Snowbird. Pure white, comes mostly true from seed. 75 seeds for $\$ 1.00$.

Lepachys columnaris. (Ratibida columnaris) Coneflower. A gem for the rock garden or low border, yellow drooping rays and dark cones. Blooms the first year from seed and for a long season; excellent and easily grown.

Liatris ligulistylis. Rocky Mountain Gayfeather. Dwarf, early species with very large heads of rosy magenta.

Lilium tenuifolium. Coral Lily. Brilliant scarlet, easily grown from seed. One-eighth ounce, $\$ 1.00$.

Lupinus argenteus. Bluebonnet. Two feet, showy blue spikes, deep well-drained soil.

Lupinus decumbens. Lupine. Three feet, much branched, lilac, free bloomer for a long season.

Lupinus Plattensis. Bicolored Lupine. Remarkable for the conspicuous dark blotch in the upper half of each flower; rare low growing species.

Mentzelia decapetala. (M. ornata) Evening Star. Marvelous five-inch, ten-petaled stars of creamy white, opening late afternoon for several weeks; perennial in dry, calcareous soil.

Mertensia pratensis. Stout perennial for dry or moist shade, flowers blue.

Oenothera coronopifolia. White Evening-primrose. A gem for the rock garden, forming colonies on sunny slopes, the flowers white, turning pink, a constant succession all summer. Dry soil with little fertility is suggested.

Oxytropis Lambertii. Crimson Loco. Many spikes of crimson pea blossoms from a rosette of pinnate foliage.

Oxytropis villosus. Silky Loco. Silky-gray rosettes and creamy flowers.

Othake sphacelata. Sand Daisy. A very showy annual of dry sandy soil, about a foot in height, same culture as Euploca. The flowers have bright pink rays and are produced all summer.

Pentstemon acuminatus. (Beardtongue or Pentstemon is the popular name applied to all plants of this genus.) Glaucus foliage and racemes of showy lilac flowers; one foot. One-fourth ounce, $\$ 1.00$.

Pentstemon albidus. White Pentstemon. A low-growing native of sandy plains, easily grown and rather more permanent in cultivation than uthers. Flowers white. One-fourth ounce, $\$ 1.00$.

Pentstemon alpinus. Easily grown alpine with compact spike of deep blue. One-fourth ounce, $\$ 1.00$.

Pentstemon angustifolius. (P. coeruleus) Dwarf, early, sky-blue flowers, tinted rose. One-fourth ounce, \$1.00.

Pentstemon cyanthophorus. Distinct new type with broad foliage.
Pentstemon gracilis. Beautiful slender species, requiring more moisture than others, flowers lavender.

Pentstemon humilis. Quite dwarf, deep blue, sunny rocky slopes.

Pentstemon unilateralis. Tall, deep purple flowers in long racemes.

Polemonium confertum. Musk-flower. A treasure among Colorado alpines, forming clumps at high altitudes, the very conspicuous
flower clusters reflecting the intense blue of the alpine sky; not difficult to grow.

Polemonium melitum. Polemonium. Similar to P. confertum except in color of the flowers which are sulphur-white. Easily grown in light soil and partial shade.

Polemonium molle. A foot tall with panicles of small blue flowers.

Polemonium robustum. Two feet tall, long season of bloom.
Primula Parryi. Parry's Primrose. Large umbels of crimson flowers from a rosette of light green foliage.

Primula veris. English Cowslip. Seeds of my own saving, from a fine strain.

Pyrethrum hybridum. Painted Daisy. Fine mixed strain of single and double.

Quincula lobata. Low rock plant for dry, sunny spot, with purple star-shaped flowers.

Rudkeckia hirta. Brown-eyed Susan. Handsome orange-rayed coneflower.

Salvia azurea. Azure Sage. Light blue; avoid excessive moisture and fertility. Ounce, $\$ 1.50$.

Silene acaulis. Cushion Pink. A most charming alpine forming tufted mats, studded with pink stars. The true species.

Stanleya pinnata. Prince's Plume. The golden plumes, with long exserted stamens suggest a yellow Cleome. Two feet, dry limestone soil.

Tellima grandiflora. Miterwort. Saxifrage of shaded slopes. flowers fringed, petals opening green, soon turning to red.

Thermopsis montana. Buffalo Pea. A foot high, early spring, showv yellow pea blossoms.

Thermopsis rhombifolia. Very dwarf species; yellow.
Yucca glauca. Soapweed. One of the hardiest, and easily grown from seed.

## Seeds of Shrubs

Amorpha nana. Dwarf Indigo.
Ceanothus Fendleri. Nearly evergreen, thorny shrub with minute foliage and white flowers.

Cornus Coloradensis. Colorado Dogwood.
Rubus deliciosus. Rocky Mt. Bramble.

