

Quarterly of the American
Primrose
Society

Volume XIV

FALL 1956

Number 4



PRIMULA CUSICKIANA

OFFICERS—AMERICAN PRIMROSE SOCIETY

President—Wayne Arnold.....2005 Park Avenue, Milwaukie 22, Oregon
 Vice-President—Dr. Daniel H. Labby.....5931 S.W. Hamilton St., Portland 1, Oregon
 Secretary—Mrs. Louise Holford Gee.....923 Avenue A, Oswego, Oregon
 Treasurer—Mrs. Orval Agee.....11112 S.E. Wood Ave., Milwaukie 22, Oregon
 Recording Secretary—Miss Madge Ellis.....516 N.E. Floral, Portland 13, Oregon

REGIONAL VICE-PRESIDENTS

Ross Willingham—Pres. Wash. State Primrose Soc.....13310 20th S., Seattle 88, Wash.
 Benjamin L. Hoag—Pres. Onondaga Primrose Soc.....101 Cedric Ave., Nedrow, N. Y.
 Wesley Bottoms—Pres. Tacoma Primrose Society.....4815 E. Eye St., Tacoma 4, Wash.
 Mrs. W. Warneck—Pres. E. Side Garden Club, Kirkland.....316 4th Ave., Kirkland, Wash.
 Mrs. Walter Roe—Pres. Clark County Primrose Soc.....Rt. 5, Box 562, Vancouver, Wash.
 Robert Saxe.....116 Eleventh Ave., San Francisco 18, California
 Robert W. Fleming.....3100 Leighton Ave., Lincoln, Nebraska
 Douglas W. Duncan.....521 E. Windsor Road, North Vancouver, B. C., Canada
 Mrs. Rita Fissi.....204 Indian Valley Trail, Port Credit, Ontario, Canada

DIRECTORS

Mrs. Florence Levy.....Gresham, Oregon Mrs. O. Miller Babbitt, Portland, Oregon
 Mrs. William F. Hallam, Portland, Oregon Mrs. Otto Zach.....Portland, Oregon
 Mr. R. M. Bellis, Tolovana Park, Oregon Mr. James W. Watson.....Vancouver, B.C.

QUARTERLY

FLORENCE LEVY — *Editor Emeritus*

Editor—CHARLES E. GILMAN 18680 Conrad Olsen Road, Redmond, Washington

Regional Editors—

Mr. Chester K. Strong.....Box 126, Loveland, Colo.
 Mr. Roland E. Cooper....."Blythwood" 40, Grosvenor Rd., Westcliff, Essex, Eng.
 Mr. Leo Jelitto.....(14a) Stuttgart-N, Hoferstrasse 2, Stuttgart, Germany
 Mr. Aymon Corveon....."Floraire" Chene-Bourg, Geneva, Switzerland
 Mr. Verne Benedict.....30665 112th St., Auburn, Washington
 Mr. Frank F. Beattie.....Rt. 3, Dundas, Ontario, Canada
 Miss Alida Livingston.....Remsen's Lane, Oyster Bay, Long Island, N. Y.
 Mrs. Doretta Klaber.....Rt. 1, Quakertown, Pennsylvania
 Prof. Walter C. Blasdale.....2514 College Ave., Berkeley 4, California
 Mr. Elmer Baldwin.....400 Tecumseh Road, Spracuse 10, New York
 Mr. David Barton.....Rt. 2, Vancouver Island, Royal Oak, B. C., Canada
 Mrs. Ralph Van Kirk.....355 Spring Creek Drive, Eugene, Oregon
 Mrs. Eugene C. Conboy.....3250 S.E. Marine Dr., S. Burnaby, B. C., Canada
 Mrs. John Siepman.....3616 N.E. Bellevue-Redmond Rd., Kirkland, Wash.
 Mrs. Dale Worthington.....6016 Jennings Avenue, Portland 22, Oregon
 Mrs. Alice Hills Baylor.....Sky Hook Farm, Johnson, Vermont

U. S. Research Editor—

Mr. Wilbur Graves.....Rt. 1, Box 189, Roy, Washington

Editor in Charge of Translations—

Mr. Robert Luscher.....Thedford P.O., Ontario, Canada

British Research Editor—

Captain C. Hawkes....."Brown Roof," Stapleley, Nantwich, England

All material for the Quarterly should be sent direct to the Editor's Office,
 18680 Conrad Olsen Road, Redmond, Washington

British Subscription price (including membership): 1 pound per year

British Representative and Treasurer—

Mr. Norman Lawfield.....345 South Lane, New Malden, Surrey, England

Subscription price (including membership): \$3.50 per year. Old Quarterlies available
 at 75c per copy or \$2.50 per volume. Treasurer, Mrs. Orval Agee, 11112 S.E. Wood
 Avenue, Milwaukie 22, Oregon. (Free 44-page planting guide with new memberships.)

Quarterly

of the

American Primrose Society

Volume XIV

FALL 1956

Number 4

CONTENTS

	Page
Cover: <i>Primula Cusickiana</i>	
Officers and Directors of A.P.S., Editorial Staff of Quarterly.....	Page 2 of Cover
A Beautiful Little Known Primula—CUSICKIANA, <i>Kenneth C. Corsar</i>	134
Primroses in a City Garden..... <i>Doretta Klaber</i>	135
In Memoriam, Linda A. Eickman.....	137
Tribute to Susan Worthington, Retiring Editor of A.P.S. Quarterly <i>Florence Levy</i>	138
Linda A. Eickman, Deceased July 11, 1956..... <i>Dr. Matthew C. Riddle</i>	140
The A.P.S. Quarterly Award for Hybridizing.....	140
Petiolarid Primulas in Cultivation..... <i>Dan Bamford</i>	141
Pete Klein Says.....	143
Announcing an Auricula Show..... <i>Ralph Balcom</i>	143
<i>Primula Edgeworthii</i>	144
Change in Dues, Amendments to the Constitution, passed and proposed	144
Presentation of A.P.S. Quarterly's Award to Dr. Riddle..... <i>Florence Levy</i>	145
General Election of Officers, Announcement of.....	146
Seed Exchange, 1957..... <i>Chester K. Strong</i>	146
Picnic Patter..... <i>Anne Siepman</i>	147
Dictionary of the Hybrid Primulas of the Auricula Section, Natives of the European Alps..... <i>James Stuart McLees</i>	148
Seasonal Notes from Barnhaven.....	160
Table of Contents, Volume XII to XIV, inclusive.....	161

THE PICTURE ON THE COVER of *Primula Cusickiana* is the winning species photograph for the Quarterly contest. It illustrates a plant grown by Mr. Kenneth Charles Corsar which is described on page 134. Mrs. A. C. U. Berry says that the plant pictured is the best grown specimen of this species she has ever seen, either in her own garden, or in nature. A mountain side of *Cusickiana* in bloom is a never-to-be-forgotten sight. The picture was taken by Mr. T. C. Clare of Ascot Wood, Ascot, Berkshire, England, at the 1956 Spring Show of the Scottish Rock Garden Club which was held at the McClellan Galleries, Glasgow, Scotland. Mr. Clare will receive the Mrs. A. C. U. Berry cash prize of two pounds.

The Quarterly of the American Primrose Society is owned solely by the Society, which is incorporated under the copyrighted name AMERICAN PRIMROSE, PRIMULA AND AURICULA SOCIETY.

The editor is Mr. Charles E. Gilman, 18680 Conrad Olsen Road, Redmond, Washington.

It is published at the Seattle Printing & Publishing Company, Seattle, Washington.

Press of the Seattle Printing & Publishing Company.

1,100-1,500 copies of each issue are distributed.

Copyright 1948 by American Primrose Society.

Entered as second-class matter at Portland, Oregon, under the Act of March 3, 1879, July 28, 1952.

CUSICKIANA

By KENNETH CHARLES CORSAR

Condensed from *Gardeners Chronicle and Gardening Illustrated**
June 9, 1956 Printing House Square, Queen Victoria Street, London, E.C.4, England

IN THAT SECTION of their monograph on the genus *Primula* published in 1948, W. Wright Smith and H. R. Fletcher were unable to record the successful cultivation of *Primula Cusickiana* in Europe. Since that year, however, this species has been brought to flowering stage at least three times in Britain, first by Mrs. Crewdson of Kendal, then in 1954 by myself, and in this present year again by Mrs. Crewdson and myself.

The plants now in cultivation are collected specimens from the Wallowa Mountains in the State of Oregon, sent to this country by air by Mrs. A. C. U. Berry, of Portland, Oregon, who has flowered this species under a fir tree in her garden. She reported that they had been found growing on hillsides, wet from the melting snow in springtime but baked dry by the fierce sun of the summer. Further, it was thought that no water was available to the plants during the winter months because of the severity of the frosts in those parts. To reproduce anything like these conditions in a British garden is, obviously, out of the question, and careful pot cultivation is the only system I have found successful. As no information on the management of *P. Cusickiana* was available, the method of trial and error had to be resorted to, and as a result of experiments I lost fifty per cent of the plants sent to me before I found a method of cultivation. The plant illustrated on the cover is the largest of the survivors; it will be seen that it has made good growth, and that it has thrown up five flower scapes.

Primula Cusickiana belongs to the small section *Parryi*, all of whose members are natives of North Amer-

ica. Small in all its parts, this species throws up scapes four inches tall, each bearing an umbel of four deep violet flowers with a strong violet scent. Once the petals have been shed, and the seed capsules start to develop, the scape extends until it is about twice its former length; at the same time the leaves begin to die down. Growth, flowering, seed production, and final disappearance, occur within a period of five months.

If there is any secret in the cultivation of *P. Cusickiana* this lies in the amount of water to be given during the period of dormancy. Complete drying out must never be permitted, yet over-watering will prove fatal; what may be described as a happy medium must be observed, but experience alone will dictate what this is. As to soil; I grow my plants in a rich, gritty mixture to which stone chips have been added; ample drainage is provided so that stagnant moisture is never present in the soil. The plant's growth is very slow indeed, so over-potting should be avoided. Repotting, when this becomes necessary, is best carried out immediately after flowering; in other years a top-dressing with a good rich mixture is advised.

* Subscriptions (inland and foreign) \$4.85 a year.

Printing House Square, Queen Victoria Street, London E. C. 4, England.

Note: Mr. Corsar is the author of a delightful book entitled *Primulas In The Garden*, published by Geoffrey Bles, Ltd., 52 Doughty Street, London, W.C.1., England. This book is available at your bookstore and at J. K. Gill Company in Portland for \$3.50 (see ad on page 168).



The Author

PRIMROSES IN A CITY GARDEN

You don't need an acre of ground to become a Primrose collector

By DORETTA KLABER

There are so many city houses all over the country that have the approximate planting space shown on the accompanying plan that it might be of interest to show what was done with one of them.

We were living in the suburbs of Washington, D.C., at the time, and wanted to rent a house conveniently in town. This was considered impossible, so when we were shown a house

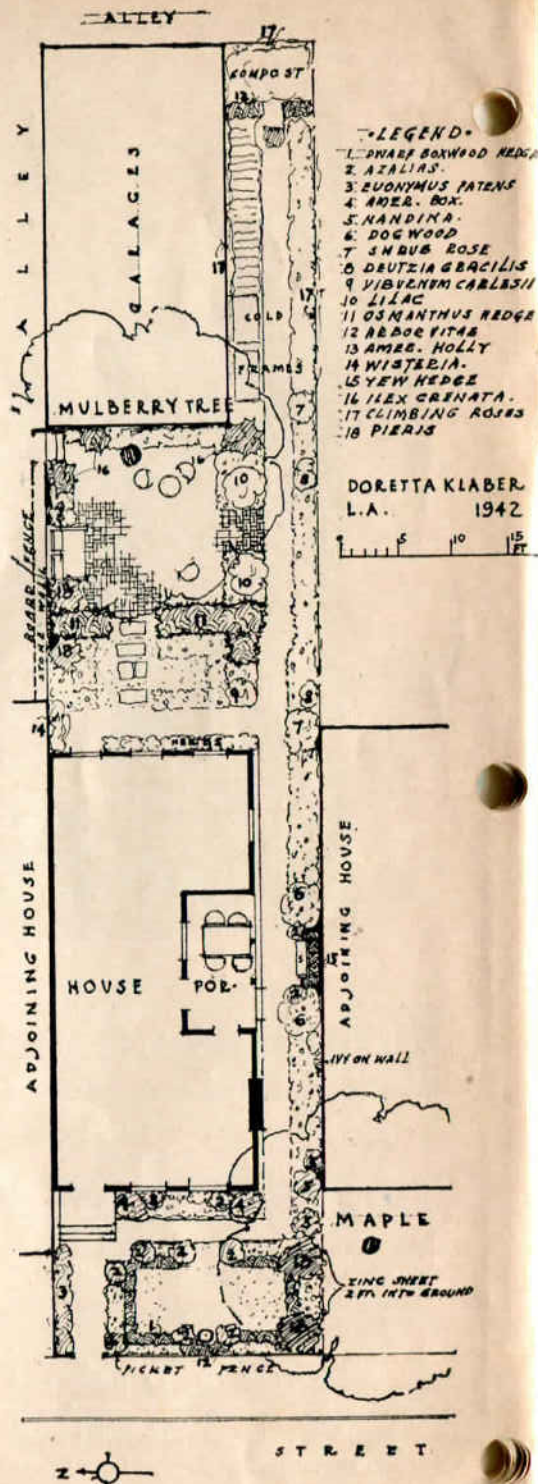
that had the necessary rooms but was badly in need of redecorating and was set in a really horrible little yard, we grabbed it. The landlord would do nothing, neither would he sell the place, which was why it was available.

There was one desiccated evergreen at the entrance of the house, and a few straggly grass blades and weeds in the front yard. This was shaded by the next door neighbor's huge maple

tree and the vinca ground cover under this tree was beginning to mix with the weeds on our side of the fence. The path leading to the back yard was bordered by broken bottles and other rubbish among the weeds. The back yard had one of the worst garden trees there is, a mulberry; but it threw a large patch of welcome shade and was a fine shape. Under the tree was a pile of garbage and rubbish, and weeds followed the path to the back alley. The mulberry had a row of corrugated iron garages in back of it.

Starting at the front, here is what we did. The ground was spaded two spades deep, and the worst of the rubbish removed. (Any resident of Georgetown in Washington will tell you that is plenty!) A two-foot-high zinc sheet was slipped down between the adjoining yard and ours to keep the maple roots out, those already in being cut. The ground was prepared and made fertile with well-rotted manure, good topsoil, peat and sand. The finished level came above the paths which were edged with old brick. This preparation was continued the length of the garden. The mulberry was sprayed for worms then and frequently thereafter; the worms had been so bad that all the neighbors wanted the tree cut down, but the spraying controlled the trouble. The corrugated iron of the garage in back of the tree was painted a dark green, so, instead of an eyesore, it became a pleasant background for the planting. After the rubbish was cleared from under the tree and the ground was graded to slope slightly toward a drain, three inches of sand was spread over the ground and the family then spent a Sunday laying old bricks in a basket pattern in the sand.

The house had an inset porch facing the side path, a convenient place for eating in summer, but the outlook was a blank wall six feet away. So we put a bench against the wall, backed by a yew hedge, with a flowering dogwood and azaleas on each side and a



- LEGEND**
1. DWARF BOXWOOD HEDGE
 2. AZALEAS
 3. BUONNYMUS PATENS
 4. AMER. BOX.
 5. NANDINA
 6. DOGWOOD
 7. SHRUB ROSE
 8. DRUTZIA GRACILIS
 9. VIBURNUM CARLESII
 10. LILAC
 11. OSMANTHUS HEDGE
 12. ABDOURVITAE
 13. AMER. HOLLY
 14. WISTERIA
 15. YEW HEDGE
 16. ILEX GRANATA
 17. CLIMBING ROSES
 18. PIERIS

bit of paving in front of the bench, while ivy was planted to grow up the wall all along that side.

The plants used for background and foundation planting, as indicated on the plan, boxwood, yews, azaleas, osmanthus, lilacs, pieris, etc., could be changed to fit climatic conditions anywhere in the country; but where possible some broadleaved evergreens and some needle leaved are preferable because of their winter appearance. We want flowering shrubs, of course, but the basic planting should look well at all seasons of the year.

And what about primroses? Here was a perfect setting for the vernalis and cortusoides sections. The front garden, shaded from the afternoon sun by the maple tree (without its ruinous roots), edged with dwarf box, was planted with carefully chosen colors of acaulis and polyanthus primroses, making a brilliant display. Later color was carried through the summer by planting impatiens under the shrubs against the house.

Along the side path, which was in shade most of the day, a spring garden evolved, with hepaticas and other wild flowers, small bulbs and narcissus, wild columbine, Sieboldii and saxatilis primulas as well as Juliae and the other vernal primroses, violets, hardy cyclamen, woodland phlox and ferns, while Japanese anemones and more impatiens gave some later color. If I were planting it now, I would try the candelabras there, for with extra watering I believe they would flourish.

The rear yard where it was open to the sun had pansies and violas, iris, and other perennials, annuals and herbs, roses and wisteria. In the shady part were sweet violets and lily of the valley, primroses wherever there was room, and ferns filling the darkest corners.

There was space in back of the garden as shown for coldframes and nursery beds, annuals and perennials for cutting, and the invaluable compost heap, screened by a hedge.

IN MEMORIAM

The Tacoma Primrose Society wishes to express its deep sorrow at the passing of Linda Eickman. She will live again in the hearts of her many friends in Tacoma each spring when her Pinks and Warm Laughter come into bloom.

* * *

The passing of Linda Eickman last July 11th was a severe shock to her host of friends in the Washington State Primrose Society who wish to express their regrets at her being taken. She looked upon her plants as "His and only by His gracious love transplanted to make for us a delightful land."

* * *

It is with a very deep feeling of sorrow and loss that we announce the passing, July 11, of our very dear friend, and yours, Linda A. Eickman. Primrose lovers will remember her with pride and respect, as the creator of Crown Pink and Warm Laughter. Those of us who knew her, will not miss the hybridizer for missing the true and loyal friend. Linda was dedicated to the help of others from the time she graduated from high school, when she chose nursing as her profession. Being deeply religious, she obtained great comfort and peace of mind from her church, and through her church had "adopted" a little Korean child whom she was helping to the best of her resources. A trip to Oregon was never complete without a visit with Linda and we always left her with our faith renewed and peace in our hearts. We never heard her say an unkind word of anyone, and it will be with love and affection that we will hold her memory bright. The Society has sustained a great loss in the passing of this gentle spirit over and above the devoted work she was doing with her beloved Primroses.

—The Editors.



Tribute to

SUSAN WORTHINGTON

Retiring Editor of the American Primrose Quarterly

By FLORENCE LEVY, *Editor Emeritus*

IN MY NOTE books are seventeen issues of the American Primrose Society's Quarterly produced by Susan Worthington during her editorship. As I have had occasion to refer to these journals over the past four years, it has been apparent that, as the issues accumulated, each new one was better than the last. To maintain a steady growth for that period of time

is a personal triumph as well as a triumph for the Society. Her friends know that the last six issues were assembled, edited, and published during hospitalization and a long convalescence which is still in process, and which is the reason for her resignation.

It is not easy to give up a work into which one has poured one's vital

forces. It was not easy for me and it has not been easy for her, but unless circumstances are adjusted to, what has been built may be razed. In her case, as in mine, it is handing the torch to the one whose abilities promise to carry on without interruption and without lowering the standards of accuracy and interest. A finished piece of writing, or a finished publication—finished in the sense of smooth readability—is deceiving. Usually those who do not write give it no thought, and there is no reason why they should be interested in knowing that the less labored the page, the more labor goes into making it so.

Nor is it easy to step into a retiring editor's shoes without feeling a rub here and a pinch there. When Mrs. Worthington accepted the editor's responsibility she had had little or no previous experience in writing and Primulas were new to her. To my lasting regret, she had no help whatever from me because of the situation I found myself in at the time. Yet she began and gave us the Outline of the Sections of the Genus Primula, a list of the Valid Species and Synonymy, the Pictorial Dictionary of the Cultivated Species of the Genus Primula, stimulated and coordinated interest in Show and Alpine Auriculas with the Show Auricula Floriculturists of America and brought about a unity of standards among the British, Canadians, and Americans. In addition to this, she conceived and financed the idea of the American Primrose Society Quarterly Award for Outstanding Achievement in Hybridizing which, in 1953, was first won by Linda Eickman, 1954 by Peter Klein, and in 1955 by Dr. Matthew Riddle. She further broadened the Society's influence with Regional Editors in England, Germany, Switzerland, Canada, and throughout the United States, and with Mr. Luscher as Editor of Translations and Capt. Hawkes as British Research Editor.

Since a publication of this sort

must serve, at the same time, the novice and the advanced Primula gardener, and additionally be a continuing repository of accurate reference material in Libraries and Universities for generations to come, each editor must face three directions at once. Mrs. Worthington succeeded in this by providing us with articles of historical and practical value along with her scholarly contributions.

Although the editor receives no remuneration for his work other than experience and the satisfaction of a job well done, the printer and the engraver cannot afford this luxury. In the President's Message, April 1956, we find that the Society provides \$325 for the editing, publishing, and mailing of each issue, plus \$1.67 a page to absorb the recently increased costs leveled by the printer. This is for a sixteen-page Quarterly only. How many pages over the sixteen, and how many pictures used, are at the election and personal expense of each editor, defrayed only by the amount of paid advertising he brings in. After seeing the printer's bill for the last forty-four-page issue, and counting twenty-five illustrations for which I have not seen the engraver's bill, it will be the usual nip and tuck between costs on one hand and the Society's guarantee and paying advertisers on the other. Each editor gives advertising space to whatever he deems interesting or helpful to the readers whenever the editor is willing to pay for the space for which he makes no charge. This prerogative, plus the work invested in writing and designing the ads, has made the advertising section of the Quarterly as absorbing as the editorial these past four years.

Aside from a mutual interest, an international Society such as this has but one coherent medium because of its scattered membership. The success or failure of its publication is the success or failure of the Society. Susan Worthington has shored up the structure on which she began her work.



Linda A. Eickman

Deceased July 11, 1956

By DR. MATTHEW C. RIDDLE

Among the many rewards of the gardener are the friendships he makes with other gardeners. Some consolation for Linda Eickman's death may be had from the memory of her friendliness as well as the beauty of the Primroses she leaves behind. A hybridizer achieves a sort of immortality in the lasting beauty of his or her floral creations.

Linda Eickman, whose name literally means beauty, was a gentle person whose life was devoted to the service of humanity. Professionally she

was most successful as a nurse and educator. Personally she selflessly cared for her aged and ailing mother and brother. As an avocation she developed the world renowned strain of "Majestic Polyanthus Primroses", the "Linda Pinks". This is a distinct contribution to floriculture and an expression of her discriminating love of nature.

I have known Linda many years. My first acquaintance with her was in 1934 when she became superintendent of nursing for the University of Oregon Medical School at the Multnomah County Hospital. Later when she retired in 1940 to care for her aged mother, I visited her garden on the old family farm near Dayton, Oregon. Here under the shade of a grove of ancient apple trees she lived in a garden of western and mid-western wild flowers. Here she developed her renowned majestic strain of pink polyanthus Primroses, derived from a strain of imported British polyanthus. In a tiny greenhouse in this rural garden, she patiently pollinated her Primroses year after year until she had her "Warm Laughter" and "Crown Pink" Primroses which have brought her fame and awards, and which have given pleasure to so many others. Climax to her honors was the Premier Award for Hybridizing by the American Primrose Society Quarterly in 1953, the highest possible tribute in this field.

So long as the Linda Pink Primroses bloom, Linda Eickman will be remembered. They serve as a lasting memorial to this "gracious, generous, and humble lady" who loved and created beauty.

The A.P.S. Quarterly Award for Hybridizing

Nominations for the 1957 award for hybridizing should be coming into the Quarterly office now. Names of candidates should be accompanied by pictures of the plants. Plants in question should have been seen by more than one competent judge and a signed statement from each judge regarding the plant's Show Points should be submitted. If enough postage is enclosed, pictures can be returned, otherwise all material becomes the property of the Quarterly. Winner will be determined by Quarterly staff and announced in the 1957 year book.

Petiolarid Primulas in Cultivation

By DAN BAMFORD

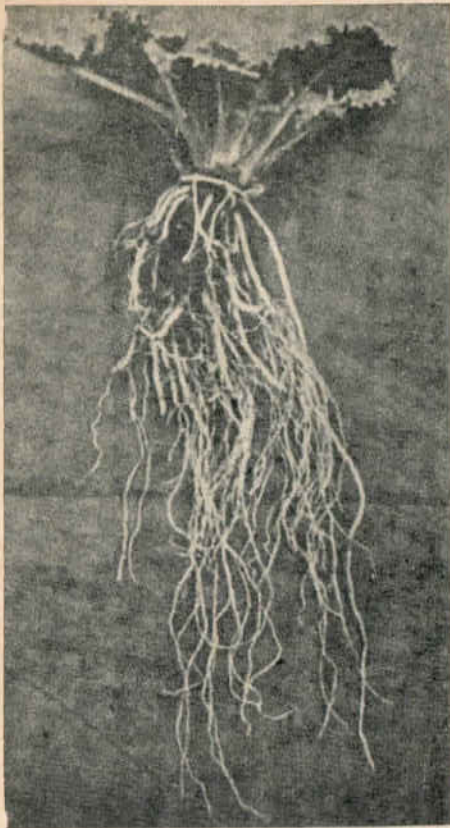
I GROW Petiolares Primulas such as *Edgeworthii*, (*Winteri*) and its variety *alba*, *bractiosa*, *bhutanica*, *sonchifolia*, and *sessilis* in the cold house. There must be many in the A.P.S. who do not enjoy a favoured climate, and it may be that many are timid of trying some of the reputed more difficult primulas. I advise them to have a try; even if they have their little trials and difficulties, the thrill of achievement will no doubt reward them.

In pot culture use pots of sufficient size to accommodate the plants comfortably, pots as used for Auriculas will usually be found suitable. I prefer the deep pots known here as "Long Toms." Drainage is of prime importance and may be managed with a layer of half decayed leaves—oak or beech. For a compost I use two parts really good leaf mould, one part sandy loam, one part coarse sand and a little charcoal broken up into small pieces. I rub this through a one-half inch mesh riddle and thoroughly mix it. These primulas dislike stagnant water and a saturated compost, so make sure the compost is porous. Work the soil well among the roots and as potting proceeds give the pot a few sharp taps on the pottery bench to settle the soil among the roots. Do not press the soil too firm, a moderate pressure is all that is necessary. When the potting is completed I leave the surface in the form of a small cone. In this way the water will run away from the crown of the plant. When I say "small cone" I mean about one-fourth inch only, but see that the soil is brought well up to the crown of the plants, say about level with the rosette of leaves. After one or two have been potted it will be found that potting can be carried out at a fair speed.

Winter is the critical time for these plants. Avoid a stagnant atmosphere

at all times by giving the plants ample ventilation. If cold east winds prevail, ventilate on the leeward side of the house, but during fogs, which often occur in industrial areas, close the ventilators. If a little electric heat is available switch it on and set the thermostat to keep the temperature of the house two or three degrees above the outside temperature. This will reduce the dampness and keep the air moving slightly—it is in no way intended as a means of raising the temperature. In January and February the plants will begin to flower and as the light increases this will go on at a rapid rate until the plants are in full bloom. At this stage the plants must receive more water but saturation must be avoided. Continue to attend to the watering until late Autumn, when the plants will form a hard central crown. From this time until Spring only water when the soil is dry. During Spring and Summer the plants must be shaded as for Auriculas. I prefer canvas or lath blinds to the wash shading—they keep the inside of the house much cooler. Damp or syringe between the pots in summer to produce a moist atmosphere and ventilate to the full. In winter discontinue the damping, as these plants prefer a dry atmosphere at that time. My experience leads me to say that repotting and division is best carried out when all the flowers have faded. These plants set seed very freely and increase by this means can be rapid. The seed cannot be depended upon to keep for any length of time and it ought to be sown immediately. The seed pod can be burst by a slight pressure.

Sown thus, germination will be rapid and almost 100%. For a seed bed I use mostly leaf mould and sand rubbed through a fine mesh riddle with just a little loam to hold the com-

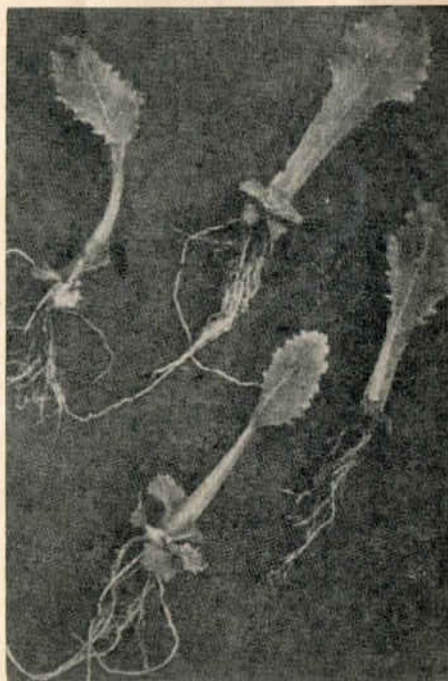


Petiolaris Root Cuttings

post together. Sow thinly and then scarcely cover the seed with sand. Prior to sowing thoroughly water the soil and when the sowing is completed cover the seed pan with a pane of glass. I sometimes find that germination is more rapid if the surface of the pan is covered with a thin layer of moss which conserves the moisture. Keep a sharp lookout for germination and immediately this occurs, remove the moss but keep the pans covered with the glass for a few days. When the seedlings are large enough to handle prick them out into pans of the same compost and when large enough pot into small pots. Part of a bench filled with about 50 plants of this primula makes a delightful picture. When success has been achieved the grower will need no encouragement

to launch forth with others in the same series. In its native Himalayas this primula must be in flower as soon as, or before, the melting snow has vanished. I have read somewhere that it has been seen in flower encased in *solid ice*. It must have been a thrilling sight. Unfortunately I do not know what the climate is like in the Northwest United States, but it must be such that many English gardeners can be excused if they envy it. I therefore judge that most of the Primulas I have mentioned will be happy in the open there, but maybe they will require a little protection against winter rain.

The good form of *P. aureata* is lovely. There is a cream form which is charming but the real plant is a gem (orange). I tried to get a few seed pods to set this spring but the weather was against it. However, I will take particular care next spring to try to get some of the seeds to set. (See page 23 in dictionary for picture, January 1954 Quarterly.)



Petiolaris Root Cuttings

Pete Klein Says-

September 1955

I have tried *P. sonchifolia* for the last three years but never had any germinate. In July I wrote to Jack Drake in Scotland asking if he would send me new seed just out of the pod. He sent me a packet and three pods. I planted them, and watered with warm water each morning for ten days. They started to germinate in three weeks and at least seventy-five per cent germinated at once. I treat all my Petiolaris seed that way, and all my crosses germinated well, but *P. bhutanica* selfed only. Six or eight germinated so far. *P. sessilis* is blooming again now. It did not re-seed this spring but seeds are forming now . . . Water the Petiolaris seed pans with good warm water each morning.

March 1956

P. scapigera is starting to bloom now. These are outdoors and several of the leaf cuttings I took from *P. scapigera* last May are blooming now, still in the greenhouse. The best time to take leaf cuttings is some time in May; it is the lower or older leaves that will dislodge easily from the plant.

Announcing An Auricula Show

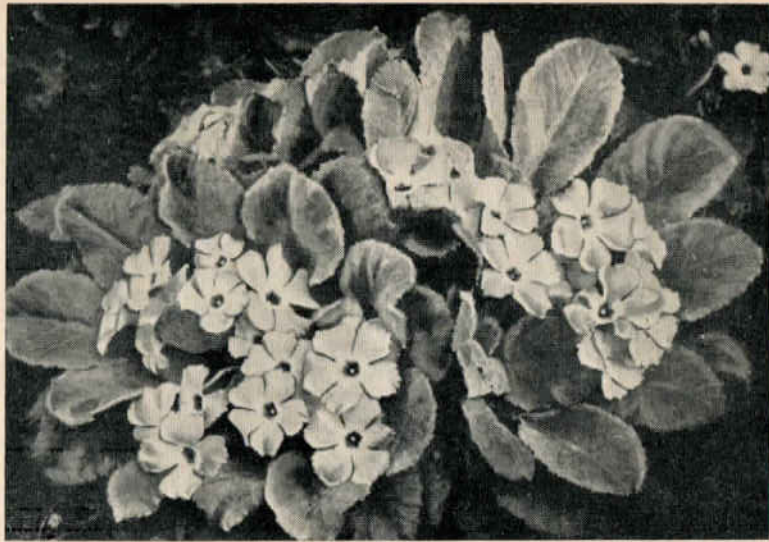
By RALPH BALCOM

The Washington State Primrose Society will sponsor an Auricula Show in Seattle next spring. Committees are already working on plans for a one-day show patterned, as near as is feasible, after those held in England. Entries will include all types of Auriculas and also the Gold Laced Show Polyanthus.

Application has been made to the American Primrose Society to have this recognized as an official National Show and also to have it designated as the place where the 1957 Bamford Trophy will be presented.

It is expected that this will be the outstanding Auricula event of the year and all growers anywhere, whether they be members of any Society or not, are cordially invited to exhibit their plants and to compete for suitable ribbons and trophies. The exact date and the place of exhibition will be announced in the next issue of the Quarterly.

(Editor's Note: You can visit the Alpenglow Gardens on Highway 99 in New Westminster, B. C. in a day from the Seattle area, lunching on the way, and be back before dark. Don't let the technical articles about the difficulties in growing some of the species keep you from owning a few Shows and Alpines. See page 128 of the July Quarterly for a list of the current named varieties.)



(Courtesy Gardening Illustrated)

Primula Edgeworthii, long known under its synonym *Winteri*.

Reginald Farrer writes in *English Rock Garden** that *P. Edgeworthii* . . . "will freely come from seed (which, however, as becomes a jewel requires some setting) or is so robust that in the end of summer its added crowns of the year may readily be removed from the main stock and grown on for the next season. Care, however, should always be taken with this, as with all *Primulas*, to see the specimen you are buying in flower; for the species, like the race and its hybrids, is as variable as a woman, and the best should be as carefully chosen of the one as of the other."

*2-volume edition available at Gill's for \$35.00 (see ad on page 168)

CHANGE IN DUES

The following amendment to the Constitution was passed at the September meeting of the American Primrose Society at Portland, Oregon.

Article III, Section II of the By-Laws was amended to read: Active membership dues shall be \$3.50 per year. A combination membership shall be offered wherein the first person in the household to hold membership in the Society will be a subscriber of the *Quarterly* at the regular membership fee of \$3.50. The other persons in the household may have full memberships (without subscription) for \$1.00 each. All dues shall be due November 15th for the following year and be considered delinquent at the beginning of the American Primrose Society's business year, January 1st.

AMENDMENT TO THE CONSTITUTION was proposed at the September meeting of the American Primrose Society to be voted upon at the October meeting, at 7:30 p.m. October 16, 1956, at the Public Library in Portland, Oregon: Amendment to Article III, Section II of the By-Laws to provide full membership, including subscription for the *Quarterly*, for *overseas* membership in the A.P.S. for \$2.50 per year.

Presentation of the American Primrose Society Quarterly's Award to Dr. Matthew C. Riddle for Outstanding Achievement in Hybridizing

Presented by FLORENCE LEVY at the Fifteenth A.P.S. Show in Kirkland, Wash., April, 1956

As happy as I am to make this presentation to Dr. Riddle, I hope my fate is not that of the retired minister who introduced a noted Harvard astronomer. The minister had been too long without a congregation and got carried away by his opportunity to recite degrees, honors, and vital statistics he had dug up. When relief finally came, the astronomer acknowledged with "Thank you very much. If I knew *anything* good about you, I would certainly say it." On the other hand, Dr. Riddle might be accused, as was the other scientist, of furnishing beforehand the imposing list of his accomplishments, but I had to dig for my facts the same as the minister.

This is the third time the American Primrose Society Quarterly has given its award for outstanding achievement in hybridizing, and the first time to one whose vocation is not horticulture. Dr. Riddle is not only a physician, he is, as well, an instructor, administrator, and research scientist. He taught at Reed College and the University of Oregon two years while going to medical school, although he planned to be a professor of zoology. As a matter of fact he was assistant professor of zoology at the University of Oregon while taking his master's degree. With Harvard no easier to enter than than it is now, Dr. Riddle was not only accepted but won his MD cum laude. His intention at that time was to do medical research and so studied hematology, and I am told he is considered one of the outstanding hematologists on the west coast. He also worked at

the University of Michigan medical school on the use of liver in the treatment of pernicious anemia.

Besides specializing in parasitology and internal medicines, he specializes as a diagnostician and teaches genetics at the University of Oregon Medical School. He is currently working with atomic medicine, being one of the moving forces in the establishment of an atomic medicine laboratory at Good Samaritan Hospital in Portland. He has just recently returned from Costa Rica, sent by the Rockefeller Foundation, as he was in 1944, for the purpose of continuing his research in tropical diseases. He was one of those selected for this work in 1943, sent to Tulane in New Orleans, for the ultimate purpose of teaching young doctors who would be in the medical corps in the last war. Additionally and currently, he teaches two hours every morning at the University of Oregon Medical School, is head of the Dean's Committee at the Veterans Hospital, choosing and supervising the training of resident doctors.

The same intellectual curiosity and keen observation that has made Dr. Riddle an eminent scientist has made him an outstanding horticulturist. Plus, of course, a love of beauty and of growing things which is inherent. He started collecting the wild flowers of southern Oregon at the age of five or six, and today has the finest collection of native Oregon Iris in existence. Breeding the finest forms of *Iris innominata*, sharing the seeds with other hobbyists in this country and as

far away as New Zealand, he has given much pleasure. Then there are his crosses between species of native Iris, and his crosses of German Iris which made four registrations in 1955, two yellow blends and two red-browns. He has an exquisite collection of native Erythroniums and their hybrids, dwarf Trilliums, and Dodecatheons. But now it is time to talk about his particular contribution to Primulas. To him goes the credit for bringing into existence a new race of Polyanthus hybrids that are exceptionally beautiful and which complete a sequence in the scale of size and form.

I can remember as though it were yesterday my first sight of a Miniature Polyanthus. It was seven years ago and the plant was the incomparable Red Riddle which is now often used in the breeding of Miniatures. Two other professional growers came to me at the time and asked me to come and see something and then tell them if I believed it. I stood a long time and wasn't sure whether or not I believed it. Dr. Riddle has bred Miniatures so miniature that the over-all height—foliage, scape and truss—was not more than two inches. He is now breeding Miniatures with certain characteristics in mind: perfection of form, flowers of heavy substance to resist the assault of violent spring rains and hail, very small round eye, and heart-shaped petals. One of his newest is a vibrant lobelia blue of superb form. For this, his first cross was a small-eyed blue Acaulis with Red Riddle. The F₁ progeny was, of course, a hodge-podge of color and form. The F₂ generation had beautiful form and flowers. His lobelia-colored plant is the third generation cross, and one which created as much excitement last year as did Red Riddle.

Dr. Riddle, seven years ago I was exceedingly happy to present you with the Barnhaven trophy for the best seedling in the Show, won by Red Riddle. Tonight, because of your work with mineatures, generally, and

GENERAL ELECTION OF OFFICERS will be held at the annual meeting of the American Primrose Society, November 20, 1956, at the Oregonian Hostess House, Broadway at S.W. Columbia, Portland, Oregon, at 7:45 p.m. Members outside the Portland area in good standing who wish to vote but cannot attend the meeting may send to the Treasurer, Mrs. Orval Agee, 11112 S.E. Wood Ave., Milwaukie 22, Oregon, for a ballot. Marked ballots must be returned to the office before the annual meeting. Nominations will be accepted from the floor at the October meeting. We refer you to page 110 (July 1956) for the panel of officers nominated by the nominating committee.

Seed Exchange 1957

By CHESTER K. STRONG

It has fallen out that I will again be distributor of seed for 1957 regardless of the fact that I definitely resigned the post.

A seed list will be available about the first of the year, probably in its usual mimeographed form.

Seeds will be acceptable immediately. And if any growers have surplus seeds of the rare species of Primulas, will they please also contribute to the Exchange.

Again this year, seeds of those plants companionable to Primulas are wanted. Hardy cyclamen seed are always in demand.

Mail seed to Chester K. Strong, Box 126, Loveland, Colorado.

your Lobelia Blue, particularly, I know the same happiness in presenting you with the American Primrose Society Quarterly's Premier Award for Outstanding Achievement in Hybridizing.

Picnic Patter

By ANNE SIEPMAN, *Regional Editor*

Those of us who were lucky enough to attend the annual Society picnic at Hannon Acres on July 22nd had a delightful time. Mrs. Hannon, as always, was the gracious hostess. There were members from Tacoma, Seattle, and Kirkland.

The Photography Award was given to Orval Agee, pictured right, at this time. Florence Levy presented the trophies (see page 107). It was also at this time that Susan Worthington, our beloved Editor, turned over the Quarterly to our new editor, Mr. Charles Gilman, pictured below. Both Mr. and Mrs. Gilman are to be commended for taking over this tremendous task, and I'm sure all of our best wishes go to them.

* * *

On August 15th, the Tacoma Primrose Club's picnic was held at the Western State Hospital, by invitation of Mr. Rigby, who is the landscape gardener at that institution. Everyone enjoyed the beautiful grounds where there is a fine planting of Candelabra and where the Tacoma Club hopes to have a Candelabra Show next year. This picnic was also attended by folks from Portland and Seattle.

* * *

Another fine picnic was held by the Washington State Primrose Society at



Colewood Gardens on August 26th. This is getting to be a tradition with us. The friendly hospitality of Mr. and Mrs. Cole make these annual affairs especially enjoyable.

* * *

We combined business with pleasure by having a plant sale at both the Tacoma and Seattle picnics, with plants from Linda Eickman's yard. After paying the Estate for the plants, a nice sum was realized for the A.P.S. Treasury.



Dictionary of the Hybrid Primulas Of the Auricula Section

NATIVES OF THE EUROPEAN ALPS

Compiled By JAMES STUART MCLEES

One of the pleasant byways into which the lover of Primulas may be led is the collection of the natural hybrids of the Auricula Section. These are found sometimes in numbers, sometimes sparsely, upon the mountains and the high passes of Europe, wherever the areas of the different species overlap. Although many of the hybrids are described as better garden plants than the parent species they are, unfortunately, not well known in America. A few are offered by nurserymen specializing in Primulas and may be found by diligent search but many more are quite unobtainable in commerce here. The attitude of the United States Department of Agriculture tends to discourage their importation. Nevertheless, so great is the interest throughout America in Primulas, and especially in Auriculas both wild and cultivated, that it is only a matter of time until American nurseries are encouraged by the demand to submit to the vexations and risk of loss that attend the importation of Primulas in general.

Meanwhile we must depend on British gardening publications for information about these delightful subjects for our rock gardens. Every now and then articles dealing with individual hybrids are published in British journals but there has been no general treatment of the subject since the publication of Smith and Fletcher's monumental work in 1948, and even here the hybrids are merely incidental to description of the parent species. There has been no work of a popular nature devoted to the hybrids since "European Primula Crosses" by C. C. Mountfort appeared in the December, 1940, issue of the Quarterly Bulletin of the Alpine Garden Society (of Great Britain). Corsar (1948) de-

scribes a number of the hybrids in his "Primulas in the Garden," but our own Professor Blasdale pays scant attention to them except for the garden Auriculas and the series commonly called pubescens hybrids. The present review offers nothing that is original on the subject. It is principally a recapitulation of the information contained in the six sources cited in the footnote. Its excuse for being is solely because the original works may not be readily available to many American gardeners. It offers a starting point for the collection of a record of American experience with the hybrids of the European Alps and the writer will welcome correspondence with those who have grown them or who may have experimented in raising seedlings obtained by crossing the species, to the end that our combined experience may be made available to American Primula lovers.

As might be expected of hybrids, many of the crosses exhibit a wide range of variation. In the past, eager botanists have taken advantage of this variability to publish descriptions and have given specific names to plants which differ from each other often in only minor particulars. As a result, the nomenclature is involved and difficult. Smith and Fletcher have done much to clear away this confusion. From a botanical point of view there should be but one name to cover all the progeny of each pair of parent species and this should, of course, be the earliest name published. Smith and Fletcher have arranged their descriptions with this as their guide, all other names for a given cross being treated as synonyms. Considerable difference of opinion will be found between them and the other authors, particularly Farrer, as to the priority

of names, but, because of the strictly scientific basis of "The Genus Primula" and of the high standing of its authors, this writer has preferred to follow the Smith and Fletcher classification.

Gardeners in general will not appreciate the simplification thus brought about. The plants from a given cross often differ from each other in ways which are important garden-wise and gardeners require names with which to identify the different forms. When, therefore, it is found that one of the synonyms has come to be associated with a particular form of a hybrid, that name has been retained here but has been given a subordinate status in a manner analogous to the grouping of varieties under the name of a recognized species. Such a subgroup is here designated a "form" to differentiate it from a "variety" which, in the ordinary course of nature, may be expected to breed true. A form of a hybrid rarely, if ever, reproduces itself by seed even when bred to another individual of the same form.

The question of arranging the hybrids for presentation here has required considerable thought. Some authorities, Smith and Fletcher among them, have arranged the hybrids under the species presumed to be the seed-parent of the cross. This arrangement follows logically from botanical classification: genera under family, species under genus, varieties and other sub-species under specific names. But it requires the use of an index to adapt it to the use of gardeners who generally are more interested in descriptions and cultural information than they are in the exact relationship of their plants. An alphabetic arrangement has been selected for its more general usefulness.

Culturally, the hybrids as a group are plants for the rock garden. Most of them are small, requiring the protection of a rock pocket lest they be overwhelmed by land-hungry neighbors, and all appreciate adequate moisture

supply during the growing season thrusting their long roots far down under the rocks in search of the cool waters that trickle through the shingle and rock crevices of their mountain homes. Yet, like their parents, none of them will tolerate conditions of stagnant moisture, especially during their dormant period when they normally would be kept safe and dry beneath a thick blanket of snow. A sound compost enriched with one third of its bulk composed of leaf mold or, failing that, of enriched peat moss, but no other fertilizer, opened with sharp sand to permit fairly rapid drainage, will suit the great majority of them and nearly all like or will tolerate a little lime in the soil. Like the parents they enjoy the sun, but do best if protected from the midday heat when grown at or near sea level. In short, a great majority of the hybrids are of easy culture under normal rock garden conditions. There, when established, they can be counted upon to give a good account of themselves and to delight us with their bright and abundant blooms which are often relatively enormous in comparison with the tiny plants.

Propagation of any given form must be by vegetative methods. Many of the hybrids are sterile and will not set seed in response to the pollen of either of the parent species or of another plant of the cross. A few are sterile in that, although they will set seed, the seed will not germinate. But some of the crosses are endlessly fertile, setting viable seed to the pollen of other plants of the cross or of one or both of the parents, some may be selfed, and some may be crossed in the garden with other species with which they do not come in contact under natural conditions. As previously indicated, the forms rarely, if ever, reproduce themselves by seed, but the raiser of seedlings will obtain many interesting and sometimes exceedingly beautiful forms of his own which may be reproduced vegetatively. However,

it is only rarely that forms better than those already on the market appear among the raiser's seedlings.

Those hybrids that form densely matted plants, and most of those derived from *P. minima* are of this habit, are easily propagated by division of the original plant. Even the smallest division with roots will grow if given adequate moisture and the protection of a shaded frame until it has had time to reestablish itself. Unrooted crowns, if detached with a short length of stem, may often be rooted as cuttings and will in time grow into blooming sized plants. Those that do not form mats are multiplied by detaching the rooted offsets which grow from the main stem and root where they touch the soil, or by treating unrooted side growths as cuttings and rooting them in vessels of sharp sand, kept moist and close until they show by renewed growth that roots have been produced.

There now follows an alphabetic list of the hybrids and their synonyms.

Primula admontensis, Gusmus, is *P. Clusiana* var. *crenigera*, Beck, and is mentioned here only because Gusmus declared it to be a hybrid between *P. auricula* and *P. Clusiana*. It differs from *P. Clusiana* in having the leaf margins conspicuously toothed above the middle. (4)

P. adulteriana, Gusmus, is *P. x Venzoi*, Huter, q. v.

P. x alpigena, Dalle Torre and Sarnth, is *P. minima* x *P. daonensis*. This is a sterile hybrid. Two forms are recognized but it is so variable that it seems unfortunate that any forms have been distinguished by separate names.

Form *pumila* has the habit of *P. minima* and has a scape as long as the leaves, carrying two flowers. The leaves are wider than long, rounded at the ends, and with 6-9 horny pointed teeth on each leaf. More tidy and compact than most of the hybrids to which *P. minima* has contributed. (3).

Form *Widmerae*: taller than the preceding. Leaves obovate with 8-10 small teeth that lack the horny points of the form *pumila*. Scape equal to or longer than the leaves and carrying up to four flowers. Corolla about three-quarters of an inch in diameter with small red glands in the throat. (2).

Both forms are found in the alpine grasslands of Judicaria and are suitable for cultivation under conditions that suit *P. minima*, growing more strongly and flowering more freely in the garden than in nature. (1).

P. x alpina, Schleicher, is *P. auricula* x *P. viscosa*. Not common among the parents. Leaves longer and narrower than in *P. auricula*, practically without farina; scape rising above the foliage; truss tending to be one-sided, the pips narrower in outline than in *P. auricula* and fewer than in *P. viscosa*, color rose-purple to vinous lilac, rather muddy and impure, with a dirty white or yellowish eye. (3).

P. x aretotis, Kerner, is *P. x pubescens*, q. v. The name is given to a plant with strong purple flowers held well above the narrow foliage. (6).

P. x assimilis, Sundermann, is *P. x Heerii*, Brugger, q. v.

P. x auricula of gardens: under this name we refer to the familiar and beloved auriculas of the garden and the florist's show bench, perhaps best referred to under *P. x hortensis*, Wettstein. These developments are so vast and the named varieties so numerous as to be quite incapable of treatment here. They require a volume to themselves. The vast race is understood to be derived from the cross between *P. auricula* and *P. rubra* and as such might be thought of as *P. x pubescens* but, so readily do the varieties interbreed both among themselves and with the parent species, and so responsive are they to the pollen of other species in the garden that it seems practically certain that the modern auriculas reflect the influence of species other than and in addition to the parents of

the original cross. In this case it well may be advisable to restrict the name *P. x pubescens* to the natural hybrid and to apply to the host of garden auriculas the name suggested by Wettstein.

P. Balfouriana, Watt, is also *P. Tanneri*, King, and is a very fine garden form of *P. pubescens* (1) with heads of dark terra-cotta colored flowers. (5).

P. x Barbara Barker, Hort., "I crossed Zuleika Dobson once with *P. Linda* Pope and so raised *P. Barbara* Barker. Having a strain of *P. marginata* in her, I suppose *Barbara* Barker is not strictly speaking a *P. pubescens*. But for convenience I will describe her here. She has an excellent constitution. The leaves are slightly wavy-edged, but lack the silver-mealy margin of a *marginata*. The flowers, rather large, are round, of a fine, clear lilac, fragrant, and carried in bold upstanding trusses. This outstanding hybrid received an Award of Merit, R.H.S., in 1927". (5).

P. x Beatrice Lascario is *P. Allionii* x *P. marginata*. Collected by Dr. Denham in Rio Freddo, Col di Tenda. Concolorous purple-mauve flowers in stalked umbels. (4) Mountfort (3) tells of having collected a plant out of flower in the Tenda in August, 1927, growing on a rock face among *P. Allionii* which it resembled. Transferred to poor, gritty soil in his garden it neither flowered nor increased but, when moved to better conditions, the leaves increased in length, improved in color, and developed the toothing which clearly showed *P. marginata* as one of the parents. Its flowers were pale pink, fading to white at the center, and opened one at a time. The individual flowers had the appearance of *P. Allionii* and side shoots were now freely produced as is the habit of that species.

P. x Berninae, Kerner, is *P. rubra* (*hirsuta*) x *P. viscosa*. It is a handsome primula and frequently a better plant than either of its parents, not uncom-

mon in free, open soil on the higher passes of the Bernina and Bergamask Alps in the Engadine. The flowers are fewer, larger, and wider than those of the parents and have the purplish, powdered throat of *P. viscosa*. In color they may be violet, purple, or lilac-rose. The scape is equal to or longer than the leaves; umbel erect and sometimes unilateral, and the pips semi-nodding. In cultivation it is as easy as its parents in similar conditions. (1), (2), (3), (4), (5), and (6).

The Wildrush form, collected or raised from seed by Mr. Paul Rosenheim, is an improvement on the type, dwarf and extremely free-flowering, with large flowers of a clear, strong rosy-pink, with a white eye. (5).

P. x biflora, Huter, see under *P. x Floerkeana*, Schraeder.

P. x Bilekii, Sundermann, is a form of *P. x Steinii*, q. v.

P. x Blue Bowl is a particularly fine form of *P. x crucis*.

P. x Bowlesii, Farrer, is *P. pedemontana* x *P. viscosa*: a very variable hybrid, its inferior forms no improvement on either parent, but at its best a very lovely thing, carrying a rather one-sided scape of pips not unlike those of *P. viscosa* but fuller and wider and of a lovely lavender-purple with a white eye not unlike that of *P. carniolica*. (3). It is found in a very restricted area about Mount Cenis.

P. x brennia, Gusmus, is *P. x Steinii*, Obrist, q. v.

P. x caesarea, Farrer, is *P. x intermedia*, Portenschlag, and is the name given by Farrer to a hybrid found by him on the Hochschneeberg and believed to be *P. minima* x *P. Clusiana*, i.e., the reverse cross to the usual *P. x intermedia*, but, by the latest Viennese rule, to be included within that name. A small plant, and quite fertile. (4). Undistinguished, with the small foliage of *P. minima*, more glossy, toothed, and not cut so square across the ends; the flowers are those of a

poor *P. minima* but much brighter in color. (3).

P. x Carueli, Porta, is *P. glaucescens* subsp. *longobarda* x *P. spectabilis* and is said to be fertile; it is intermediate between the parents and has no special garden value. (4). Rare.

P. Churchilli, Gusmus, is also *P. admontensis*, Gusmus, q. v.

P. x Commodore is one of the finer garden varieties of the series known as *P. x pubescens* (q. v.) and is described by Elliott as a seedling from The General, with deep mahogany-red flowers. (5).

P. coronaria, mentioned by Corsar, appears to be a misspelling of *P. coronata*, q. v.

P. x coronata, Porta, is a synonym for *P. x alpigena*, q. v.

P. x cridalensis, Gusmus, is but another name for *P. x Venzoi*, Huter.

P. x crucis, Bowles, is *P. marginata* x *P. viscosa*, and is intermediate between the two. Mountfort (3) found only inferior forms like "a rather scraggy *P. marginata*" in the Monte Viso district but Farrer (1) states that "the hybrid has many splendid colour-forms, and seems to breed back again into secondary crosses with either or other of its parents—but always a glory". Farrer found a plant of it, which he named "Blue Bowl" with flowers "of a clear and lucid sapphire-blue like the finest Chinese glass of Kien-lung," which may still be in cultivation.

P. x Davosiana, Sundermann, is *P. x Heerii*, Brugger, q. v.

P. x decora, Sims, is a false name for *P. rubra (hirsuta)*. *P. x decora* of gardens is a garden auricula or *P. x pubescens* hybrid described by Farrer (1) as of great beauty, of neat free growth, with an attractive rosette of dentate leaves, and generously-borne heads of large, round, mealy-eyed flowers of a rich and beautiful blue-purple. Being a hybrid, it does not come true from seed but produces auriculas of every color and variety.

P. x Deschmanni, Gusmus, is a form of *P. x vochinensis*, Gusmus.

P. x Dinyana, Lager, is a form of *P. x muretiana*, Monitzi.

P. x discolor, Leybold, is *P. auricula* x *P. daonensis*. Exceedingly variable and very fertile, so difficult to identify. The original hybrid differs from *P. auricula* in having reddish glands, shorter pedicels, and the flowers violet or yellowish-white; and from *P. daonensis* by having the foliage often entire, and by its longer pedicels. The scape equals or exceeds the leaves, and carries a few- to many-flowered umbel of flowers. Leaves obovate to oblong-wedge shaped, entire or slightly denticulate and with or without a cartilaginous margin. Specimens are far from common in the Alps of S. Judicaria, in limestone; not difficult to cultivate in the rock garden. (2).

P. diversa, Gusmus, is *P. x Steinii*, Obrist.

P. Dumoulinii, Stein, is a form of *P. x Facchinii*, Schott.

P. x Escheri, Brugger, is *P. auricula* x *P. integrifolia*. Little is known about this plant. It was collected by Sundermann in the W. Rhaetian Alps and flowered at Munich as well as at Chur by Professor Brugger. (2). Not a very striking primula, with dull red flowers. (6). Has the general appearance of *P. integrifolia* but is larger in all its parts. (3).

P. x Ethel Barker, of garden origin. Was raised by Clarence Elliott of Stevenage. The leaves are long-petioled and downy, the flowers are freely borne, 3-5 in a short stemmed umbel. Bright carmine with a white eye. (4). The plant is figured in Qt. Bul. A. G. S. VIII, (1940), p. 261. This photograph seems to indicate a low-growing plant with spatulate leaves perhaps one and a half inches long and three-quarters of an inch broad, rounded at the apex and with somewhat obscurely dentate margins. The flowers, broader than the leaves, are well displayed although not much, if any, higher

than the foliage. The lobes are quite conspicuously notched.

P. x Facchinii, Scott, is *P. minima* by *P. spectabilis*. (4). A sterile hybrid recorded in two forms, both from Judicaria. Both are small in habit with obovate leaves, dentate and margined with a stiff membrane, glabrous and a little viscid. They differ from *P. spectabilis* in having dentate leaves with dots in a leaf substance and being more dwarfed; and from *P. minima* in being larger, with margined leaves.

Form *Facchinii* is the taller, with ovoid leaves toothed from the middle. The flowers are large and red and are carried in pairs on scapes of a good height. (6).

Form *Dumoulinii* is close to *P. minima*; a little plant with a short, one-flowered scape; and leaves that are wedge-shaped, serrately toothed, and somewhat truncate at the end. (2).

P. x Faldonside of gardens, was raised by Dr. Boyd, the famous raiser of Saxifrage *Boydii* and *S. Faldonside*. It has full heads of rather frilly-petalled flowers of a bright, light crimson. (5).

P. fallax, Gusmus, is *P. intermedia*, Portenschlag.

P. flatnitzensis, Gusmus, is *P. x Sturii*, Schott, q. v.

P. Floerkeana, Facchini, is *P. x Facchini*, Schott, q. v.

P. Floerkeana, Salzer, is *P. intermedia*, Portenschlag.

P. Floerkeana, Schrader, is *P. glutinosa* x *P. minima*, a fertile and highly variable hybrid, interbreeding and cross-breeding and producing a series of unmistakable intermediates, of which four forms have been recognized. All are found among the Alps of Austria and Italy.

Form *Floerkeana* has spatulate leaves with 9-15 strong, triangular, "horny teeth"; bracts oblong; calyx short; scape glutinous, with 1-4 bright, red-violet or red-mauve flowers (2). Similar in habit to *P. glutinosa* but with somewhat shorter leaves and

large flowers of glowing purple on three-inch scapes (4).

Form *Huteri* is the closest to *P. glutinosa*, with oblong spatulate leaves, toothed toward the tip with 11-15 short, hard-pointed teeth; bracts two or three; scape sticky; corolla red-violet, limb shorter than the tube (2). Resembles *P. glutinosa* in the broad, ovate, overlapping bracts which are longer than the calyx. It has the blunt-shaped leaves of *P. minima*. Each scape carries 2-3 large, purplish-red flowers (4).

Form *x salisburgensis* is a compromise between the simple, clump growth of *P. glutinosa* and the dense, spreading carpet of *P. minima*. This fine plant has glossy, deeply-notched, wedge-shaped leaves and very large, rich red flowers (4). Leaves wedge-shaped, with 7-9 strong teeth toward the tip. Scape not glutinous, flower buds deepish blue but opening lavender with a creamy white eye. Resembles *P. minima*. Does well in the rock-garden and flowers freely. (2).

Form *biflora* is very rare. It differs from *P. minima* chiefly in having two flowers on a short scape; bright pink or rose. (2).

P. Forsteri, Stein, is a form of *P. x Steinii*, Obrist, q. v.

P. fratensis, Gusmus, is another false name for *P. x Facchinii*.

P. globulariaefolia, Gusmus, is *P. Heerii*, Brugger, q. v.

P. Gobelii, Kerner, is *P. auricula* x *P. villosa*, Pax, a fairly distinct plant which should be known as *P. alpina*. The name is variably spelled by different authors, *Goebellii* by Ludi, *Goblii* by Mountfort, and *Goeblii* by Ingwersen.

P. Goeblii described as one of the handsomest of natural hybrids by Corsar (6) is ascribed by him as *P. auricula* x *P. rubra (hirsuta)* and hence should be treated as a form of *P. pubescens*.

P. x Heerii, Brugger, is *P. rubra* x *P. integrifolia*, a beautiful reputedly sterile hybrid found in the West Rhae-

tian Alps and in the Pyrenees. The leaves may be entire or toothed and are broader and softer than those of *P. integrifolia* and brighter green and less downy than those of *P. rubra*. It forms ramifying masses, and has flowers of greater size and brilliance than either of its parents. The pips are bright pink to dull rose in color with fuzzy glands in the whitish throat. Dislikes lime in the garden. (1).

P. helvetica, Donn, is a form of *P. x pubescens* having a stout stock, dull green leaves and large roundish heads of light, lilac-pink, fragrant flowers. It is an easy plant and attractive rather than sensational. The white form, *P. h. alba*, is very lovely, with creamy-white flowers. An easy and satisfactory "doer", free-flowering and fragrant, it is a first rate plant for the alpine house. (5).

P. hortensis, Wettstein, is a name suggested to apply to the host of garden auriculas including the forms generally known as *P. x pubescens*, leaving the latter name to apply to the natural hybrid between *P. rubra* and *P. auricula* alone.

P. Huteri, Kerner, is a form of *P. Floerkeana*, Schraeder, q. v.

P. idriana, Gusmus, is better known as *P. x venusta*, Host.

P. incerta, Gusmus, is yet another name for *P. x Heerii*, Brugger.

P. integrifolia, Lehm., is *P. Clusiana* var. *crenigera* (4). Gusmus considered this to be a hybrid between *P. auricula* and *P. Clusiana*.

P. integrifolia, Linn., var. *gavarrensis*, Widmer, is *P. x Heerii*, Brugger.

P. intermedia, Portenschlag, is *P. Clusiana* x *P. minima*, and is said to be sterile, but this is doubtful. It is a smaller plant than *P. Clusiana*, with definite dentation derived from *P. minima*. The flowers of the best forms are borne on scapes three or four inches high and are bright pink with a large white eye. It is one of the easiest of primulas to grow, multiplying its crowns freely in any rich soil

and blooming from every crown in early April. The form *caesarea* is believed to be the reverse cross to the type and is fertile. It is undistinguished, the flowers being those of a poor *P. minima* but much brighter in color (3).

P. intermedia, Van Houtte, is *P. x pubescens*, Jacq.

P. Jalenkae, Gusmus, is yet another name of his for *P. x venusta*, Host.

P. Jiraseckiana, Tratt., is *P. Sturii*, Schott.

P. x juribella, Sundermann, is *P. minima* x *P. tyrolensis*, a lovely but uncommon little primula with cuneate, sparsely-glandular leaves, rather lucent and slightly sticky, rounded off from the middle, and with cartilaginous teeth. Usually one-flowered, it differs from *P. minima* in having finer leaves of a duller green because of the numerous glands; and from *P. tyrolensis*, very little. Juribella Alps. (2). Large rose-pink flowers borne on short stems. Shy of bloom. Responds to confinement of the root system between rocks (6).

P. Kankeriana, Gusmus, is *P. x vochinensis*, Gusmus, q. v.

P. Kellereri, Widmer, is a form of *P. x Steinii*, Obrist, q. v.

P. Kernerii, Gobl & Stein, is *P. Gobelii*, Kerner.

P. x Kolbiana, Widmer, is a doubtful hybrid between *P. viscosa* form *graveolens* and *P. daonensis*, apparently collected only once, by Kellerer in the Mt. Cimone district. It is said to combine the reddish glands of *P. daonensis* with the woody habit and odorous foliage of *P. viscosa*. (4).

P. x Ladybird, of gardens, is a seedling raised by Elliott (5) of which Old Red Dusty Miller was one parent. Hearty and vigorous, and with leaves slightly dusted with farina, it carries large heads of medium-sized flowers of an uncommon shade of ladybird red.

P. Laggeri, Sundermann, is *P. x Heerii*, Brugger.



X P. MARVEN

(courtesy Professor Walter C. Blasdale)

P. Laxii, Gusmus, is *P. x Sturii*, Schott.

P. x Linda Pope, of gardens, is a seedling of *P. marginata* of which the pollen parent is unknown. It is very like *P. marginata* but with larger leaves, beautifully toothed and lined with primrose colored meal on the edges. The somewhat larger flowers are soft lavender or mauve with a white farinose eye. It gained an Award of Merit in 1920. (4).

P. x Lindsayi, Hort., is *P. rubra* x a garden auricula and is illustrated in McWatt (2).

P. Loiseleurii, Sundermann, is said to be *P. auricula* x *P. Allionii*, but this is very improbable in nature. It seems more likely to be *P. auricula* x *P. tyrolensis* as this has been reported twice by Huter from the Southern Dolomites where the two species meet. (3).

P. macciassonica, Dalle Torre & Sarnth, and *P. magiassonica*, Porta, are false names for *P. x Facchinii*, Schott.

P. marginata x? *P. Allionii*. Mountfort (3) has described collection of a

plant from a rock face in the Tenda area where it grew among *P. Allionii*, which it greatly resembled. Cultivated for some years in the rock garden in poor gritty soil, it neither flowered nor increased but, when removed to better conditions the leaves lengthened from one inch to three, they lost their grayish appearance and became more green, and the tothing, which had been but faintly visible, became well marked. When it flowered in 1938 its relationship to *P. marginata* was clearly visible. The flowers were pale pink, fading to white at the center and the pips resembled those of *P. Allionii*. It now produced side shoots freely, as is the habit of that species.

P. marginata var. *Rheiniana* is obviously a *marginata*, but whether a hybrid or a collected variety is not known. It is a beautiful thing, not so large in leaf and flower as Linda Pope, but with fine heads of clear, rich, violet-blue, white-centered flowers, and handsomely scalloped, well-silvered leaves. (5).

P. x Marven, Hort., is *P. x venusta* x *P. marginata* and is a very beautiful

garden cross. The leaves are smooth-edged and margined with silver. The flowers are a fine, dark violet with a white farinose eye. It has a good constitution and flowers freely in April. (2).

P. micrantha, Gusmus, is *P. x Venzoi*, Huter.

P. montafoniensis, Gusmus, is *P. x Heerii*, Brugger.

P. monticola, Gusmus, is *P. intermedia*, Portenschlag.

P. x Mrs. J. H. Wilson, Hort., is by far the best of the pubescens hybrids, a quite exceptionally fine plant, compact, thrifty, a good grower, and extraordinarily free-flowering. The flowers are medium-sized, of a strong luminous lilac-mauve with a well-defined white eye, and fragrant. (5).

P. x mureti, Charp., is *P. x muretiana*.

P. x muretiana, Moritzi, is *P. integrifolia x P. viscosa* and is a very variable plant with numerous forms grading into each other. From *P. integrifolia* it can be distinguished by the toothed leaves, more numerous flowers on longer pedicels and by the non-glandular, hairy throat of the corolla. It is more dwarfed than *P. viscosa* with fewer and larger flowers, longer bracts, and shorter capsules. The flowers are purplish-red and the leaves sticky. It likes open gritty soil and a sunny position, blooming in April and May. Produces seed capsules but the seeds will not germinate.

Form *Dinyanas* This name is frequently applied to forms of the hybrid most closely resembling *P. integrifolia*. Both are found in the Bernina Chain. (2) and (4).

P. mutata, Gusmus, is another name for his own *P. vochinensis*.

P. nivalis is a garden name for the white form of *P. x pubescens*, commonly known as *P. x pubescens, alba*.

P. obovata, Huter, is *P. auricula*, subsp. *Balbisii*, Lehm, *x P. tyrolensis*, Schott. Much doubt attaches to this plant, and, as the name is already occupied by a Chinese species, another

will be required should confirmation and an adequate description appear. (4).

P. oenensis var. *Judicareae*, Widmer, is *P. x discolor*, Leybold.

P. oenipontina is a name suggested by Mountfort for what Smith and Fletcher call *P. x alpina*, Schleicher. (4).

P. pedemontana ? *x P. marginata*: in the Mont Cenis area *P. marginata* reaches its northern limit. It is a very poor form, but here one unusual plant was found. The leaves were coarsely toothed, narrowly lanceolate, and distinctly petioled. They were yellow-green in color with a faint brown margin in the young leaves. The flowers, which resemble those of *P. marginata*, were somewhat funnel-shaped and carried on scapes above the leaves. Obviously *P. marginata* was one parent and *P. viscosa* might well have been the other had that species been growing in the vicinity. *P. pedemontana* was there and is assumed to have been the other parent. An offset with roots attached was brought home and proved remarkably vigorous, making side shoots with the greatest freedom. (3).

P. x penzoi, Huter: this name appears in Mr. Mountfort's account of the hybrids (3) but no doubt is a misspelling of *P. x Venzoi*, q. v.

P. Peyritschii, Stein, is yet another name for a cross between *P. auricula* and *P. rubra* (see *P. x pubescens*).

P. Portae, Huter, is *P. x discolor*, Leybold.

P. Portenschlagii, Beck, is a name for a slight variant of *P. intermedia*, Portenschlag.

P. pseudoforsteri, Gusmus, is a smaller and narrower leaved variation of *P. Forsteri*, Stein, which again is described as a form of *P. Steini*, Obrist.

P. pubescens, Jacq., is the name originally given to the natural hybrid between *P. auricula* and *P. rubra* (*hirsuta*). It is extremely variable in its natural habitat and still more so in cultivation. Cultivated for centuries,

it has been crossed with other species as well as with the original parents until the forms are innumerable. Many believe that our present day auriculas are derived from this mixture. Clarence Elliott (5) says "All this great family of bastard Primulas has divided roughly into two main branches—the garden plants which we commonly know as auriculas, both the show and the border varieties, on the one hand, and on the other hand the Primulas which have taken more after the *hirsuta* (*rubra*) and *viscosa* ancestors. These are becoming popularly known as *pubescens* hybrids. Among them are some of the finest of all hybrid rock garden Primulas, brilliant, free-flowering, and easy to manage. All of them look best and grow best when planted in rather raised positions in the bolder rock formations of the rock garden. Here they should have sound, turfy loam, good drainage and an aspect sheltered from the fiercest midday sun. They make, too, first-rate alpine house plants, planted in pots or pans in a good potting compost of turfy loam, leaf mould, and sand." Some of the best of the garden varieties will be found briefly described under the names:

Balfouriana, Commodore, Faldon-side, Helvetica, Ladybird, Mrs. J. H. Wilson, Nivalis, Robertson Hall, Ruby, The General, White Pearl, Zuleika Dobson, Barbara Barker.

P. pumila, Kerner, is here described as a form of *P. x alpigena*, Dalle Torre & Sarnth.

P. rhaetica, Gaud., is another name for *P. alpina*, Schleicher.

P. x Rheiniana—see under *P. marginata* var. *Rheiniana*.

P. x Robertson Hall, Hort., is a variety of *P. x pubescens* with loose heads of rather large flowers of a fine rosy magenta.

P. rhenaniana, Hort., is probably a hybrid of *P. marginata*. (4). It is suggested that the name is no more than a variant of *P. x Rheiniana*, above.

P. x Ruby, Hort., is another fine form of *P. x pubescens* raised originally by James Douglas of Edenside. It has a good constitution and rather small flowers of glowing, brilliant ruby-red with a startling white eye.

P. x salisburgensis, Floerke, is now treated as form of *P. Floerkeana*, Schraeder.

P. Salisii, Brugger, is another name for *P. x berninae*, Kerner.

P. x Sendtneri, Hort., is *P. auricula x P. pedemontana*. This is a garden hybrid. It cannot appear in nature because the ranges of the parents do not overlap.

P. x seriana, Widmer, is *P. rubra x P. daonensis*, is intermediate between the parents, and has no especial garden value. (2)

P. serrata, Gusmus, is another name for his own *P. vochinensis*.

P. serratifolia, Gusmus, is yet another name for his *P. vochinensis* based on the toothing of the leaves.

P. spinulosa, Gusmus, is *P. intermedia*, Portenschlag.

P. x Steini, Obrist, is *P. rubra x P. minima*, a handsome and fertile hybrid of innumerable forms of which the following are recognized:

Form *Steinii*. The leaves of this lovely Primula are spoon-shaped or oblong spoon-shaped, toothed from the middle with 7-10 horny, pointed teeth and glandular, though rather translucent, and only slightly viscid. The scapes bear two to five large flowers, red, nearly an inch across, with villous throats, and with fleshy bracts below the head of flowers.

Form *Kellereri* much resembles *P. rubra* but differs in having short glands, small leaves armed with horny pointed teeth and longer bracts. The viscid leaves are densely glandular, opaque, ovate-cuneate with the apex obtuse and closely toothed from the middle with horny pointed teeth. The bracts are lanceolate and the scapes bear three to six brilliant crimson flowers an inch or more in diameter.

Form *Forsteri* is one of the most beautiful of all Primulas. Near to *P. minima*, it has glandular, wedge-shaped leaves, rounded at the tip, and toothed with 8 - 13 horny points, not sticky, and with short glands. The scape is short and carries one to three flowers of a beautiful shade of light purple with many long villous hairs in the throat. The bracts are fleshy. Easily grown in peaty soil and at its best the flowers practically smother the plants.

Form *Bilekii*. Leaves dark green and deeply notched at their apices, flowers large and purple to clear pink and with a white eye. It has very much the look of *P. minima* but the flowers can be enormous.

P. x Sturii, Schott is *P. minima x P. villosa*, a sterile hybrid intermediate between the parents. It is distinguished from *P. villosa* by the scape being less than the leaves and by the almost colorless glands, and from *P. minima* in having glandular almost opaque leaves and several flowers per scape. Native of Styria. In form *Sturii* the leaves are broadly wedge-shaped, rounded at the apex and with 8 - 10 teeth. Scape four or five flowered, shorter than the leaves. The outside of the flower tube is ruddy with glands and the throat has long hairs inside. Has been in commerce under the name of *P. Steinii*.

Form *Truncata* more resembles *P. minima*. The leaves are wedge-shaped, with 5 - 7 teeth at the truncate end. The scape is very short, almost sessile and two-flowered. The corolla tube is sprinkled with very small uncolored glands.

P. Tanneri, King, is another name for *P. x Balfouriana*.

P. tauernensis is a name suggested by Mountfort (3) for what Smith and Fletcher (4) call *P. x Gobelii*, Kerner.

P. x The General, Hort., is an old variety and somewhat rare. It resembles a small auricula with flowers of a color impossible to describe except that it suggests rosy-terra-cotta and a tawny-port. (5)

P. Thomasiana, Sundermann, is a name given to a form of *P. x Heerii*, Brugger, which, according to Corsar (6) has the leaves of *P. integrifolia* and the flowers of *P. rubra*.

P. Trisannae, Gusmus, is another name for *P. x Heerii*, Brugger.

P. truncata, Lehm., is a form of *P. x Sturii*, Schott, q. v.

P. Valbonae, Gusmus, is also *P. x Facchinii*, Schott.

P. valmenona, Gusmus, is a name for *P. x Venzoi*, Huter.

P. varians, Gusmus, yet another name for a microform of *P. x Facchinii*, Schott.

P. variiformis, Gusmus, is *P. x Sturii*, Schott.

P. venalensis, Gusmus. Once again Gusmus came late into the field and gave this name to the hybrid which Obrist had already described under the name of *P. x Steinii*.

P. x Venusta, Host., is *P. auricula x P. carniolica*. In it the leaves and calyx are usually more or less farinose but are sometimes glabrous. It differs from *P. auricula* in the rosy, purplish, or brownish flowers and, as offered by British nurserymen, is often rather dull and unattractive, but these forms may be secondary or tertiary crosses, for the hybrid is endlessly fertile and the name is now almost as blurred as that of *P. x pubescens* (1). It is, however, one of the parents of the beautiful *P. x Marven*, Hort., of which the other parent is *P. marginata*. Cultivation is not difficult in sandy peat and turf, in the half shade. The original hybrid is found high up in the Idrian ranges.

P. x Venzoi, Huter, is *P. tyrolensis x P. Wulfeniana*, a very variable little plant which differs typically from *P. tyrolensis* in having larger, stiffer, and glossier leaves, entire or sometimes vaguely toothed and with a barely visible horny margin, and from *P. Wulfeniana* in that the latter has larger, stiff, and very glaucous leaves, always entire and with broadly horny margins. The scape is taller than in *P. tyrolensis*, the bracts narrowly lanceo-

late, and the blunt-lobed calyx is often purplish in color. The flowers are rosy-lilac, 3/4 inch in diameter and two or three to the umbel. It is found in the mountains of Venetia and is easily grown under any reasonable conditions; propagation is by pulling the clump to pieces and planting the divisions almost at will.

P. x vochinensis, Gusmus, is *P. minima x P. Wulfeniana* and is one of the hybrids, forms of which are readily available in the United States. All differ from *P. Wulfeniana* by having saw-toothed leaves, and from *P. minima* in larger habit. They are found in the heights of Carinthia where the parent species meet.

Form *vochinensis* has oblong leaves, seldom entire, and often with from one to three teeth. The scape is short, rarely half an inch in length, and the flowers are deep red and comparatively freely produced.

Form *serratifolia* has oblong-lanceolate or oblong-cuneate leaves with from seven to nine teeth, pedicels very short, and no scape.

Form *Deschmannii*, although larger in all its parts, resembles *P. minima* in habit and growth. The foliage is neat, light green, and deeply serrated. The flowers are pink, borne two or three at a time on short scapes. It is easy but rather shy of bloom in the rock garden. All forms are said to be sterile. All do well in turfy loam or a rich scree mixture in crevices between the rocks. Moist and shaded situations should be avoided (in England). (6)

P. Wettsteinii, Wiemann, is *P. intermedia*, Portenschlag.

P. x White Pearl is a form of *P. x pubescens*: "a curious small plant, with few-flowered heads of rather large, fragrant white flowers, flushed with palest shell-pink." (5)

P. Widmerae, Dalle Torre & Sarnt, is another name for *P. alpigena* by the same authors.

P. Windrush variety is an especially good form of *P. x berninae*, dwarf and extremely free-flowering, with large flowers of a clear, strong rosy-pink, with a white eye. (5)

P. x Zuleika Dobson, Hort., "As Mrs. Wilson is by far the best of this group (*pubescens*) of Primulas, so *Zuleika* Dobson is outstandingly the most magnificent, and the most heart-breaking. In effect *Zuleika* is Mrs. Wilson greatly enlarged, and greatly refined. The deep-lilac flowers are well over an inch and a half across, perfect in form, texture and outline, and with a clear, round, pure-white eye, and they are carried proudly in well proportioned trusses. *Zuleika* received an Award of Merit, and a very handsome offer was made, and refused, for her. But she has never done any good in the world. She has an atrocious constitution, in fact hardly any constitution at all. She maintains just enough life in her sickly frame to support a swarm of root aphid and red spider, and yet year after year she produces those astonishing great flowers." (5) Crossed with *P. x Linda* Pope., *Zuleika* Dobson gave rise to *P. x Barbara* Barker, q. v.

THE FRIENDLY GARDENER

Invites Primula lovers to write for free list of

ENGLISH NAMED SHOWS AND ALPINES

6016 Jennings Avenue, Portland 22, Oregon

- (1) "The English Rock Garden" by Reginald Farrer
 - (2) "The Primulas of Europe" by John MacWatt
 - (3) "European Primula Crosses" by C. C. Mountfort, in the December, 1940, issue of the Quarterly Bulletin of the Alpine Garden Society (Great Britain)
 - (4) "The Genus Primula", by Sir W. Wright Smith and H. R. Fletcher, Ph.D., D.Sc., from Transactions of the Royal Society of Edinburgh, Vol. LXI, Part III, (No. 22), 1948.
 - (5) "Rock Garden Plants" by Clarence Elliott
 - (6) "Primulas in the Garden" by Kenneth C. Corsar
- (Some of these books available at The J. K. Gill Co.—see ad on p. 168)

Seasonal Notes From Barnhaven

By FLORENCE LEVY

When Linda Eickman withdrew from this world, the gentleness and goodness, quiet strength and generosity that were her, somehow became more real. But Linda Eickman made a contribution to primroses that will always live, for pink primroses—really true, Linda-pink primroses—will be carried on by horticulturists as long as men love beauty.

Let no one forget that it was Linda Eickman who developed the first true pinks. She reminds me of the growers outside of London in the 1880's and '90s, enthusiasts who laid the foundation for modern primroses and polyanthus, who carried their exhibits in baskets to London for the R.H.S. fortnightly shows. Linda carried her pink polyanthus in baskets, by bus, thirty-five and forty-five miles to the National Primrose Shows in Portland. Here she gave with a free hand to amateur and professional alike, never clutching, knowing her source was inexhaustible.

I wish to acknowledge once again Barnhaven's indebtedness to Linda Eickman. Her pinks, the only other strain of polyanthus that genetically could be introduced into ours, were crossed with our pastels. The generations following this cross established that her color and our vigor were dominant in the offspring. Linda had two problems with her pinks. The two original plants, one a good pink and the other not so good, were weak as almost all color breaks originally are. To develop and fix the color, line breeding was necessary. With plants, as with animals, line breeding is practiced to fix desired characteristics, but always the most vigorous are selected to strengthen the descendants. If a weak parent is used, the tendency to weakness is multiplied. Linda had no choice but to work with what she had, and it was a long and often

heartbreaking job. Although each year brought more beautiful pink shades and stronger plants, she constantly raised her sights to something higher. She leaves an inheritance of beauty in which she lives because in every pink primrose that blooms you will see Linda.

* * *

In the Barnhaven Notes for July several points on winter care had to be omitted to make the contents fit the page. An important one is slow thawing. Peter Klein and I were talking over the merits of slow thaw during our recent 90 to 106 degree weather. Before Pete became famous for breeding double primroses in Tacoma he farmed in Illinois where he learned that apples could be kept crisp and juicy throughout the winter and spring, not by boxing and storing, but by piling them on the ground several feet deep and covering them with a good quantity of straw. Here they froze slowly and thawed slowly reducing loss of water.

Frost injury to plants results because of certain combination of circumstances. Repeated freezing and thawing may be fatal to plants which can survive continuous low temperatures. Sudden freeze following a growing period without hardening off, as said before, is especially hard on evergreen plants. The loss of water is naturally much greater than with herbaceous plants because of the larger evaporating surface of the leaves, a loss which cannot be replaced by roots in the grip of frozen soil. Add wind and sun during freeze and you have the maximum in drying conditions. The over-all mulch of wood excelsior, evergreen boughs, hay or such material should be put on when temperatures drop below freezing, if there has been no hardening off and there is no

(Continued on page 164)

TABLE OF CONTENTS

Volumes XII to XIV inclusive

	Volume XII	
	No. 1, January 1954	
Page		
1	Dedication, A Pictorial Dictionary of the Cultivated Species of the Genus <i>Primula</i>	111 An Appreciation of Reference Material and Library Facilities
2	Key to the Sections of the Dictionary	113 Seasonal Notes from Barnhaven
3	Pictorial Dictionary of the Cultivated Species of the Genus <i>Primula</i>	115 What to Do About Insects—Mrs. John P. Hannon No. 4, October 1954
19	Informal Bibliography and Key to the Abbreviations of Authors names and publications	121 A Cooperative Supplement to the Pictorial Dictionary, explanation of
20	Pacific Strain of <i>Polyanthus</i> Primroses—Frank Reinelt	122 Pictorial Dictionary (cont'd)
22	Leo Jelitto, Introduction of Regional Editor from Germany	153 Seasonal Notes from Barnhaven
24	Propagation—Mann Leiser	154 Old and New Composts
26	Pointers on Permanent Soil Improvement—Charles Jamison	157 The Show Auricula Floriculturists of America
27	Auricula Culture—Mrs. Ben Torpen Seasonal Notes from Barnhaven No. 2, April 1954	157 Section Parryi 1933-1954—Roland E. Cooper
41	Dan Bamford—A Link With the Old Florists—C. G. Haysom	158 Presentation of Johnny Appleseed Memorial Certificate to John G. Bacher
43	The Bamford Trophy—Mrs. O. Miller Babbitt	
44	How to Qualify for the Bamford Trophy	VOLUME XIII
45	Gooseberry Scales—A Rare Gift from England	No. 1, January 1955
46	Labels—Mrs. J. J. Boyd-Harvey	1 To Introduce Our English Editor, Roland E. Cooper—Lord Elibank
48	Pictorial Dictionary (cont'd)	3 In a Scottish Rock Garden—A. B. Duguid
54	The Clark County Primrose Society Project at the Battleground High School—Mrs. Walter A. Roe	8 Let Us Work Together—Dan Bamford
59	Informal Bibliography and Key to the Abbreviations of Authors names and publications	9 The Show Auricula Floriculturists of America, formulation of organization
60	Possible sources of Species Seed	10 Primrose Culture in Pennsylvania—Percy W. Adams
62	An Appreciation of Reference Material and Library Facilities	12 Shipment of Rare Plants
63	The President's Message	14 The Auricula Floriculturist, A Prospectus—Ralph Balcom
64	Treasurer's Report for 1953—Mr. C. Y. Griffin, Treasurer	16 The Need for Judges Educated in the Lore of Auricula Floriculture—Ralph Balcom
66	Roster of the American Primrose Society and Affiliated Societies	17 A Few Suggestions on Judging the Auricula—Dan Bamford
80	Seasonal Notes from Barnhaven No. 3, July 1954	20 Points for Edged Show Auriculas—Dan Bamford
81	Mrs. John Karnopp, Bamford Award Winner—Doretta Klaber	21 Qualifications for Benching Show and Alpine Auriculas, and Point Scales for Judging Alpine Auriculas
82	Mr. Ralph W. Balcom, runner-up for the Bamford Trophy—Charles E. Gilman	22 Miscellaneous Notes on the Judging of Show Auriculas—Ralph Balcom
83	Women's Health Federation of America Honors Canadian for Discovery of New Soil Builder, Mr. James W. Watson—Mrs. Otto H. York	23 Sample Vocabulary test for Naming Parts of an Auricula, illustrated
84	Pictorial Dictionary (cont'd)	24 Types of Show and Alpine Auriculas
109	Be Wise and Buy Good Seed Now—Alfred E. J. B. Kidney	25 Sample Test Questions for Judging Show and Alpine Auriculas
110	Mrs. Ben Torpen Honored by British	26 Qualifying Questions for Associate Judge of Show and Alpine Auriculas
		27 Why I am a member of the Scottish Rock Garden Club—Major-General D. M. Murray-Lyon
		32 Seasonal Notes from Barnhaven No. 2, Spring 1955
		41 An Interview with Peter Klein
		43 Flowers and Peter Klein—Wilbur Graves
		45 Breeding for Doubles, An Outline of

- Peter Klein's lecture—Cyrus Happy III
- 46 The Story of a Flower—Roland E. Cooper
- 50 The Most Fun so Far—Cyrus Happy III
- 51 Why Have Slugs and Weevils?—A. J. "Jim" Overton
- 52 S.A.F.A. Sets the Pace
- 55 The Bamford Trophy
- 56 The President's Message—Wayne Arnold
- 57 Treasurer's Report for 1954—Sadie Griffin
- 58 Roster of Members and Affiliated Societies
- 78 Constitution of the American Primrose, Primula, and Auricula Society

No. 3, July 1955

- 82 Frank H. Michaud—Bamford Award Winner—Doretta A. Klaber
- 83 Cooperative Supplement to the Pictorial Dictionary
- 89 Notes on the Supplement—Chester K. Strong
- 93 Frank H. Michaud—Another Link with the Old Florists—editorial
- 96 Presentation of the Bamford Trophy—a Speech by Florence Levy
- 97 APS Quarterly Editor Emeritus Honored by Oregon Federation of Garden Clubs
- 98 "Native Collectors" of Primulas—Roland E. Cooper
- 103 Robert Luscher, introducing APS Editor in Charge of Translations A Book Review by Walter C. Blasdale—"Primroses and Polyanthus"—by Ray Genders and H. G. Taylor
- 104 The Collection and Care of Polyanthus and Other Vernalis
- 105 In Memoriam—Robert W. Ewell and Captain G. L. Hearn
- 107 Seasonal Notes from Barnhaven

No. 4, October 1955

- 114 Cooperative Supplement to Pictorial Dictionary (cont'd)
- 119 Bibliography with Key to Abbreviations Used in the Pictorial Dictionary (1954) and the Supplement (1955)
- 121 Number of Primulas with Key to the Sections
- 122 Errata to Pictorial Dictionary Information for Members New and Old
- 124 Methods of Propagating Primula Denticulata—George B. Boving
- 125 Fluorescent Light Box — Elmer C. Baldwin
- 126 Mrs. John Shuman—SAFA Chairman
- 127 Mr. Douglas Duncan, Introducing the first President of the Canadian Primula and Alpine Society

- 127 Jottings from the Canadian Primula and Alpine Society
- 129 European Column—Robert Luscher
- 129 A Practical Diary for Gardeners
- 131 Plant Parasitic Nematodes
- 133 The Human Element—Wayne Arnold
- 136 Seasonal Notes from Barnhaven

VOLUME XIV

No. 1, January 1956

- 1 The Compleat Gardener
- 10 A Treasure Box of Primulas—Louise Holford Gee
- 14 Suggestions for Judging Alpine Auriculas
- 15 Points for Judging Auriculas, Latest A.P.S. Official Scores
- 16 A.P.S. Competitors Benching Rules for Show and Alpine Auriculas
- 18 Compost Can Build a Garden—H. C. Winch
- 26 Seasonal Notes from Barnhaven

No. 2, April 1956

- 41 The East Anglian Primulas—David G. F. Barton
- 45 The Garden Primulas, A Translation by Robert Luscher, from the German of "Die Freilandprimeln" by Leo Jelitto
- 47 Dialogues of the Compleat Gardener
- 52 Classification of Primulas as to Their Cultivation—Walter C. Blasdale
- 53 Notes from Northeastern Pennsylvania on the Classification of Primulas as to Their Cultivation — Doretta Klaber

- 56 Primula Photography Contest
- 57 How I Grow Polyanthus Plants—G. E. Dawson
- 58 Pollinating and Growing Primroses—editorial
- 67 The Bamford Trophy
- 69 Horner on the Auricula—A Book Review by James Stuart McLees
- 71 The President's Message — Wayne Arnold
- 72 Chester K. Strong, a Tribute
- 72 Treasurer's Report for 1954 of the A.P.S.—Mrs. Orval Agee
- 74 Roster of Members and Affiliated Societies
- 82 Proposed Amendment to the Constitution
- 83 Seasonal Notes from Barnhaven

No. 3, July 1956

- 93, 113 Oriental Splendor for the Occidental Garden—Mrs. John P. Hannon
- 94 The Garden Primulas, a translation by Robert Luscher, from the German of "Die Freilandprimeln" by Leo Jelitto (cont'd)
- 106 Recollections of a Recent Holiday in Britain—J. Haydn Young

(Continued on page 165)

The official organ of the American Primrose Society,

The Quarterly

is a specialized magazine dedicated to the dispensing of authoritative information regarding the culture of the genus Primula. Advertising is usually confined to the back pages and is carried primarily as an aid to the members and only secondarily as a means of revenue. The revenue thus obtained pays for only a part of the printing cost.

Under the circumstances, the payment of dues becomes very important.

On page 160 you will find the announcement that the amendment to the constitution was approved which makes the dues now \$3.50. This had become a necessity. A further amendment retaining *overseas* dues at \$2.50 will no doubt pass at the October meeting.

The A.P.S. Treasurer would appreciate the thoughtfulness of any member who sends in dues for 1957 before November 15th when statements must be sent out.

We suggest that there is no finer Christmas gift to a gardening friend or relative than a subscription to the Quarterly.

APPLICATION FOR MEMBERSHIP OR RENEWAL

Mrs. Orval Agee, A.P.S. Treasurer
11112 S.E. Wood Avenue,
Milwaukie 22, Oregon.

I desire to be admitted to or to renew my membership in the AMERICAN PRIMROSE SOCIETY. Herewith I enclose dues, as checked below, which will include a year's subscription to the Quarterly.

- () First member of the household.....\$ 3.50
- () Second member (no subscription)..... 1.00
- () Sustaining Membership 5.00
- () Life Membership.....100.00
- () Commercial Listings in Capitals in Roster.... 1.00
- () Gift Membership..... 3.50

Kindly make checks payable to the American Primrose Society.

BARNHAVEN NOTES

(Continued from page 160)

snow, and left on until the soil beneath the mulch has completely thawed. Days after the unmulched ground has thawed, the mulched soil is still slowly thawing and helping the plants' recovery. Quite unbelievably such a mulch also raises the temperature, diminishing the loss of heat by radiation and by providing a slightly higher level around which the heavier cold air drains away to lower levels. More than a hundred years ago it was recorded in England how a cambric handkerchief, supported on four stakes six inches above a patch of grass, raised the temperature under

WILLOW GARDENS

The Fairyland of Hardy Primroses

Thousands of Polyanthus,
Aculis, and Auriculas—
Hundreds of Shades

129 RAYMOND ST.
DARIEN, CONN.

Off Old Kings Highway No.
DARIEN OL 5-2178

SHOULD YOU DUST OR SPRAY?

DUST if you are looking for the easy way. It's faster, cleaner; saves dilution mixing. Use dusts that come in handy pump-action dusters with economical refill packages such as BOTANO Deluxe or ORTHO Rose Dust.

Keeps gardens clean and healthy—
the easy way

CALIFORNIA SPRAY CHEMICAL CORPORATION

Richmond, Calif.—Elizabeth, New Jersey—
Kansas City, Mo.—Dallas, Texas—Orlando, Florida
Portland, Oregon

this slightly sheltered area from eight to eleven degrees.

Because primroses are the first evergreen perennials to bloom in the spring, their flower crop is made between the time the old perennial cycle has been completed, with the ripening of the seed in June or July, and fall, and therefore should be kept growing during that four-month period. But in late fall, if they have no frosts to harden them off, Liquinox 0-10-10 will do it artificially if you wish this precaution. Keep them covered during freezes, if there is no snow, until the soil thaws beneath the mulch and you will be rewarded on those bleak, transitional days of winter by the most heart-warming flowers man and nature ever collaborated on.

PAID ADVERTISEMENT

Elmer C. Baldwin, the Regional Editor for New York, writes that double forms of Polyanthus and Acaulis need more light in the Autumn, "do not allow plants to become dry because of drying winds which are prevalent at this time." These tend to dehydrate the plant as completely as the hottest sun.

As we go to press with the first issue of the Quarterly that carries our name as editor, we are uncertain as to which emotion has the upper hand. The feeling of pride that we were asked to become the editor in the first place, reaching nearly the bursting point when the edition was actually put to bed, and the feeling of trepidation as to how our editing will be received. Fortunately the two conflicting emotions have resulted in a stalemate. They offset each other so that we are blissfully numb. Changes in format have been made with but one object in view, more comfortable reading for you the reader. We hope that the mistakes overlooked in this, our maiden effort, will be forgiven, and promise to try to do better in the future.

—The Editor.

CONTENTS

(Continued from page 162)

- 107 The Primula Photography Contest — announcement of Winners
- 108 Cyrus Happy III, 1956 Bamford Trophy Winner
- 109 Introducing Mr. Charles Gilman, the new editor of the A.P.S. Quarterly
- 110 The President's Message—Wayne Arnold
- 111 Captain Comley Hawkes—Grace M. Eddolls
- 112 Seasonal Notes from Barnhaven No. 4, Fall 1956
- 134 A Beautiful Little Known Primula—Cusickiana—Kenneth C. Corsar
- 135 Primroses in a City Garden—Doretta Klaber
- 137 In Memoriam, Linda A. Eickman
- 138 Tribute to Susan Worthington, Retiring Editor—Florence Levy
- 140 Linda A. Eickman—Dr. Matthew C. Riddle
- 141 Petiolarid Primulas in Cultivation—Dan Bamford
- 143 Pete Klein Says
- 143 Announcing an Auricula Show—Ralph Balcom
- 144 *Primula Edgeworthii*
- 144 Change in Dues, Amendments to Constitution, passed and proposed
- 145 Presentation of A.P.S. Quarterly's Award to Dr. Riddle—Florence Levy
- 146 General Election of Officers
- 147 Seed Exchange, 1957—Chester K. Strong
- 147 Picnic Patter—Anne Siepmann
- 148 Dictionary, Hybrid Primulas of the Auricula Section—James S. McLees
- 160 Seasonal Notes from Barnhaven
- 161 Table of Contents, Vols. XII-XIV, Inclusive

EVERYTHING FOR THE HOME GARDENER



Seeds — Tools — Plants
BLUE WHALE IN ALL SIZES

PACIFIC NORTHWEST NURSERIES, INC.

532 - 104th N.E., Bellevue, Washington
BELLEVUE'S LEADING NURSERY

Fertosan

COMPOST ACCELERATOR

Fertosan Compost Accelerator, West Jordan, Utah
O. A. Moore, Colloidal Soil Service, College View Station,
3827 South 52nd Street, Lincoln 6, Nebraska

Clair W. Stille, 137 Bassett Avenue, Lexington 27, Kentucky

Sally's Puget Sound Seed Company, 1530 Westlake Avenue North, Seattle 9, Wn.

DUNN SALES LIMITED

310 King Street East, Toronto 2, Ontario

58 Victoria Street, Winnipeg, Manitoba

140 St. Paul Street West, Montreal 1, P.Q.

FLORIDA FERTOSAN COMPANY, INC.

1501 - 26th Avenue South, St. Petersburg, Florida

CANADIAN ORGANIC DEVELOPMENTS LTD.

306 Burns Building, Calgary, Alberta

MACDONALD & WILSON LTD.

562 Beatty Street, Vancouver, B.C., Canada

RELIABLE SEEDS . . .

for Gardens, Greenhouses, Hobbyists. The Largest Stock
in Northwest America.

FERTILIZERS . . .

Commercial Dry, Soluble and Liquid.
Sprayers—Dusters—Insecticides—Pet Supplies

WASHINGTON SEED CO.

89 Pike Street • SEATTLE • MAin 0652

Just a few steps from First Avenue

Downtown Headquarters for Hobby Gardeners

Everything for the Home Gardener

Tools, Seeds, Bulbs, Fertilizers, Sprays, Plants, Etc.

—We carry the Finest Collection of Fall Bulbs—in the Pacific Northwest

Send for our Free 1956 Bulb Catalog

PORTLAND SEED STORE

204 S.W. Yamhill St.

Portland 4, Ore.

AURICULAS

Named Varieties of Show and Alpine
Auriculas. New seed crop now ready.

For a wonderful garden and a long flowering
season combine primulas with Alpine plants—
you will be delighted

Catalogue free

ALPENGLOW GARDENS

MICHAUD & COMPANY

13328 Trans-Canada Highway
New Westminster, B.C., Canada

The Secret is

LIQUINOX

LIQUID
FERTILIZERS

Odorless 10-10-5
At Your Dealer or 0-10-10

KEIFFER'S NURSERY

Route 2, Kirkland at Juanita Junction
Phone VA. 5326 Home of LIQUINOX

WHERE THERE IS

CUPROLIGNUM

THERE IS NO ROT!

••

Use it on . . .

FLATS, FENCE POSTS, BENCHES,
AND ALL EXPOSED LUMBER.

••

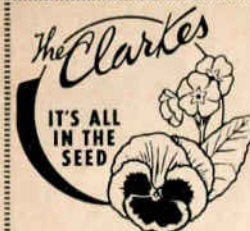
Backed By 25 Years Of
Outstanding Service

••

Sold at Lumber Yards
and Hardware Stores

RUDD & CUMMINGS

1608 15th Ave. W. Seattle 99, Wash.



PRIMROSE, PANSY, HELEBORUS,
HARDY CYCLAMEN

Seed and Plants

The Clarkes Box 440 Q Clackamas, Oregon
On Southeast 82nd Street

PHONE: EMPIRE 1602

HERMANN

Seed and Floral Company

CUT FLOWERS
FLORAL DESIGNS
ROSES ★ SEEDS ★ BULBS



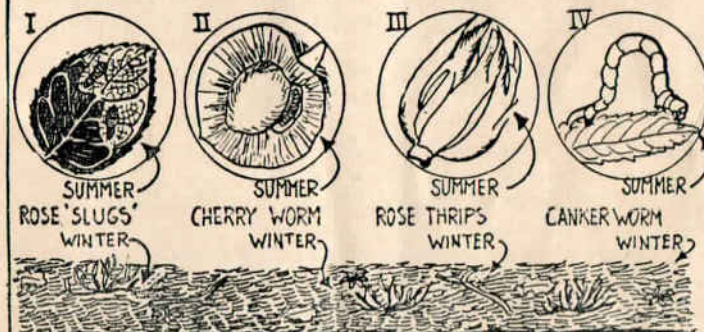
1930-34 SOUTHEAST POWELL BLVD ✦ PORTLAND 2, OREGON

"We Give S & W Green Stamps"



"Get your BLUE WHALE HERE"

WHEN WINTER COMES COMMON GARDEN PESTS GO DOWN TO THE SOIL



CARCO-X is an ovacide as well as a fungicide, and excellent results can be obtained by dormant spraying in late fall. Insects winter over in the litter in a perennial garden. As soon as the garden is raked clean, cultivate lightly and spray or sprinkle thoroughly with 1-100 solution. This destroys the eggs as well as the insects at a time when they are easiest to kill.



AT YOUR LOCAL GARDEN OR HARDWARE STORE

or write to

GETZUM PRODUCTS, P.O. box 37, SUMNER, WASH.

The J. K. Gill Company for Books

A new edition of the standard reference book **TREES AND SHRUBS FOR PACIFIC NORTHWEST GARDENS**, *What to Grow and How to Grow Them*, by John A. Grant and Carol L. Grant is now available at Gills for \$4.95.

Also recommend Carl L. Wilson's **BOTANY** because the illustrations by T. Croasdale, which are found on almost every page, help to make this subject exceptionally graphic and easy to understand. The text is simple to follow for those who have thought of Botany as difficult. A glossary of botanical terms is included. \$6.50.

THE WATER GARDEN, by H. L. V. Fletcher, a British author of note, is profusely illustrated with many garden photographs, many of which are in color. **THIS IS A GILL SPECIAL**, regularly \$3.00, now only \$1.98.

ENCLOSE INSTRUCTIONS AND A CARD AND YOUR BOOK WILL BE GIFT WRAPPED AND SENT TO YOU

Enclosed please find.....for which send me Books marked below, postpaid.

- The Water Garden, by H. L. V. Fletcher, a Gill Special @ \$1.98 Each
- Botany, by Carl L. Wilson @ \$6.50 Each
- Primulas for the Garden and Greenhouse, by Cox & Taylor @ \$2.00 Each
- Trees & Shrubs for Pac. N.W. Gardens, by Grant & Grant @ \$4.95 Each
- Present Day Rock Garden, by Sampson Clay @ \$6.50 Each
- Flora of the Rocky Mountains, by Rydberg @ \$15.00 Each
- Simple Propagation @ \$1.75 Each
- Royal Horticultural Society Rhododendron and Camellia Year Book (1955) @ \$1.75 Each
- R.H.S. Horticultural Color Chart @ \$15.00 Each
- Geraniums for Home and Garden, by Helen Krauss @ \$5.00 Each
- The Propagation of Alpines by Lawrence D. Hills @ \$5.00 Each
- Primula and Polvanthus by Genders & Taylor @ \$3.00 Each
- Primulas in the Garden by Kenneth Corsar (revised) @ \$3.50 Each
- Cultivated Species of Primula by Walter C. Blasdale @ Special \$1.98 Ea.
- Treasury of American Gardening, Flower Grower & Doubleday @ \$7.50
- House and Garden's New Complete Book of Gardens @ \$10.00
- Year 'Round Gardening in the West by John H. Hanley (Aug. '56) @ \$5.50
- Plants of the Pacific Northwest by Leonid Enari (July '56) @ \$3.00

J. K. Gill Company will be glad to fill orders for books from any publisher.

Name

Address..... City..... Zone..... State.....

The J. K. Gill Company (BOOK DEPT.)
408 S.W. Fifth Ave. Portland 4, Oregon

BARNHAVEN

Gresham, Oregon, offers

BOXES FOR BEGINNERS

Those who asked us to choose the varieties best suited to their particular climatic conditions last year were more than pleased with the boxes they received generously filled with our best plants. Realizing that the wide variety of hardy garden Primroses may be a surprise to many, we again offer to make selections with climate and season of purchase in mind, giving you extra value for the amount sent—which amount is entirely optional. You may, of course, make any requests as to types and color preferences. If you do not have a catalog and 1956 Supplement, please write us.

Sincerely,

Lew and Florence Levy

LINDA EICKMAN SEEDS

Dear Friends:as Linda would say The 1956 crop of her *Majestic Primrose* seed is ready. I have put 10 seeds each of her Crown Pink, Warm Laughter, and the Fire Bell into the mixed packets of 150 seeds at \$2.00 per packet. The other colors in the packet are Light and Dark Blue, Rosy Red, Maroon, Dark Red, Yellow, White, Lavender, Flame, and Purple. All these colors, except Crown Pink, are available in individual packets at prices listed in Linda Eickman's last folder.

Write to

MISS E. KATHERINE SEARS
7904 SW Chestnut
Portland 19, Oregon

Primrose Lovers . . .

will enjoy every monthly issue of the
**Pacific Northwest's Only
Garden and Home Magazine!**

ONE YEAR \$1.50

TWO YEARS \$2.25

THREE YEARS \$3.00

Washington Residents Please
Add 3 1/3 State Sales Tax

ORRIN & EMMA HALE
Editors & Publishers

Pacific GARDENS & HOMES
24 Years of Serving the Home Gardener
2626 15th AVE. WEST • SEATTLE, 99, WASH.



Gardens Where BLUE WHALE Is King

John Georges owns one of the most beautiful commercial roadside gardens in America. He brought his gardening know-how with him from his native Syria. With great foresight and tremendous energy, he converted a piece of rough treeless ground on East 82nd Street between Portland and Clackamas, Oregon, into a garden with beautiful trees, unusual shrubs, and an extensive assortment of perennials and annuals. He became a great believer in Democracy

and loves America devotedly. One day he was given a sack of Blue Whale to try in his garden. Mr. Georges now uses Blue Whale Impregnated Peat Moss in raising bulbs, in growing Dahlias, in fact in his whole planting. The garden has grown to such beauty that it is a traffic-stopping sight. Johnny Georges' customers are glad to follow his advice for he is always sure of the results before he speaks. He states, "Blue Whale is easy to use. It make you feel you are a good gardener. The shovel feel lighter, the ground feel softer, your bulbs and shrubs grow healthier. The flower bloom richer to color, not pale, because Blue Whale, it is from the Sea. As they say in America, 'you will hit the Jack Pot' if you use Blue Whale any time of the year."

Wayne Arnold, President of the A.P.S., and Clematis raiser of note, needed "proof" before he let Blue Whale rule in his garden. Now he uses many nursery bales a year for his Fuchsias, Primrose beds, and for his famous Clematis Fence which may be seen at his nursery in Milwaukie, Oregon. He says, "We have always been users of Fish fertilizer, in fact we have been slaves to its use. Every weekend during the growing season, my wife and I poured countless gallons of the solution on our fuchsias and Clematis, which are just as gross feeders as are the fuchsias. We reinforced this feeding with bone meal, potash, and phosphorus. We were sold on the idea that the sea could produce an animal fertilizer of a higher quality than the land. Results are what count with us and results of the finest kind have been produced by using Blue Whale in our garden. Our work has been cut to a minimum. We prepare the potting mixture, the Clematis and Primrose beds with the greatest of care, using at least one-sixth Blue Whale. In the fall we mulch these beds for frost protection using a good proportion of Blue Whale in the mulch which is still rich in the spring when it is incorporated in the ground about the roots. I am sure that the more intense colors, the stronger stems, as well as the increased stability of the plants are due to the wonderful solubles made from the whale. It stands to reason that an animal whose diet is composed of phosphorus-rich, high protein materials, will yield a product of almost unlimited value to the garden. We have now used Blue Whale long enough to know that the most valuable soil in our garden is that which has had Blue Whale applied in the spring and fall of the previous year. Instead of throwing the old potting or greenhouse soil away or putting it in the compost heap to revitalize, we now put it in a bin so that not one wonderful crumb is wasted. There is a valuable residue of the bone meal and other components which lasts as long as there is any evidence of the peat in the soil. Yes, you can say that Blue Whale is King in our garden, and a wonderful King he is."



Blue Whale Impregnated Peat is a product of the Acme Peat Products Ltd. of Canada.

