

Copyright 1948 Entered 2nd Class Tacoma, Wash.

#### Editors:

Cyrus and Rita Happy 11617 Gravelly Lake Dr. SW Tacoma, Wash, 98499

#### In this issue

- 3 President's message
- 4 Primrose variety
- 6 Gold-laced polyanthus by Cyrus Happy
- 10 Gold-laced polyanthus by Bernard M. Smith
- 12 Membership list
- 28 Questions/Answers by Alice H. Baylor
- 32 P. cockburniana by Dr. Ralph Benedict
- 32 P. cawdoriana by Cyrus Happy
- 36 Diary

### On the cover

This gold-laced polyanthus is just one of many entered by Agnes Johnson at the Tacoma Primrose Society shows over a 10-year period. Perfect form—well grown and well groomed—make it best in its class.



### **Memorial edition**

This special color edition of the quarterly is presented as a memorial to Agnes Johnson. A substantial bequest from the family enables APS to offer full color illustrations in this edition and to purchase a national trophy to be awarded each year for best gold-laced polyanthus.

The society expresses its appreciation to Jack Zeigler, Mrs. Johnson's son, for his kindness. Mother and son were devoted friends, sensitive to each others' attitudes and goals. Knowing his mother's love of gardening and her skill, Mr. Zeigler made the memorial gift one of his immediate priorities. The check was presented to APS on the day of his mother's funeral as friends gathered in the little Anderson Island chapel to honor this outstanding woman.

Choice people, like choice plants, are never forgotten. Memories of their good qualities serve as a constant reminder that the search for perfection is a worthy goal.

### President's message

This issue contains tributes to two beloved and long-time members of APS who died recently: Agnes Johnson of Anderson Island, Wash., and Ivanel Agee of Milwaukie, Ore. Agnes will be especially remembered for her lovely gold-laced polyanthus strains and Ivanel for her improvements on marginata and others in the auricula section. Their enthusiasm and love for primulas inspired many others. They will be sadly missed.

The APS board met in August and November and wrestled with the problem of financing the quarterly without asking too much of smaller chapters and affiliated clubs. The result: a previous decision to assess these groups \$30 annually for APS support was rescinded.

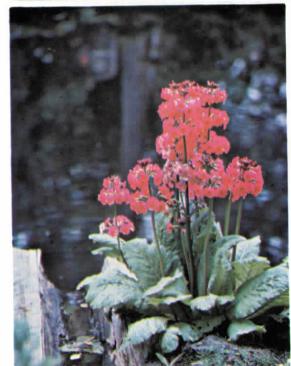
Instead chapter and affiliated club dues will be \$7 annually, which includes a subscription to the quarterly. In addition, clubs will be asked to donate \$1 a member annually in support of APS. It is hoped that larger clubs will make larger donations and that all will consider fund-raising projects for their own (and APS's) benefit. You all know the rising cost story and the value of the journal, the seed exchange and other APS services.

Recently my wife Marian and I volunteered to re-do the mailing list of the quarterly for our overworked editors. What an eye-opener! Our hats are off to Cy and Rita Happy and their predecessors in the editor's office and to Mary Speers and her predecessors in the treasurer's job and all others who have kept up these lists in the past!

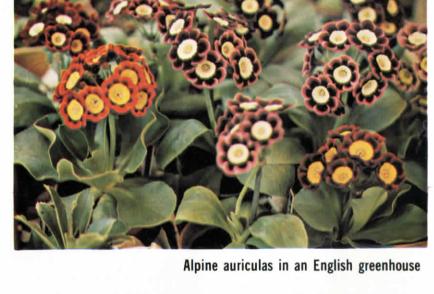
Think of the interpreting to get your hand-written name and address right, the deciding if the check from Minnie Jones is for the membership of Mrs. J. P. Jones, checking U.S. and foreign zip codes, deciding when to remove names for non-payment of dues! Please be patient and understanding if your name is misspelled or otherwise not how you want it or if there are errors in your address. Send a legible correction to treasurer Mary Speers, and we will get it right.

I hope the winter is kind to your primroses and tough on their enemies.

James Menzies

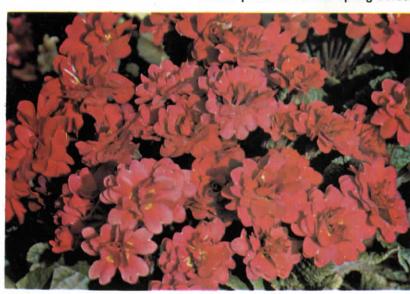


Juliana hybrid, Ida, tiny rockery jewel



Primulas offer colors and growth habits to suit any taste. Meeting their needs for growing conditions is a never-ending challenge. Here are examples: poolside, cool greenhouse, rockery and border.

### Double primrose dazzles spring border



Primula Japonica at poolside

### Growing gold-laced polyanthus

### by Cyrus Happy

Perhaps the best way for me to write about gold-laced polyanthus is to make it personal.

In the 1920's my mother had several groups of small-flowered, mahogony-colored polyanthus in her garden. I remember them as my introduction to the primrose family. They had clear yellow centers and an occasional touch of lacing. I believe they came from Sutton's seed.

#### Survivors

Peter Klein of Tacoma grew gold-laced polyanthus in the early 1950s. As I recall, they came from a few seeds shared by Florence Bellis of Barnhaven. A few named varieties had survived World War II in the north of England. The grower had sent some precious seeds to America. That was a new beginning for the gold-laced polyanthus.

I observed and grew some of the Klein plants. They were very good. Pete gave me a bit of advice on pollinating. He said the best seed parents are the second best plants, adding that plants with perfect lacing may pass on an overabundance of lacing to their offspring. Plants with very narrow and occasionally broken lacing make better parents. Further, seed and pollen parents should have a clear, well-defined yellow eye.

### Larger flowers

About that time I received from J. Antrobus of Wilmslow, Cheshire, England, a few seeds of gold-laced polyanthus. The plants had larger flowers than the Klein

plants. I then learned that Mr. Antrobus had been trying to bring about a modest increase in the pip size.

I'm afraid I was spoiled by the perfection of the Klein plants. Size did not bring equal refinement. Fortunately, Peter Klein lived long enough to distribute seeds to connoisseurs at home and abroad.

Mrs. C. C. (Violet) Chambers of Seattle was one of them. For more than 20 years she has had Klein strain gold-laced polyanthus tucked in her shrubbery border. Time has taken many of them, but about five survive.

### Agnes' 'busy bees'

I raised plants from her seed six years ago with good results. The best were crossed with one of Agnes Johnson's "busy bees," and excellent plants resulted.

Agnes had purchased a plant of old "Tiny" in Portland back in the 1930's (for a dime) and spread divisions and seedlings among her Anderson Island neighbors. The "busy bees" flourished on the shores of southern Puget Sound.

Peter Klein had been gone for at least five years, and the gold-laced polyanthus were not well represented at our local primrose shows. Then Agnes Johnson began appearing at the entry table with a basket of plants under her arm.

### Superb plants

Her entries always included a superb gold-laced polyanthus, single or fewcrowned, and groomed to perfection—as were all her plants. Agnes dominated the gold-laced section at the Tacoma show for at least 10 years.

Through the last 25 years Barnhaven in Oregon and later in England has offered good gold-laced polyanthus seed. From this source anyone who wanted to grow



them could get a good start. In a local garden several hundred plants were grown from Barnhaven seed. They were all gold-laced polyanthus. Some were pineyed and a few were silver-laced, but there was no doubt about the good quality of the seed. Of course, when it came to selecting show quality plants, the choice narrowed down to about 10 per cent.

### **Exhibition** quality

For exhibiting in the gold and silverlaced polyanthus class a plant must be thrum-eyed (anthers filling the tube and hiding the stigma, which must be lower in the tube).

Florence Bellis points out that George Glenny in his "Properties of Flowers," written about 1835, provides us with the point score still used. This is based on a six-point total.

	SIX POINT LOLAI.	
Characteristic		Points
1. Strong, straight stem, 4-6 inch	nes	1/2
2. Footstalks of pips just long er	nough to bring all together in a	
compact symmetrical whole		1/2
3. Truss not less than 5 well-expa	anded flowers	1
4. Center or eye round, pure, wit	thout stain, and uniform with	
that on the edges		1 ½
5. Lacing thinly and evenly laid	on round each segment, cutting	
down to the center		1½
6. Ground color red or black, uns	haded and dense	
		6

One can see from analyzing the score that the emphasis is on the flower detail. The plant form is secondary.

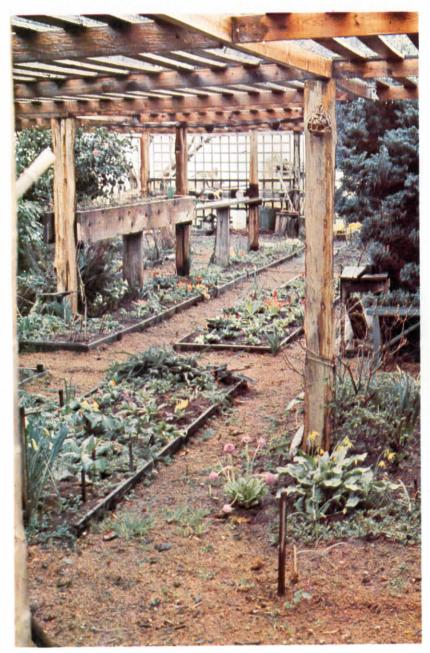
Preference is for a five-petaled flower because it is usually less lumpy and not so likely to be crimped at the edges. Width of the eye should be the diameter of the tube; ground color should be the same width as the eye. (This reminds one of the ideal in show auriculas, the concentic circles.) The ideal diameter of a

pip is 5/8" to 3/4."

### Flat pips

The pip should be perfectly flat, never ruffled or waved, but slightly scalloped or indented on the edges. The pip should be divided in five or six places (depending upon the number of petals), each petal indented in the center to make a kind of heart-shaped end.

These plants, Mrs. Bellis pointed out, were developed in an age of ornate detail



Agnes Johnson's lath house

and for the purpose of bending nature to the will of the cultivator in a most exact and precise conception of what a show plant should be. At the time Glenny set up his score of points, these were primarily used for show table display rather than garden use.

### Haysom's hints

C. G. Haysom of England wrote in "Florists' Auriculas and Gold-Laced Polyanthus" that the gold-laced polyanthus is easily grown and readily propagated when it is given the right growing conditions. It likes good rich loam with some well-decayed leaf mold and grit or sharp sand. Crumbly, old decayed cow manure is a good dressing in the spring. No strong manure or fertilizers should be used.

"The more simply the plants are grown the better," Haysom wrote. "More goldlaced polyanthus and auriculas have been killed by obnoxious feeding than by any other means."

He recommended beds elevated about four inches above ground level with bricks to retain the soil. Leave the joining of the bricks slightly open to allow water to drain away freely so the crowns and stems of the plants will be free of standing water.

### Water properly

However, don't let the plants get thirsty. Although drainage must be excellent, plants must be well watered during dry weather and sprinkled again during hot summer evenings. If plants are allowed to dry out, Haysom warned, they are liable to attacks of red spider, a difficult pest to get rid of.

The gold-laced polyanthus is not quite as hardy as the garden polyanthus,

Haysom said. It requires a little protection against frost and east winds and against excessive winter wet. The plants like a bed facing west or northwest because they dislike strong sunshine.

### **Dividing plants**

Plants must be lifted and divided every second year. Cut away from the main stem all the strong outer growths, making sure roots are attached. Rub a little powdered lime or sulphur over the cut and plant the divisions immediately. Don't throw away the old stems or fine roots. Plant them, and quite a few will produce new growth. Haysome advised that the beginning of August is a good time to divide the plants so they will become well established before severe winter weather arrives.

If you raise them from seed, sow the seed early in the spring in pans covered with a sheet of glass. Use good loam, leaf mold and sand. Press the soil down rather firmly, sow seeds thinly and barely cover them with silver sand. Spray the surface lightly with a syringe and place the pans in a cool, moist shady corner of a cold house.

### Keep good ones

Examine the plants carefully as they begin to flower and discard the ones that don't meet your high standards. Breeding really good varieties of gold-laced polyanthus is a slow process.

It's worth the effort. Modern growers certainly have agreed with the early-day florists that the gold-laced polyanthus "in its perfection of form, coloring and properties shone brilliantly in the floral world."

It is, they agree, "a jewel among spring flowers."

I was primarily a border auricula grower and was working toward better borders when our spring show came up. I had little to show but found that some Barnhaven gold-laced polyanthus in the open garden were not too bad. I lifted some. potted them and put them on the show bench because I believe that every member should take something to help the show along.

To my surprise, I took a first; and at the auricula show a month later the same two plants took a second and a third. It was at this show that I noticed that Mr. Jarvis was showing a gold lace with six petals. (He kindly gave me the plant after the show.)

Mr. Warriner had mentioned years before in our year book that he had a sixpetaled plant of gold lace like the picture of Burnard's Formosa in Mr. Hecker's book. This fired my imagination, and I set out to grow a six-petaled strain of gold

I sent a questionnaire to a number of members. As a result I found that there are several strains of gold lace being grown, but few had ever thrown sixpetaled pips.

From the local library I borrowed a book, Robert Sweet's "The Florist's Guide and Cultivator's Director" published in 1827. In it he illustrated pips and described them both as being "generally six-cleft."

As a result of my inquiries I have received seed from many growers. It looks as if I will be having a busy time next year. (I am also still trying to breed border auriculas.)

It was in the quarterly for spring 1977 that Cy Happy fired my imagination with an article about Anderson Island and

Agnes Johnson's gold-laced polyanthus. Finding that Agnes was a member of the NAPS(S). I wrote to her and started a friendship such as I had not dreamed of.

## Learning about gold lace

by Bernard M. Smith

Agnes wrote telling me about herself, sent me some seed and tried to send me some of her plants. Alas, the importation laws made it impossible for her to send them direct: however I found that if the plants were sent by passenger's "hand luggage," they could be examined at my

Before Agnes could send the plants she was called to that "Garden of Eden" where I am sure she tends her primulas. making heaven the beautiful place that she tried to make the earth. Although she has gone. I am told she left instructions for my plants to be forwarded to me.

People like her are like perfect goldlaced polyanthus. Rare to the extreme. We never met and vet I shall miss her.

Bernard M. Smith has five seedlings from Agnes Johnson's plants "going well and strong" and by now should have the plants from her garden. He says he owes "favours all over the globe. One day I will repay them." His garden is at "Windways," 35 The Drive, Gravesend, Kent, DA12 4BY England

### SEEDS BY ROSETTA

**New Crop** 

**Double Vernales** 

30 seeds . . . . . . \$2.50

Plants Available at Nursery

ROSETTA JONES-6214 So. 287th St.-Kent, Wash. 98031

### NATIONAL AURICULA AND PRIMULA SOCIETY - Northern Section

Invites all Auricula and Primula Lovers to join this Old Society Membership of \$4.50 per year includes Year Book

Hon. Sec. David G. Hadfield 146, Queens Road, Cheadle Hulme, Cheshire SK8 5HY England

## The endless summer. Garden Domes make it happen.

Add months of summertime to your garden in just one hour, the time it takes to put up a Fabrico Garden Dome. Long vegetables and flowers will continue to

flourish in the warmth and sunshine gathered under the clear polyvinyl enclosure. And, happy thought, you'll be after the growing season has passed, your free of nibbling rabbits and pesty bugs and



Keep sowing a good three months longer each year. All because summer never ends under a Fabrico Garden Dome. Write or phone for information and a free brochure.

It's not a miracle. It's a Garden Dome. 1300 W. Exchange Ave., Chicago, Illinois 312/254-4211

### Membership List

This membership list is current as of November 1978.

It is hoped that members scattered across the countryside will find each other by using this listing. Those who live within driving distance may want to organize into study groups or small clubs to exchange ideas and plants.

Aborn, Miles H.: Titicus Mill, 15 Saw Mill Hill Rd., Ridgefield, CT 06877 Adams, Wanda: 919 Palm Ave., South Pasadena, CA 97202 Addamiano, Betty Mrs.: 4222 Robertson Blvd., Alexandria, VA 22309 Agee, Dorothy: Box 571, Bingen, WA 98605 Agee, Orval: 11112 S.E. Wood Ave., Milwaukie, OR 97222 Agric. Canada, Library: Sir John Carling Bldg., Ottawa, Ont., Can. K1A OC5 Alberts, Robert Mrs.: Box 79, Amherst, NH 03031 Alexander, Anita Mrs.: 35180 S.E. Hwy. 211, Boring, OR 97009 Allen, Emmy Lou: Hidden Hill-8700 Snouffer School Rd., Gaithersburg, MD 20769

Alpenflora Gardens: 17985 40th Ave., Surrey, B.C. Canada V3S4N8 Alpenglow Gardens: 13328 King George Hwy., North Surrey, B.C., Canada Alpine Garden Club of B.C.: Geoff Williams, 891 Baycrest, North Vancouver, B.C., Canada

Alpine Garden Society: E.M. Upward, Rye End Link, St. John's Woking, Surrey, England

Althouse, Harry L. Mrs.: 1515 King St., Laureldale, PA 19605 American Horticultural Society: Mt. Vernon, VA 22121 American Rock Garden Society: c/o Laura Louise Foster,

Falls Village, CT. 06031

Andersen, A.E.: 56 Sioux Ave., Springfield, MA 01109
Anderson, Carl H. Mrs.: Gate House-State Rd., Narbeth, PA 19072
Andrews, Jr. John W.: 1646 10th St., Berkeley, CA 94710
App, Helen Mrs.: Rt. 1, Bridgeton, NJ 08302
Armentrout, James Mrs.: 480 Morris Rd., Ambler, PA 19002
Armstrong, Lawrence E. Mrs.: 11011 Pacific Ave., Tacoma, WA 98444
Arneson, Gus N.: 1004 N.W. 179th Pl., Seattle, WA 98177

Asmus, Hans W.: 11413 N. Meadowbrook Dr., Mequon, WI 53092

Bailey, E. LeGeyt Mrs.: 157 Douglas St., Hartford, CT O6114
Baker, Juanita M. Mrs.: 212 E. North St., West Manchester, OH 45382
Balcom, Ralph: 345 N.W. 88th, Seattle. WA 98117
Baldwin, Elmer C. Mrs.: 45 Heath St. E., Toronto, Ont. Canada M4T1S6
Baldwin, Frederick Mrs.: 105 North St., Foxboro, MA 02035
Balla, Wallace J. Mrs.: 189 Taconic Rd., Greenwich, CT 06830
Baltz, John Mrs.: Lincoln Ave., Box 275, Rye, NY 10580
Barlow, J.M.: 83 Tattersall Gardens, Leigh-On-Sea, Essex, Eng. SS9 29S
Barnes, Linda: 1018 E. 52nd, Tacoma, WA 98404
Barrett, Gordon A. Mrs.: 100 New Hampshire Ave., Bay Shore, NY 11706
Barth, Richard G. Mrs.: Rt. No.1, Box 157, Canaan, CT 06018

Barton, Doris E. Miss: 33O3 Dixwell Ave., North Haven, CT 06473 Baton, Valora: 12760 S.E. 93rd, Clackamas, OR 97015 Baxter, Mary: 22422 Ninth S., Bothell, WA 98011 Baulor, Alice Hills Mrs.: Stage Coach Rd. Rt. No. 2, Stowe, VT. O5672 Beatty, Virginia L.: 1509 Forest Ave., Evanston, IL. 60201 Becker, Judith: Undermountain Rd., Rt. 41, Salisbury, CT 06068 Beckman, Lois: Rt. 1, Box 810, Sequim, WA 98382 Belfer, Nathan Mrs.: 85 Bedford St., New York NY 10014 Bellis, Florence Mrs.: 2835 N. Oar Ave., Lincoln City, OR 97367 Benedict, Keith J., Raintree Florists Greenhouse, 1911 North Denby Ave., Evansville, IN 47711 Benedict, Dr. Ralph: 14 Alpine Ct., Wilson Lake, Hillsdale, MI 49242 Benedict, Verne F. Mrs.: 30805 112 Ave. S.E., Auburn, WA 98002 Benet, James: 206 Armentier Rd., Forestville, CA 95436 Berg, Roberta S.: 60 Cedar St., Wenham, MA 01984 Bertolette-Green, Marie Ms. 1952 Bridgetown Parkway, Feasterville, PA 19047 Best, Evelyn G. Mrs.: 105 Florence St., Lebanon, IL 62254 Billings, Barbara Mrs.: 2255 N. Cove Dr. Mariner's Cove. Oak Harbor, WA 98277 Billings, C. Viola: 121 Harbor Rd., St. James, NY 11780 Binford, Janet E.: 6915 N.E. Sacramento, Portland, OR 97213

Black, Marvin: 124 N. 181st St., Seattle, WA 98133 Blethen, Margaret: Waldron, WA 98297 Bolt, Alvin L.: 325 Fieldcrest Dr., Nashville, TN 37211 Book, Eleanor M.: Rd 2, Box 290, Coatesville, PA 19320 Bower, Auda: P.O. Box 1628, Blaine, WA 98230 Bowerman, W.J. Mrs.: 3605 Apollo St. S.E., Lacey, WA 98503 Boyes, David: 521 Chemawa Rd. N., Salem, OR 97303 Brehaut, Bert: 1302 Downer Ave., Utica, NY 13502 Briscoe, Harley E.: Rt. 1., White Hall, IL 62092 Bronow, Betty Z.: 228O5 Stottlemeyer Rd., Poulsbo, WA 9837O Brown, Dorothy D.: 2276 N. Fairway Lane, Oak Harbor, WA 98277 Brown, Evelyn P. Miss: Rt. No. 2, Box 276, Claremont, NH 03743 Brown, L.B. Mrs.: 2811 Linden Lane, Puyallup, WA 98371 Brown, Ray: 54 Thalassa Ave., Corrimal E. 2518 N.S.W., Australia Brown, William E.: 4 Wellsely Ct., Coram, Long Island, NY 11727 Buchanan, Kathleen K. 1767 Hamilton Dr., Valley Forge, PA 19481 Buckles, Irene N.: 13732 45th Ave., S. Seattle, WA 98168 Bullitt, Jr., Orville H. Mrs.: Twinbrook Rd., Berwyn, PA 19312 Burge, Doris Mrs.: 2318 14th Ave., Forest Grove, OR 97116 Burnett, Frank: 1007 S. 72nd., Tacoma, WA 98408 Burt, Dr. Georgie M: 1201 14th Ave. N., Fargo, ND 58102 Butchart Gardens, LTD., Box 4010 Postal Station A., Victoria, B.C.

Buttle, Peter R.: 410 Bellevue, Apt. 402, Oakland, CA 94610

Canada V8X 3X4

Callas, Panayoti Peter: 922 12th St., Boulder, CO 80302
Campayno, Madelaine Mrs.: R.D. No.3 Bx 559, Monongahela, PA 15063
Campbell, Dorothy: Rt. 2, Box 728, Buckley, WA 98321
Carson, Patricia: 6210 Klam Rd., Otter Lake, MI 48464
Carter, F.C.: P.O. Box 82, Lower Sackville, Nova Scotia, Canada BoN 150
Cartwright, Betty: 24 Chapel Rd., New Hope, PA 18938
Carty, George B.: 25607 68th Ave. S., Kent, WA 98031
Castle, R.D. Mrs.: 4900 N.W. 127th St., Vancouver, WA 98665
Cate, Arlindo S.: 275 Locust Rd., Winnetka, IL 60093
Catherwood, Anita C. Mrs.: 2304 Ottawa Ave., W. Vancouver, B.C. Canada

Cerimele, Carol Mrs.: 8222 38th N.E., Seattle, WA 98115
Charles, Percy B. Mrs.: 1013 84th N.E., Bellevue, WA 98004
Charlesworth, Geoffrey B.: 135 Broadfield Rd., Hempstead, NY 11550
Chase, Clarence Mrs.: No. 2 Chevy Chase Lane, Eugene, OR 97401
Cherpeske, Niona Mrs.: Rt. 2, Box 1617, Port Angeles, WA 98362
Chiado, Virgil Mrs.: 8501 N. Highway No.1, Little River, CA 95456
Chicago Horticultural Society: Botanic Garden, P.O. Box 400,
Glencoe, IL 60022

Clark, Gertrude Mrs.: Rt. 5, Box 36O, Camano Island, WA 98292
Clark, Michael Mrs.: Rt. 1, Box 475, Rockaway, OR 97136
Clarke, Fred Mr. & Mrs.: 6423 Wildaire Rd. S.W., Tacoma, WA 98499
Clarke, Elinor F.: Bear Swamp Gardens, Ashfield, MA 01330
Clevenger, E. Mrs.: 116 Clevenger Rd., Morton, WA 98356
Cline, Iris Mrs.: Rt. 8, Box 341, Olympia, WA 98502
Cobbs, Honor C.: 845 Clifton Rd. N.E., Atlanta, GA 30307
Cole, Trevor J.: 2700 Priscilla St., Ottawa, Ont. Canada K2B 7E2
Collins, William L. Mr. & Mrs.: 123 Kings Hiway, Morristown, NJ 08057
Conboy, Grace M. Mrs.: 5486 S.E. Marine Dr., South Burnaby, B.C.

Correvon Fils & Cie: Jardin Alpine "Floraire", 1225 Chene-Bourg, Geneve, Switzerland

Corwin, C.M. Mrs.: Rt. 4, Box 626, Sequim, WA 98382 Countryman, R.C.: 7 Vantage Dr., Pittsford, NY 14534 Crawford, Jean M. Ms.: 19713 35th S.E., Bothell, WA 98011 Crew, Samson I. Mrs.: 18 Garden Pl., Cincinnati, OH 45208 Crick, Barbara: 2845 140th N.E., Bellevue, WA 98005 Crumley, Sarah Mrs.: P.O. Box 116, Gales Creek, OR 97116 Cyr, Lawrence A. Mrs.: Fortunes Rocks, Biddeford, ME 04005

Daetwyler, Cheryl: 226 Rohen St., Pittsburgh, PA 15234
Dahlbom, Allan: Sjohallstigen 45-16240, Vallingby, Sweden
Darrall, Eva C. Miss: 1205 N. Garden, Boise, ID 83704
Darts, E.C. Mrs: 1660 168th St., Surrey, B.C. Canada V4B 4Z5
DeFries, John Mrs.: Box 77A, Rt. 1, New Paris, IN 46553
Dehler, Juliana M. Miss: Rt. 1, Box 136, Mt. Angel, OR 97362
DeMarrais, Edward Mrs.: 110 W. Governeur Ave., Rutherford, NJ 07070

Denver Botanic Gardens: 909 York St., Denver, CO 80206 Devecis, Elizabeth W. Mrs.: 9889 Mallory Rd., R.D. 1, Sau Quoit, NY 13456 Deyrup, Felicia J.: 309 N. Broadway, Nyack, NY 10960 Dickert, Carl F. Mrs.: 408A Jennings Ave., Greenwood, SC 29646 Dickson, Herbert: Rt. 5, Box 816, Chehalis, WA 98532 Dickson, Herbert H. Mrs.: Rt. 5, Box 816, Chehalis, WA 98532 Dines, William Mrs.: 9017 180th Ave. N.E., Redmond, WA 98052 Dodd, Richard A.: 2211 Chamberlain Ave., Madison, WI 53705 Dodge, Michael H.: Hilltop Rd., Deer Island, Lakeside, CT 06758 Doonan, Harry Mrs.: P.O. Box 127, Startup, WA 98293 Douglas, Mary Jane: 210 Riverside Dr., New York, NY 10025 Drake, Frederick H. Mrs.: Morris Island, Chatham, MA 02633 Drew, Dorothy Miss: 400 Buckingham Ave., Syracuse, NY 13210 Dunn, Robert L.: Froelsid 30, 3800 Torshann, Faroe Islands Dupre, Jr., L.J.: 2015 N. Ave., Anacortes, WA 98221 Dutton, Theresa: Rt. 2, Box 639, Gresham, OR 97030

Eastern Chapter, A.P.S.: c/o 189 Taconic Rd., Greenwich, CT 06830 Eastside Garden Club: c/o Mrs. R. Fleming, 8219 120th N.E., Kirkland, WA 98033 Edgren, Margery Mrs.: c/o Oak Garden Apt., Apt. M 205, 816 S. Saratoga Ave., San Jose, CA 95129 Edwards, Ralph W.: Box 115, Henniker, NH O3242 Eichhorn, Gary: 525 McLeod Ave., Missoula, MT 59801 Ekman, Beryl N.: 10831 Interlaaken Dr., Tacoma, WA 98498 Elcombe, Keith F.: 11539 78th Ave., Edmonton, Alta, Canada T6G ON4 Elder, David: 9 Christie St., Dunfermline, Fife, Scotland KY12 ORO Ellams, Robin: 586 Cannon Rd., Wilton, CT 06897 Ely, Carl H. Mr. & Mrs.: 114 Rosewood Ave., New Haven, CT 06513 Emerson, Gordon G.: 1850 Rt. 45, Rock Creek, OH 44084 Emory, John A. Mrs.: 14008 Ziegler Way, Silver Spring, MD 20904 Enger, Yngve: Soderbergsgarden, S-66200 Amal, Sweden Ervin, Edmund N. Dr.: 2 School St., Waterville, MA 04901

Farmer, Carol: 5929 N.E. 162nd Ave., Vancouver, WA 98662
Krusinski, Karen: Far North Gardens, 15621 Auburndale Ave.,
Livonia, MI 48154
Farrell, Aileen M.: Scotland Yard, Foxhollow School, Lenox, MA 01240
Fauler, Fred A.: 8542 Fenner R. Rt. 2, Baldwinsville, NY 13027
Faust, Mildred Dr.: 1216 Westcott St., Syracuse, NY 13210
Fenderson, G.K.: Grout Hill, South Acworth, NH 03607
Finkbiner, Jacob H. Mrs.: Kulp Rd., Pottstown, PA 19464
Finney, Francis, Mrs.: 415 Leonard Rd., Onalaska, WA 98570
Fisher, Arthur: 1580 Blue Bell Rd.. Blue Bell, PA 19422
Fisher, Robert J. Mrs.: Hickory Hill, Rt. 2, Box 128, Loudonville, OH 44842
Fitzpatrick,III John: P.O. Box 103, Bel Air, MD 21014
Fletcher, Alice: The Green House, N. Locksley Rd., Glen Mills, PA 19342

Flick, Fred Mrs.: P.O. Box 23, Carthage, IN 46115 Flook, Jr. William M. Mrs.: Box 3748, Greenville, DE 19807 Flory, Fred J.: Box 508 R.R. No. 1, Long Beach, WA 98631 Fontaine, Eugene Mrs.: 5881 Harrison, Milwaukie, OR 97222 Forrest, Robert: 12903 124th St., Edmonton, Alta., Canada T5L OP6 Fortune, Ronald, Mrs.: Rt. 4, Box 990, Gresham, OR 97030 Foster, Alice R. Miss: Union Grove, WI 53182 Fournier, Caroyle: 442 50th Ave. N.W., Salem, OR 97304 Fox, James H.: P.O. Box 1935, Palmer, AK 99645 Frank, Joseph W. Mrs.: P.O. Box 332, Mt. Angel, OR 97362 Frost, Margaret Mrs.: 2415 Fulton St., Berkeley, CA 94704 Frost, Raymond: 8 Commercial Bldgs., Oakenshaw, nr. Bradford, Yorkshire, England Fuller, Rodney: 92 Catlins Lane, Penner, Middlesex, HA5 2BX London, Eng. Funker, Albert: 2483A N.E. Rene, Gresham, OR 97030

Gaffney, Clare V.: 664 New Jersey Ave., Lyndhurst, NJ 07071 Gaige, Jesse C. Mrs.: Pierce Rd. Rd. 2, Holland Patent, NY 13354 Galbraith, Donald J. Mrs.: R.D., Spruce Creek, PA 16683 Galbraith, Margaret Mrs.: 47 Huffey St., Geraldine, South Island, New Zealand Gambrill, Kendell: Rt. 1, Box 648, Sumner, WA 98390 Gamlam, John E. Mrs.: 2353 N. 140th, Seattle, WA 98133 Garden Center of Greater Cleveland: 11030 E. Blvd., Cleveland OH 44106 Gardiner, S.J. Mrs.: R.D. Rai Valley, Marlborough-So. Island, New Zealand Garton, Linda: 8516 Interlake Ave. N., Seattle, WA 98103 Gay, Jr. Wilson R.: P.O. Box 316, Lakebay, WA 98349 Genheimer, Thelma Mrs.: 7100 S.W. 209th, Beaverton, OR 97005 Gerrath, J.F. Dr.: 70 Dumbarton St., Guelph, Ont. Canada NIE 3T6 Gilman, Charles E. Mrs.: 286 Lenox Ave., Oakland, CA 94610 Gittner, Louis: Outlook Inn, East Sound, Orcas Island, WA 98245 Gladson, G. Vivian: 4814 79th Ave. W., Tacoma, WA 98467 Godshall, Horace Mrs.: Goezel Rd., Box 516, Perkiomenville, PA 18074 Goff, Ruth M.: West Main St., Millbury, MA 01527 Goldsby, A.R. Dr.: 76 Marcourt Dr., Chappaque, NY 10514 Good, Walter C.: 167 Colebrook Rd., Middletown, PA 17057 Goodwin, Allan: Goodwins Rd., Bagdad So.-7407 Tasmania, Australia Goplerud, Robert: 15621 Auburndale Ave., Livonia, MI 48154 Gordon, Dora F.: 24-Lavender Rd., Hordle, Lymington Hants, ENG. SO4 OGF Gordon, Emma Mrs.: Box G, Steilacoom, Wa 98388 Grabenhofer, Virginia: Rebel Hill Farm, R.R.1, Box 346, Nineveh, IN 46164 Graham, Paul N.W.: 211 Strathmore Pl., Corning, NY 14830 Grassel, Leonard J.: 3778O S.E. Boitano Rd., Sandy, OR 97055 Graves, Wilbur: Dill Apts., 11150 Gravelly Lake Dr., Tacoma, WA 98499 Gray, Julius, Dr.: 148 Seapine Rd., No. Chatham, MA 02650

Greawin, Erwin Mrs.: Box 176, Norwalk, WI 54648 Greenman, H.J. Mrs.: 36 Delaware St. MR 118, South Haven. MI 49090 Grey, Roger Mrs.: R.F.D. No. 1, Bucksport, MA O4416 Grimlund, Kurt: Industrial Medical Officer, Husquarna, Vapenfebricks A-Husquarna, Sweden

Gurney, Roland J. Mrs.: 42 Water St., Fairfield, MA 04937 Hagerman, Nancy Searle: 820 Windom, Wayne NE 68787 Hale, Emma Mrs.: 16614 9th Ave. S.E., Bothell, WA 98011 Halladin, Margaret E.: 85 Hillcrest Dr., Upper Saddle River, NJ 07458 Hamilton, Goldie Mrs.: Lora Gorge No. 2 Rd., Winton, New Zealand Hansen, Constance: 1931 33rd St., Lincoln City, OR 97367 Hanworth, W.R.: Assington Green Cottage, Stansfield, Sudbury, Suffolk, England Happy, III, Cyrus: 11617 Gravelly Lake Dr. Tacoma, WA 98499 Harmon, Mark W.: Rt. 1, Box 262, Sagle, ID 83860 Harold, Vivienne: 1034 N.W. Coast St., Newport, OR 97365 Harrison, Martha & Judith: 7737 35th Ave. N.E., Seattle, WA 98115 Hartill, Marian Mrs.: Rt. 3, Box 423, Astoria, OR 97103 Hayakawa, Nobuyuki: 9-4-4-Takasucho Kamekawayun, Hokkaido, Japan Heimburger, C.C.: 2060 McNeill Ave., Victoria, B.C. Canada Held, Frederick W.: Rt. 1, Box 488, Beaverton, OR 97005 Held, Marilun: 8 Horse Hollow Rd., Locust Valley, NY 11560 Helm, Brandon Mrs.: 25 Ash St., Hopkinton, MA 01748 Hider, Richard Mrs.: 2922 Graustark, Wooster, OH 44691 Hieggelke, Margaret: 3001 M St. S.E., Auburn, WA 98002 Hillhouse, Druscilla Mrs.: 15592 Sunburst Lane, Huntington Beach, CA 92647 Hindla, Louis A.: 986 Church St., Bohemia, NY 11716 Hinterwirth, Hubert: A-4560 Kirchdorf An Der Krems, Austria Hixon, Kenneth: 512 Waite St., Eugene, OR 97402 Hoag, Floyd: Rd. 2, 8701 Hopkins, Batavia, NY 14020 Hockheimer, L. Mrs.: Ridge Farms Rd., Norwalk, CT 06850 Hogarth, Hanna Mrs.: Box 477, Terrace, B.C., Canada V8G 4B5 Hohnstein, Peter Mrs.: 8525 N.W. Lovejoy St., Portland, OR 97229

17

Holman, D.V. Mrs.: Franconia, NH 03580 Holubec, Noitech: Karlinske Namesti 6, Praha-Karlin Czechoslovakia Horticultural Data Processor: P.O. Box 489, New York, NY 10028 Hosenfeld, Florence A. Ms.: 1441 Ridge Rd., Webster, NY 1458O Hoss, Lavalie B.: 37 Summer St., Rockland, MA 02370

Holden, M. Mrs.: Rt. 4, Box 188, Shelton, WA 98584

House Plants & Porch Gardens Magazine: c/o Peter Johnson, 1 Aldwin Center, Villanova, PA 19085

Huey, Mary: 4721 Maple St., Willoughby, OH 44094 -Hufschmid, Adolf Mrs.: Canney Hill Rd., Gilmanton Iron Works, NH 03837 Hull, Harry Mrs.: Uplands, Highland Ave., Manchester, MA 01944 Huston, Ruth B. Mrs.: Spring Hill Farm, P.O. Box 42, Gig Harbor, WA 98335

Imbsen, Marlene: P.O. Box 644, Douglas, AK 99824

Jackson, Louise Mrs.: Box 2683, Kodiak, AK 99615 Jacques, Frank: 265 Hollin Lane, Middleton, NR. Manchester, ENG Jaeger, James: 2617 25th St., Santa Monica, CA 90405 Janes, John R: P.O. Box 1, Jericho, NY 11753 Jarvis, Frank A.: P.O. Box 372 Quaker St., Millville, MA 01529 Jelenits, Dr. Istvan: Budafok Ady E, Ut 15 Budapest XXII Hungary Jenkins, Belva: 217 Cecil St., S.E., Minneapolis, MN 55414 Jenks, V.F.: P.O. Box 44, Prince George, B.C. Canada V2L 4R9 Jensen, Elm: Rt. 4, Box 255B, Squilchuck Rd., Wenatchee, WA 98801 Jensen, Norman A.: R.R. 2, Box 81, Mundelein, IL 60060 Jessen, Elliott: Duralite, Inc., School St., Riverton, CT 06065 Jochens, Renee: R.R. 1, Box 5A, Hoskins, NE 6874O Joe's Bulletin: P.O. Box 144, Lamoni, IA 50140 Johnson, Cassa Ms.: 3116 N. Tyler, Tacoma, WA 98407 Johnson, Cleatis R.: 6024 197th Ave. E., Sumner, WA 98390 Johnson, Nina M. Mrs.: R.D. 1, Box 625, Sabinsville, PA 16943 Johnson, W.L.: 116 N. Regent, Burlington, WA 98233 Jones, Dorcas: 34 Burchard Lane, Rowayten, CT 06853 Jones, Judith: 1911 4th Ave. W., Seattle, WA 98119 Jones, Rosetto, M.: 6214 S. 287th St., Kent, WA 98031 Jonsson, Ulla Mrs.: Pilgatan 9-77100 Ludvika, Sweden 18 Joliand, Ella: 11 Jackson St. Greene, NY 13778 Justus, Patricia: Rt. 2, Box 224B, Flemington, NJ 08822

Kaweck, Dale: Rt. No.1 120 Circle Dr., Merritt, MI 49667 Keefe, Richard L. Mrs.: Deep Spring Rd., Earlville, NY 13332 Keettel, William C.: 343 Hutchinson Ave., Iowa City, IA 52240 Kehl, Dr. Siegfried: D6 Frankfurt AM Main 50, Berkersheimer, Untergasse 9, Germany Keiffer & Smith: 10324 44th Ave. N.W., Seattle, WA 98125 Keighton, Walter L.: 311 Cedar Lane, Swarthmore, PA 19081 Kelley, Augustus M.: P.O. Box 458, Little Compton, R.I. O2837 Kelly, Steven John: 2325 S. Wartertown Rd., Long Lake, MN 55356 Kerrigan, Howard: Kerrigan Nrsry, 24249 Second St., Hayward, CA 94541 Kingwood Center: P.O. Box 966, Mansfield, OH 44901 Kinnan, Wesley J. Rt. 1, Box 597, Otis, OR 97368 Kirk, Delores: 12764 Grover St., Omaha, NE 68144 Kirkpatrick S.: 2 Nautilus Lane, Hampton Bays, NY 11946 Kiser, Glenn Mrs.: Box 364, Blowing Rock, NC 286O5 Kistler, John S. Mrs.: 1421 Ship Rd., Westchester, PA 1938O Kitsap County Primrose Club: 6733 Jarstad Dr., Bremerton, WA 98310 Klahn, Margaret: 1519 W. 12th, Port Angeles, WA 98362 Kline, Thomas C. Mrs.: 3016 Cedar Hill Rd., Falls Church, VA 22042 Klopping, B.H. Mrs.: 3415 N. 80th St., Omaha, NE 68134 Knapp, Fred E. Mrs.: 58 Kaintuck Lane, Locust Valley, NY 11560 Knippenberg, J.F. Mrs.: 736 Pines Lake Dr. W., Wayne, NJ 07470 Knoff, William Mrs.: R.D. 2, Cazenovia, NY 13035 Koch, Adam Mrs.: Star Rt. Box 382-B, Forest Grove, OR 97116

Koster, Werner Dr., 3253 Hess. Oldendorf 17, Reuter Kamp 10, West Germany Krastin, Alexandra Miss: 325 Park Ave., Arlington, MA 02174 Kraus, Lillian H.: 430 Cherokee Dr., Butler, PA 16001 Krecmer, Jaroslav: nam, J. Krautivurma 14, Plazen 2, Czechoslavakia Kreischer, Fred H. Mrs.: 222 E. 13th St., Berwich, PA 18603 Kronbuegel, Henry: 7332 Macley Rd. S.E., Salem, OR 97301 Kry, Gunnar: Box 82, 51033 Rydal, Sweden Lane, Ralph Mrs.: Box 25, Louisville, TN 37777 Larrick, Alice M.: 4841 N. 30th St., Arlington, VA 22207 Larrison, Roland D. Mrs.: Rt. 1, Box 556, Port Jervis, NY 12771 Larsson, Sven: Starvagen 10, S-18363, Taby, Sweden Larter, Alfred H. Mrs.: 70 Hearthstone Lane, Rochester, NY 14617 Latimer, Fern Morrisey Mrs.: 19027 100th N.E., Bothell, WA 98011 Ledding Library of Milwaukie: 820 21st St., Milwaukie, OR 97222 Leffler, Lucille M. Mrs.: 39695 Ridge Dr., Scio, OR. 97374 Lehner, Alice Mrs.: 23000 N.E. 92nd Ave., Battleground, WA 98604 Leide, Charlotte: Rt. 1, Box 18, Jonesboro, IL 62952 Lemire, Joseph E.: 45 Chestnut Ave., Auburn, MA 01501 Lenzner, Joseph J.: 1231 Delaware Ave. Apt. 3, Buffalo, NY 14209 Lewine, John L. Mrs.: P.O. Box 386, West Stockbridge, MA 01266 Lewis County Primrose Society: Mrs. Fanny Aldrich, 320 N. Diamond. Centralia, WA 98531 Lichtenwanger, W. Mrs.: P.O. Box 127, Berkeley Springs, WV 25411 Lindner, Mary A.: Rd 3, Bragman Rd., Dover, NJ 07801 Link, Elva C.: 211 W. Mountain Rd., Corinth, NY 12822 Link, Gale: Box 171, Sewanee, TN 37375 Lips, Roger Mrs.: 1405 Vermillion Rd., Duluth, MN 55812 Long, James F.: Rt. 2, Box 1, Marion, VA 24354 Longwood Gardens: Kennett Square, PA 19348 Loughlin, Joan E.: Box 63, South Freeport, MA 04032 Lunn, Ann. 3040 N.W. Parkview Lane, Portland, OR 97229 Lygo, C.: 205-4635 Imperial St., Burnaby, B.C. Canada V5J 1B9 Lyons, William H. Mrs.: R.R. 5, Dunnville, Ont. Canada N1A 2W4

Maki, T.: 7-11-6 Kugenuma-Karigan, Fujisawa-251, Japan Malone, J.A. Mrs.: 6009 Westbrook Dr., Brook Park, OH 44142 Marshall, Dorothy B.: 1172 S.E. 55th Ave., Portland, OR 97215 Martin, L.E. Mrs.: Buttonwood Dr., R.D. No. 4, Doylestown, PA 18901 Martin, Dr. Louis G.: 19 Lansdowne Rd., Toledo, OH 43623 Martin, M.J. Mrs.: 1 Wellesley Ave., Toronto, Ont. Canada M4X 1V2 Mason, Howard Mrs. 4316 S.W. Bernard Dr., Portland, OR 97201 Mass Horticultural Society: Horticultural Hall, 300 Mass. Ave., Boston, MA 02115

Mastin, L.D.: 15 E. Main St., Cortland, NY 13045
Matthew, Bruce A. Mr. & Mrs.: 9908 Lake Stellacoom Drive,
Tacoma, WA 98498

Maule, S. Mrs.: 578 Lanark Rd. W., Balerno, Edinburgh, Scotland EH 14 7BN Maupin, Margaret S.: 1273 McLean Rd., Mt. Vernon, WA 98273 Maxwell, William: Priors Rd., Monbulk, Victoria, Australia 3793 Mends, David: 261 Teller Rd., Trumbull, CT O6611 Menzies, James D. Mr. & Mrs.: 765 Tenth Court, Fox Island, WA 98323 Meyer, Richard J.: 2610 Minerva Lake Rd., Columbus, OH 43229 Meyer, Thirza Mrs.: 1431 S. Burroughs, Oceanside, CA 92054 Michl, Leo: Brice Route, Lebanon, MO 65536 Midwest Wildflowers: Leroy H. Busker, Box 64, Rockton, IL 61072 Miller, Harry L.: 1925 35th St., Des Moines, IA 50310 Millner, Raymond T.: Rt. 1, Box 525, Longbeach, WA 98631 Mills, Robert J. Mrs.: 150 Prospect Ave., Princeton, NJ 08540 Missouri Botanical Garden: 2315 Tower Grove Ave., St. Louis, MO 63110 Mitchell, Sally A. Mrs.: Chicken Valley Rd., Locust Valley, NY 11560 Madalene Modic: R.D. 1, Box 162, Sewickley, PA 15143 Moehnke, Helen Mrs.: Star Rt. Box 55. Banks. OR 97106 Moore, Thomas H.: 10576 King George Hwy., Surrey B.C. Canada V3T 2X3 Morency, Andre: Box 297, Chute-Aux Outardes. P. Quebec, Canada GOH, 1CO Mori, Kazud: 58 Matushita, c/o Nishinomiya Shi, Hyogo Ken, Japan 20 Morris, Sr. Harley A.: 731 Ditman St., Kansas City, MO 64125 Morton, Evelyn: 13497 Balsom Crescent, White Rock, B.C. Canada V4A 2Y1 Muller, Claire: 2001 Ridley Creek Rd., Media, PA 19063 Mulloy, Milton S.: 90 Pierpont Rd., Waterbury, CT. 06705 Multnomah County Library: Library Assoc. of Portland, 801 S.W. 10th Ave., Portland, OR 97205 MacFarlane, Dorothy: 5453 S.E. Harlene, Milwaukie, OR 97222 MacKeller, Robert: Sharp's Landing Rd., Germantown, NY 12526 McBride, Walter H.: 2738 Elmwood Dr. S.E., Grand Rapids, MI 49506 McCarter, Dr. Jackson H.: 30 Lotus Ct., Greenville, SC 29609 McDonald, Dr. Sandra: 209 Ward Dr., Hampton, VA 23669 McGrail, Ruth Ann: 9730 Schreiner Lane, Great Falls, VA 22066

Nagel, William Mrs.: 2082 Gird Rd., Fallbrook, CA 92028 Nason, Everett H. Mrs.: Church Rd., Box 1197 Brunswick, MA 04011 National Auricula & P. Soc.: Peter Ward, 25 Upton Crescent, Shirley, Solihull, W. Midlands, England B90 3RX

McGrath, Pamela: 19039 16th Ave. N.E., Seattle, WA 98155

McKey-Fender, Dorothy: 835 Ashwood, McMinnville, OR 97128 McLardy, R.: R.R. 1, Port Washington, B.C. Canada VoN 2P7

McLay, Dorothy N.: R.D. No. 3, Box 441, Leechbury, PA 15656

McQuail, Jr. J.A. Mrs.: Turkey Knob Farm, 745 Peck Rd.,

Downington, PA. 19335

McMurry, Tressa Mrs.: 2311 Valencia St., Bellingham, WA 98225

McIlvaine, Jr. Donald Mrs.: 349 W. Lancaster Ave., Whitford-Exton, PA 19341

McLeod, J. Mrs.: Bay Road, R.D. 9, Invercargill, Southland, New Zealand

Nat. Aur. & PR. Soc. (N): Mrs. A.E. Smith, White Gates, Carney Road, Grange-Over-Sands, England Nat. Aur. Prim. Soc. (S): Joan E. Youle, 58 Grand Dr., London Eng SW 20 National Ref. Library of Science and Invention: Baysewater Div., 10 Porchester Gardens, London W2 4 DE England Neesemann, Carroll E.: 67 E. 11th St. Apt. 707, New York, NY 10003 Nelson, Clarence: 4324 W. 58th Pl., Los Angeles, CA 90043 Nelson, Lois A.: 12612 Ave. DuBois S.W., Tacoma, WA 98498 Nelson, Olaf E. Mrs.: 10803 Butte Dr. S.W., Tacoma, WA 98498 New York Botanical Garden Library: Bronx Park, Fordham Br. P.O. Bronx, NY 10458 Newlin, C.J. Mrs.: Box 66, Freeland, WA 98249 Newman, Norma: 3832 N. Vassault St., Tacoma, WA 98407 Newton, Robert: 1880 Dover Rd., Wantagh, NY 11793 Nichols, Robert: 38 Ord Court, San Francisco, CA 94114 Nicolay, Kevyn-Michael: 8330 Sunnydale Dr., Brecksville, OH 44141 Nishikaiwa, Yukio: Honcho Oonomachi, Kamede Qun, Hakkaido O41-12 Japan Nitchman, Joseph Mrs.: 6572 West Smith Rd., Medina, OH 44256

Niwa, Yoshiyuki: Box 25 I/S Center, U.T.S.I. Tullahoma, IN 37388

Obersinner, Allen Mrs.: North Howell Rd., Silverton, OR 97381 O'Brien, John A.: R.R. 5 No. 5192, Juneau, AK 99803 Ohrt, Otto Mrs.: 2905 Horsehead Bay Dr. N.W., Gig Harbor, WA 98335 Olalla Evergreen Gardens: Wm & Esther Avery, 724 N. Yakima, Tacoma, WA 98403 Oleri, Jr., F.J. Mrs.: 10 Grove St., Closter, NJ 07624 Olson, Frances M. Mrs.: Bostock Mt. Rd., Boiceville, NY 12412 Oppen, Arthur Mrs.: 604 Clarmar Dr. N.E., Salem, OR 97301 Oregon State Library: State Library Bldg., Salem, OR 97310 Oregon Primrose Society: Mrs. William Tate, Treasurer, 10722 S.E. 40th Avenue, Milwaukie, OR 97222 Oregon State Univ. Library: Corvallis, OR 97331 Osborn, Eric Mrs.: 18 Winthrop Dr., Barrington, RI 02806 Osborne, Frank, 15 Shawinigan Rd., Dartmouth, Nova Scotia, B2W 3A1 Canada Oestreicher, D.L.: 2346 Gold St., Redding, CA 96001 Ottawa Res. Station Library: Res. Dr. Agri. Ottawa, Ont. Canada K1A CEF Owens, Clarence: 3390 Allston Dr., Jackson, MI 49201

Pacific Northwest Nurseries: 11030 N.E. Sixth, Bellevue, WA 98004
Palmer, Dr. Edward: 1570 Woodland Terrace, Lake Oswego, OR 97034
Paney, H.S. Mrs.: Rt. 4, Box 718, Poulsbo, WA 98370
Papierski, Edward M.: P.O. Box 1432, Sequim, WA 98382
Parker, David E.: Rt. 1, Box 108-1, W. Alexandria, OH 45381
Parker, Thomas F. Mrs.: Westlake Rd., Fitzwilliam, NH 03447

Parrot, Dr. Louis: Faculte De Foresterie, Universite Laval, Cite-Universitaire Quebec, Canada G1K 7P4 Pease, Alfred Mrs.: 411 Essex Dr., Lexington Park, MD 20653 Peavey, Amy Mrs.: Box 537, Darrington, WA 98241 Peirce, Anna M.: 47 High St., Topsfield, MA 01983 Penna. Horticultural Society: 325 Walnut St., Philadelphia, PA 19106 Persson, Ejnar, 3 die Kyrkvagsgrand 7, 60210-Norrkoping, Sweden Peterson, Elizabeth: 16414 12th S.W., Seattle, WA 98166 Petrall, Walter O.: Gardens Division. Winterthur Museum. Winterthur, DE 19735 Pieck, Mariana Miss: 260 Bay St., Apt. 204, San Francisco, CA 94133 Piekarski, Frank: 274 Walden Ave., Buffalo, NY 14211 Pierce, Donna: 2615 N.E. 137th, Seattle, WA 98125 Pincus, Edward L.: 11813 100th N.E., Kirkland, WA 98033 Plumlee, Jewell A. Miss: 531 Chemawa Rd. N., Salem, OR 97301 Pohl, Kenneth Mrs.: P.O. Box 426 Wright Branch, Dayton, OH 45409 Pollock, Shirley M. Mrs.: 6824 Lickman Rd., Sardis RR 4, B.C. Canada VOX IYO Power, Nancy Gaslee: 10788 Rochester Ave., Los Angeles, CA 90024 Presley, Anne Mrs.: 3235 N.E. 63rd., Portland, OR 97213 Preston, William S. Mrs.: 884 Bluff St., Glencoe, IL 60022

Quigley, Lloyd Mrs.: 2910 N.E. 49th St., Vancouver, WA 98663 Quinn, Mary A.: 54 Haskell St., Cambridge, MA 02140

Pritzer, MaryAnn: 95 N. Hayes, Fresno, CA 93711

Prins, H.L.A.: W. Pyrmontkade, 957 2518 JX Den Haag, Delft 3, Netherlands

Raden, Lee M.: 1 Alpine Way, Alpine Flora, Phoenixville, PA 1946O Ratcliff, Jr., James E.: 300 Montgomery St., Suite 700, San Francisco, CA 94104 Ray, Charlotte; R.D. 3, Box 91A, Kennett Square, PA 19348 Redfield, R.W.: R.F.D. No. 1, Hampton, CT O6247 Reinhold, Herman F. Mrs.: 2510 Deepwood Dr., Foulk Woods, Wilmington, DE 1981O Rennenkampff, B. Mrs.: 2162 Sand Hill Rd., Oregon, WI 53575 Renner, Louise A.: 9611 S.W. Lancaster Rd., Portland, OR 97219 Renzetti, Patricia: 2409 Woodland Lane, Arden, Wilmington, DE 19810 Rettger, Timothy: 429 E. 10th St., Erie, PA 16503 Reynolds, Dorothy: 1025 Ackerman Ave., Syracuse, NY 13210 Risley, Edward B.: 620 B. St., Davis, CA 95616 Roach, Helen: 1008 N. Nottawa, Sturgis, MI 49091 Robinson, D.: Riversdale, Glounthaune, County Cork, Ireland Rohr, Francis: 4 Greenleaf St., Brattleboro, VT 05301 Rokey, Albert: 7425 Thurston Rd., Springfield, OR 97477 Ronnheden, Sigvard: Sagvagen 1 3F100 Karlskrona, Sweden Rosier, James L.: 508 Cedar Lane, Swarthmore, PA 19081 Ross, William Mrs.: 273 Erskine Ave., Youngstown, OH 44512

Rountree, John: 6514 Elmhurst Dr., Falls Church, VA 22043 Rousseau, Paul: CP. 75 Lambton, Ce Comp MIG, P. Quebec, Canada Royal Botanic Garden: D.M. Henderson, Edinburgh EH 3 5LR Scotland Royal Botanic Gardens: Kew, Richmond, Surrey, England Rozman, H.E. Miss: 20341 Chateau Dr., Saratoga, CA 95070 Rozee, June Ms.: 53 Dillon St., Blenheim, New Zealand Rutkowski, Edmund: 160 Lawrence Rd., Trenton, NJ 08638 Sacks, Ray Mrs.: 422 Brim Road, Onalaska, WA 98570 Salinger, Gladys: 25 S.E. Adams Ave., Chehalis, WA 98532 Salsman, Orpha Mrs.: 14016 84th Ave., Seattle, WA 98168 Salter, Brian: 33 Stradbrook Ave., St. George, Bristol, England BS5 8PJ Sandifur, Evelyn Mrs.: 602 Greenacre Way, Aberdeen, WA 98520 San Francisco Public Library: Periodical Dept., Civic Center, San Francisco, CA 94102 Sauer, Vickey: 13631 196th S.E., Renton, Wa 98055 Sayers, George: 11738 222nd St., Maple Ridge, B.C. Canada V2X 5V2 Saylor, Marie: 212 Hoffman St., Crown Point, IN 46307 Sayre, Lawrence R.: 192 Thorp Dr., Moraga, CA 94556 Schaffner, Dr. Carl P.: 10 Youngs Rd., Trenton, NJ 08619 Scherer, Ruth M. Mrs.: P.O. Box 96, Trout Lake, MI 49793 Schermerhorn, John Mrs.: 8141 S.W. 47th, Portland, OR 97219 Schiff, Barbara Mrs.: 129 Washington St., Topsfield, MA 01983 Schlieder, Jr., Quentin C.: P.O. Box 1295R, Morristown, NJ 07960 Schneider, Jean Mrs.: 6914 Dartmouth Ave., St. Louis, MO 63130 Scholz, Johannes: 48 Bieldfeld, AM Kahlenberg 16, Germany Schutt, Harold Mrs.: 901 Berkeley Rd., Wilmington, DE 19807 Schwarz, A.J. Mrs.: 2509 N.E. 170th, Seattle, WA 98155 Scottish Rock Gdn. Club: A.H.D. Orr, Subs. Scty, 70 High St., Haddington, E. Lothian, Scotland Searle, Linda A. Miss: Fleischmanns, NY 12430 Seattle Public Library: Order Department, Seattle, WA 98104 Sedgewick, Lillian R.: 1052 Ackerman Ave., Syracuse, NY 13210 Sepfield, Charles W. Mrs.: 12001 Des Moines Way S., Seattle, WA 98168 Selsko-Khozjajstven: Biblioteka, Orlikov Per 3, Moscow, USSR Semanian, Jack: 1312 Avenida Polar A-5, Tucson, AZ 95710 Shami, Mike: 298 Second Ave., Sault. Ste. Marie, Ontario, Canada Sharoni, Raid: 67 Ave., El Fath, Fleming, Ramleh, Alexander, Egypt, A.R.E. Shaw, Jonathan: 41 Roundwood Rd., Newton, MA 02164 Sherman, E.J. Mrs.: Rt. 2, Box 88, Molalla, OR 97038 Shesta, Madeline Mrs.: Folly Hill Farm R.F.D. 3, Morrisville, VT O5661 Shields, Emma Miss: 678 Huguenot Ave., Staten Isl., New York, NY 10312 Shier, Alex Mrs.: P.O. Box 94, Long Beach, WA 98631 Shipman, David C.: 428 Pacific St., Brooklyn, NY 11217 Shutt, Jr., Harold Mrs.: 901 Berkeley Rd., Wilmington, DE 19807 Siegel, William A: 3024 Runnymede Dr., Norristown, PA 19403

Siepman, Anne Mrs.: 3616 N.E. Bellevue-Redmond Hwy,

Redmond, WA 98052

Silva, John W. Mrs.: Foote Hill Rd., Northford, CT 06472 Simpers, Charlotte H.: 6733 Jarstad Dr., Bremerton, WA 98310 Sims, William R.: 3420 W. Hurley Pond Rd., Wall, NJ 07719 Sizak, Dr. Mark: 1607 E. 4th St., Brooklyn, NY 11230 Sizelove, William Mrs.: 272 S. Columbia Dr., Woodburn, OR 97071 Skupen, Clara: 3204 Ruston Way, Tacoma, WA 98402 Slack, Alan P.: 908 Twyckenham Rd., Bowling Green, Media, PA 19063 Slack, Charlotte: 908 Twyckenham Rd., Bowling Green, Media, PA 19063 Slater, Leslie G.: Box 472, Quilcene, WA 98376 Smallwood, H.R. Mrs.: "Millstone Farm" Rt. 2, Box 88, Purcellville, VA 22132 Smith, Bernard: 35 The Drive, Gravesend, Kent, England DA 12 4BY Smith, Clifford L. Mrs.: Rt. No. 1, Plummer, ID 83851 Smith, E. White Mrs.: 4317 N. 18th, Tacoma, WA 98406 Smith, Elsworth J. Mrs.: 12 Weeks Pl., New Rochell, NY 10801 Smith, J.L. Mrs.: 84 East Hill Rd., Canton, CT 06019 Snell, W.D. Mrs.: R.R. 2, Snell St., Blue Mound, IL 62513 Sova, Andrew G. Mrs.: Nildbrand Rd., Perkiomenville, PA 18074 Spady, Herbert A: 9460 Sunnyview Ave. NE Salem, OR 97301 Sparks, Myrtle: P.O. Box 501, Auburn, WA 98002 Speed, Rosalie: 4434 Vandelia St., Dallas, TX 75219 Speers, Robert Mrs.: 202 Champion, Steilacoom, WA 98388 Spencer, Melinda: 17 Sunnyside Ave., San Anselmo, CA 94960 Spielman, Leon C. Mr. & Mrs.: 145 W. Main, Sharpsburg, MD 21782 Springer, Frank L. Mrs.: 7213 S. 15th, Tacoma, WA 98465 Stack, Louis F. Mrs.: 991 S.W. Berry Lake Rd., Port Orchard, WA 98366 Standish, M.P. Mrs.: 128 Barn Hill Rd., Monroe, CT O6468 Stankowski, Joseph: P.O. Box 2591, Chicago, IL. 60690 Steele, Capt. R.M.: Bayport-Rosebay R.R.I, Lunenburg Co., Nova Scotia, Canada BOJ 2XO Stenport, B.: Akerv 69, 8122-35-Enskede 43, Sweden mah Stent, Mary R.: 2419 Vallejo St., San Francisco, CA 94123 Stepankova, Vera Mrs.: Studenka 42, Nova-Paka, Czechoslovakia Stevens, George Mrs.: Rt. 1, Box 300, Sequim, WA 98382 Steward, Orville, Supt.: c/o Holly Hill, P.O. Box 336, Briarcliff Manor, NY 10510 Stewart, Margaret, V. Mrs.: 42215 S.E. Klunsmith St., Sandy, OR 97055 Stich, Alda: Freedom, ME 04941 Stoeltzing, Richard W.: 1011 Royal Ct., Cheswick, PA 15024 Stokes, Jr. F.J. Mrs.: 1012 Westview St., Philadelphia, PA 19119 Storm, Lowell A. Mrs.: Chugwater, Wyoming 82210 Story, Leona Mrs.: Rt. 1, Box 429, Buckley, WA 98321 Strickland, Esther: 2722 E. 84th, Tacoma, WA 98445 Struve, William S.: 29 Dellewood Ave., Chatham, NJ 07928 Strybing Arboretum Soc. of Golden Gate Park: Ninth Ave., At Lincoln Way, San Francisco, CA 94122 Stuckey, Dr. Charles: 2201 Bucknell Ave., Charlotte, NC 28207

Sundberg, Oscar, Mrs.: 16825 Marine View Dr., Stanwood, WA 98292 Susa, Takesumi: 1-27-1 Highashi-Nakano, Nakano-ku, Tokyo, Japan Swenson, E.C. Mrs.: Rt. 2, Box 678, Beaverton, OR 97005 Tacoma Primrose Society: c/o Mrs. Verne F. Benedict, 30805 112th Ave., S.E. Auburn, WA 98002 Tacoma Public Library: 1102 South Tacoma Ave., Tacoma, WA 98402 Tait, L.G. Mrs.: Primrose Acres, 14015 84th Ave. N.E., Bothell, WA 98011 Takuma, Seiko Miss: 1625 Mizumoto Sarumachi, Katsushikaku, Tokyo, Japan Tate, William Mrs.: 10722 SE 40th Ave., Milwaukie. OR 97222 Taylor, Harvey W. Mrs.: 14 Porter Rd., Farmington, CT. 06032 Tempest, Rosalie C.: 129 Pine St., Salinas, CA 93901 Teuscher, Capt. L.F.: 7545 Oak Leaf Dr., Santa Rose, CA 95405 Thomas, Chester R. Mrs.: 20247 S.E. 206th, Maple Valley, WA 98038 Thomas, William Mrs.: 1805 Greenleaf Dr., Royal Oak, MI 48067 Thompson, John L. Mrs.: 722 W. Fourth St., Marion, IN 46952 Thomsen, Hugo: Kirkegade 60, DK-7430 Ikast, Denmark Thomson, Olive, Mrs.: Rt. 1, Mt. Hareb, WI 53572 Ticky, Ruth Miss: 3226 Oak Ave., Brookfield, IL 60513 Tiffany, John A. Mrs.: 65 W. 30th Ave., Eugene, OR 97405 Tomsovic, Rita Mrs.: Rt. 5 Box 205, Waupaca, WI 54981 Town, M.A. Miss: 8 Hazel Grove, Linthwaite, NR Huddersfield, West Yorkshire, England HD7 5TQ Townsend, Clare D. Mrs.: 4660 Beckley Rd., Battle Creek, MI 49017 Tozo Suzuka, Guji: Takagamo Shrine Kamokami, Gose Nara, Japan Trost, Betty: 5550 Brookdale Rd., Birmingham, MI 48008 Trujillo, Tony: 11617 Gravelly Lake Dr. SW., Tacoma, WA 98499 Trzunka, Willis Mrs.: 1985 S.W. 325th Ave., Hillsboro, OR 97123 Tudor, Tasha: Rt. 4. West Brattleboro, VT O5301 Tufte, June A. Mrs.: 1122 29th S.E., Auburn, WA 98002 Tyrtkovic-Sahin, Zelimir K.: Uiterweg 34 Aalsmeer 1210 The Netherlands Univ. of California: Serials Dept. General Library, Berkeley, CA 94720 Univ. of California Library: Acquisitions Dept., Davis, CA 95616 Univ. of Minnesota: Andersen Hort. Library, Landscape Arboretum, 3675 Arboretum Dr., Chaska, MN 55318 Univ. of Tennessee: Agriculture Library, Morgan Hill, Knoxville, TN 37916 Urabec, John R: 504 Logan St., Santa Cruz, CA 95062 Valentine, Carl Mrs.: 392 Spruce Brook Rd., Berlin, CT 06037 Valley Hi Primrose Society: c/o Mrs. John Schermerhorn, 8141 S.W. 47th, Portland, OR 97219 Van Dyke, Anne: c/o 2105 S. 124th, Seattle, WA 98168 Yan Dyke, Margaret: 2105 S. 124th, Seattle, WA 98168 VanHorn, A.R. Mrs.: 7159 Camp Hill Rd., Fort Wash., PA 19034 Van Sickle, Elgin C. Mrs.: Rt. 3, Box 308, Sequim, WA 98382 Victorian Plant Research Ins.: Librarian-Plant Science Lib., Swan St.,

Burnley, Victoria 3121 Australia

Vivljunga, Gustav Lind: S-28O 5O Stromsnasbruk, Stromsnasbruk, Swed.

Wachs, Henry: 100 Edgewood Ave., Mill Valley, CA 94941
Wachter, Herbert: Box 233, Holland Landing, Ont. Canada LOG 1HO
Wagner, Sr., Corydon Mrs.: 12221 Gravelly Lk. Dr. SW., Tacoma, WA 98499
Walsh, George M. Mr. & Mrs.: Rt. 2, Litchfield, ME 04350
Walters, Dr. W.F.: "Annandale," Renewick, Marlborough, New Zealand
Warden, Elizabeth Miss: Furzehill, Molland Botreaux, So. Molton,
Devon, England

Washburn, N.B. Mrs.: 2905 S.W. 209th Ave., Aloha, OR 97005

Washington State Library: Olympia, WA 98504

Washington State Primrose Society: c/o Ludie Dines, 8837 Avondale Rd., Redmond, WA 98052

Watson, James S. Mrs.: Box 3, Brunswick Beach, Lions Bay, B.C. Canada Watson, Marjorie Miss: N. Garphar Cottage, Ballantrae Girvan, Ayrshire England KA26 OLR

Wegerzyn Garden Center, Benj: 1301 E. Siebenthaler Ave.,

Dayton, OH 45414

Weichelt, Arthur: 134 S. Lasalle St., Chicago, IL 60603 Weilmuenster, Faye Mrs.: 1 South Charles, Lenzburg, IL 62255 Welch, Earl D.: 15234 40th Ave. S., Seattle, WA 98188

Wells, Liliane, Mrs.: 49458 Kane Ranch Rd., Oakhurst, CA 93644 Westervelt, Hazel: 1111 Tennaut Way S.P. 81/2, Longview, WA 98632

Wetzel, Richard Mrs.: 1001 Reading Blvd., Wyomissing, PA 19610

Wheeler, Mrs. E. P. II: Box 148, Blue Mt. Lake, NY 12812

Wilkins, K.D. Mrs.: 213 Rosedale Hts. Dr., Toronto, Ont. Canada M47 1C 7

Williams, Ed: P.O. Box 347, Gleneden Beach, OR 97388

Williams, Robert S. Mrs.: Rt. 1, Box 95, Moscow, ID 83843

Willingham, Ross: 2248 S. 134th, Seattle, WA 98168

Wilson, Dolores: P.O. Box 788, Penn Valley, CA 95946

Wilson, Edward C. Mrs.: Rt. 2, Box 1167, Corbett, OR 97019

Winstanley, Dr. David P.: Woodlands-Tort Hill Rd., Greensted-Ongar, Essex England CM5 9LH

Winter Brook Nursery: 9919 99th Ave., N.W., Arlington, WA 98223

Wirth, Dr. Michael: Rt. 1, Concord, NH 03301

Wold, E.J. Mrs.: Roosevelt Apt. C-6, 201 E. 9th, Aberdeen, WA 98520

Wood, Deane: 962 104th E., Tacoma, WA 98445

Wotherspoon, W.W.: 105 Tonnancour Pl., Grosse Pointe Farms, MI 48236

Yamada, Roger: 8411 S.E. Causey, Portland, OR 97266 Yaw, Christine Mrs.: 711 Kennard Rd., State College, PA 16801 Young, A.C. Mrs.: Rt. 1, Box 86, Lakebay, WA 98349 Young, Edith Ryan Mrs.: Rt. 3, McDougal Lane, Peekskill, NY 10566

Zach, Mary Mrs.: 8825 N.W. Bailey, Portland, OR 97231 Zanini, John J.: P.O. Box 827, Penn Valley, CA 95946 Zeigler, Jack: 10640 Riviera Place N.E., Seattle, WA 98125 Zimmerman, Gladys: 664 Oakwood Drive., Glastonbury, CT 06033

### Your flowers and shrubs need more than just sunshine and rain. They need ORTHO.



ORTHENE Insect Spray—a new biodegradable systemic insecticide for use on roses, flowers, ornamentals and trees. Gives fast contact kill of a broad range of insects, with up to 3 weeks residual protection on Aphids. 1 pt. makes up to 32 gallons of spray.

ORTHO Rose & Flower Jet Duster—a new and easy way to control insects and diseases on flower foliage.

ORTHO Rose Food—an 8-12-4 formulation to provide all the nourishment needed for luxurious foliage and a minimum number of beautiful rose blooms; for new plantings and established plants.

Gardening shortcuts—invaluable information on frost protection, raised beds, vertical gardens, pruning, containers, and lots more.

ORTHO Lawn and Garden Sprayer—a convenient and accurate sprayer that works with your garden hose.

TMS ORTHO CHEVRON AND CHEVRON DESIGN ORTHO REG U.S. PAT OFF AVOID ACCIDENTS: FOR SAFETY READ ENTIRE LABEL IN— CLUDING CAUTIONS AND WARNINGS AND USE ALL CHEM-ICALS ONLY AS DIRECTED.

Who knows more about gardening than ORTHO?

# I have a question!

### Answers by Alice Hills Baylor

#### O. What time of year does one divide the primuals that go dormant in winter?

A. I divide mine (P. sieboldii) soon after the plants bloom, the foliage still showing. Then I put small sticks where they have been planted so as not to disturb them in spring as they are late in showing. One can plant poppies over them for later bloom.

#### O. Are gold-laced polyanthus at their best when grown as single crown plants?

A. The gold-lace that are to be left in the garden for display may be left to develop more than one crown for best development. If one wishes to propagate them they may be divided (and fertilized) every year. Same true of all polyanthus and acaulis.

#### Q. Which primulas like dry soil conditions?

A. 'According to H. Lincoln Foster, Kris Fenderson, Richard Redfield and myself, we do not know of any primula which likes dry soil conditions. The ones that will tolerate dryness to the greatest degree are the ones whose foliage dies down after blooming. (P. sieboldii) The next on the list might be the auriculas. However, they will not endure if dryness continues for a long period.

### Q. Does sawdust discourage slugs?

A. I do not know. I have used well rotted sawdust for humus for years. There is a large supply here in Vermont, a lumbering area. However, one must not use new sawdust; it will take the nitrogen content from the soil. Large amounts of cow manure may overcome that, but I prefer to use sawdust for paths until it is black. Perhaps that is why I have had very little trouble with slugs.

### Q. Actually how many species of primula are "quite readily" available?

A. If any one will send a self addressed and stamped envelope, I will be glad to send a list of the nurseries in the United Kingdom and Ireland that specialize in primula seeds.

### Q. What is recommended for a mulch? What about sawdust or bark?

A. See above for sawdust. I buy a load of bark every year from the lumber yard and use it for paths until it is three years old, then use it for mulch. I expect all kinds are in the load; I have never known from what trees the bark was taken.

### Q. I should like to start a collection of double primroses. Where can I buy plants?

A. Anyone who has plants of double primroses to sell can contact me for the name of writer of this question.

#### Q. Can you suggest where I can get seed of P. forrestii?

A. By kindness of Timmy Foster here are names of those members who have supplied seed of P. forestii in recent years: 1978, Dr. Earl Ewert, 39 Dexter St., Dedham, Mass. 02026; 1977, Joan Wilder, Old Manor Twyring Tweheshard C, Tos. DL 206 DS, England; 1976, Mrs. Sheila Hall, 14 Humeshad Road, Staines, Middlesex, TW18 2 RT, England; Dr. and Mrs. P.J. Wett Four Winds, 10 Ardover Road, No. Winchester, Hampshire, England.

#### Q. If there are no slugs and no visible bugs anywhere on the plants, what is making little holes and turning leaves yellow?

A. According to Kris Fenderson: "I have had flea beatles (very small, hard to see and extremely fast to vanish) bother the foliage in the section auricula; it sounds similar to me. They are worst in dry hot weather and drought conditions. They can really bother P. minima if it is dry, but all other primulas recover after the treatment of a daily hosing of foliage and a light dusting of Diazinon."

I had what sounds like the same condition several years ago and removed the yellow foliage, sprayed with a mild soap and Black Leaf 40 solution. The late James Mitchell of Barre, Ver., suggested years ago that the yellow foliage showed lack of iron in the soil. I soaked a half a bucket of iron scraps in water and poured that solution around the plants. It seems to help so continued it as a general health treatment.

Kristian Fenderson sent in the following as he said many people have asked him this question:

### Q. What are the differences between the cowslip, oxslip and primrose? Where do they come from and how do their growing conditions vary?

A. The cowslip is veris, once called P. officionalis. It is common in portions of the British Isles, Scandanavia and much of Europe. It is usually deep yellow, has a large Cont. on page 38

### — Here they are. Just what you've asked for!—

Delightful all-purpose notecards featuring dramatic black and white photographs of the primroses you enjoy.

Package of one dozen original cards includes four different photo

Package of one dozen original cards includes four different photo covers: gold lace, green edge auricula, candelabra and double auricula. Envelopes are included.

- Ideal for greeting cards with your own message.
- Just right for gift enclosures.
- · Perfect for short letters.

Order now for yourself and for gifts.

Share the beauty of primroses with your friends.

Send \$3.50 (for each package) to:
Primrose Patterns
11617 Gravelly Lk. Dr. S.W.
Tacoma, WA 98499

Specializing in the world's most famous strains of P. acaulis with beautiful, vivid colors. Many other primroses, alpines, rare plants, dwarf irises, rockery plants, grafted evergreens.

Quality plants . Quantity discounts . Mail order welcome OPEN WEEKENDS AND HOLIDAYS ONLY

### Alpenflora Gardens

17985 - 40th Ave., Surrey (Cloverdale), B.C. V3S 4N8 6 miles north of U.S. border, off Pacific Highway

#### THE SCOTTISH ROCK GARDEN CLUB



offers you . . . Its twice yearly journal, well illustrated in black & white, and containing authoritative articles on all aspects of rock gardening, rock plants, and their worldwide haunts. Its excellent annual scheme for the distribution of rare and unusual seed amongst its international members.

For \$5.00 per year

R.H.D., Orr, C.A., 70 High St., Haddington, East Lothian, Scotland, will be glad to send particulars

### NATIONAL AURICULA AND PRIMULA SOCIETY — Southern Section

Invites all Auricula and Primula Lovers to join this Old Society Membership of \$5.00 per year includes Year Book Lawrence E. Wigley

67, Warnham Court Road, Carshalton Beeches, Surrey England

### NATIONAL AURICULA AND PRIMULA SOCIETY - Midland Section

Invites all Auricula and Primula Lovers to join this Old Society Hon, Sec., Mr. P. Green Primrose Hill, Bell's Bank, Buckley, Worcs., England

## 'Tis the season!

Mary Speers Please pay
your dues to: 202 Champion Steilacoom, WA 98388

### **American Primrose Society**

### Officers

President: James Menzies, 765 Tenth Ct., Fox Island, Wash, 98323 Vice president: Ethel Balla, 189 Taconic Rd., Greenwich, Conn. 06830 Recording secretary: Lois Nelson, 12612 Ave. DuBois SW. Tacoma, Wash 98498 Treasurer: Mary Speers, 202 Champion, Steilacoom, Wash. 98388 Corresponding secretary, east: Alice Hills Baylor, Stage Coach Rd. Stowe, Ver. 05672 Corresponding secretary, west: Gus Arneson, 1004 NW 179th Pl., Seattle, Wash. 98177 Editor emeritus: Florence Bellis, 2835 N. Oar Ave., Lincoln City, Ore. 97367

### Elected directors

Fred Clark, Tacoma, Wash, 1976 Helen Clarke, Tacoma, Wash, 1976 Loie Benedict, Auburn, Wash, 1976 Mildred Washburn, Aloha, Ore. 1977 Dr. Ralph Benedict, Hillsdale, Mich. 1977

Alice H. Baylor, Stowe, Ver. 05672 Elizabeth Van Sickle, Seguim, Wash, 98382 Presidents of affiliated societies and chapters Cyrus Happy, Tacoma, Wash., editor, ex officio

### Membership

Dues of \$7 a year are payable Nov. 15. Membership includes four issues annually of the Quarterly, cultural chart and seed exchange privileges. Three years for \$20. Life membership, \$100; garden club affiliated societies, \*10 a year; library and horticultural societies, \*7 a year; second member in family, \*1 a year. Overseas members, \*7 a year; please send by international money order. Send dues to the treasurer.

### **Publications**

Back issues of the Quarterly are available. Order from the treasurer. Pictorial dictionaries can be ordered from the treasurer for \$5 each, postage included.

Manuscripts for publication in the Quarterly are solicited from members and other gardening experts. although there is no payment. Please send articles and photographs to the editor's office, 11617 Gravelly Lake Dr., S.W., Tacoma, Wash, 98499

Advertising rates per issue; full page, \$60; half page, \$30; quarter page \$15; eighth page and minimum. \$10. Submit advertising to the editor

### Seed Exchange

Ross Willingham, chairman, 2248 S. 134th, Seattle, Wash, 98168

APS Quarterly Index: 1943-1976 Compiled by Hilda and Elmer Baldwin . Only \$2.

> Now you can order the articles you need. Irreplacable old quarterlies: • \$1 each.

Order index from the treasurer:

Mary Speers • 202 Champion • Stellacoom, WA 98388

### P. cockburniana

### by Dr. Ralph H. Benedict

This spring marked the eighth time that 16 plants of P. cockburniana have bloomed for me from an original seedling of 1969.

From all I can read this plant is a biannual or, at best, a short-lived perennial. In



fact, the "Pictorial Dictionary" says, "It has a way of dying off after a profuse blooming season or of disappearing from damp, rich or imperfectly drained soil in winter."

I think that in the midwest we have a good winter season to keep the plants dormant. The soil is sandy with leaf mold added to it each year.

The plants are transplanted each year after blooming. Every three years new soil is added to the bed. The plants are well watered. Systemic insecticides are used in the summer.

I cover all my candelabras with oak leaves after the ground freezes in the winter.

In the spring when I uncover the plants I replant or push down roots that have heaved out. I have had plants all the way out of the ground that survived if replanted. The leaf covering kept them from drying out after the heaving frosts.

For the connoisseur . . .

### Violet-tinged P. cawdoriana

Among the floral treasures Lee and Dorothy Campbell brought to the Tacoma show a few years ago was a superbly grown Primula cawdoriana.

Suitable only for alpine house culture, it must have found the ideal situation at the Campbells' on the northwest slope of Mount Rainier. Normally P. cawdoriana carries two or three flowers. This plant carried a full head, violet-tinged and jauntily cocked to one side on a four-inch stem. Ground-hugging leaves were irregularly toothed and hairy, daring the grower to allow just one drop of water to

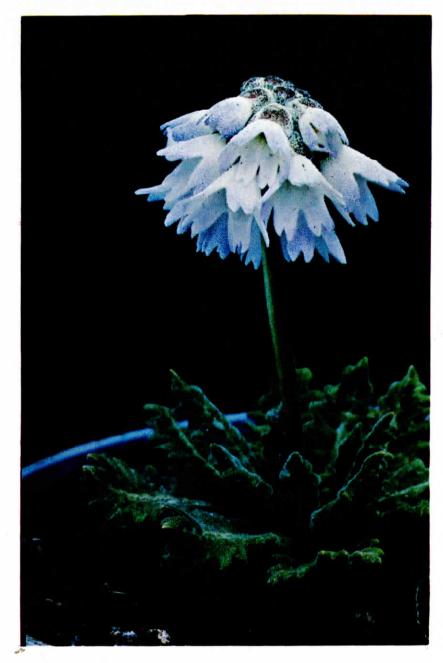
remain there and they would rot.

P. cawdoriana was introduced by Kingdon Ward in 1924. Its only known location is in southeastern Tibet on rocky slopes at the 13,000 to 15,000-foot level of the Himalayas.

A well-drained leafy soil, careful watering and good air circulation should be satifactory in an alpine house situation.

Currently it is in cultivation. But it is somewhat rare.

Like most of the soldanelloideae section, P. cawdoriana tends to be a short-lived perennial. During periods of frost and dormancy it should be kept quite dry.



Primula cawdoriana

### SPRING HILL FARM

P. O. Box 42 GIG HARBOR, WASH. 98335

Fresh Seed of Polyanthus, Acaulis, Juliae \$1.00

Double Vernais, \$3.00 for 50 seed

Transplants after August
RUTH BARTLETT HUSTON

### Species and Cultivar Primulas

Ericas, Callunas, Phlox, Saxifrage Dwarf Conifers, Container Plants and Alpines

Precise Catalogue 40c

#### THE ROCK GARDEN

R.F.D. "2

Litchfield, Maine 04350

### Classified ----

TRY JOE'S BULLETIN — our nation's oldest flower-garden magazine. Buy, sell, exchange nationwide. Save! Make new friends. Samples 25° postage. Write Box 144, Lamoni, La. 50140.

AL RAPP, Masonry Contractor, Inc. Fireplaces our specialty. Enhance your patio. Brick planters or B-B-Q. — Fresh Seed of Double Auricula, 15c per seed, min. order \$1.00. Send self addressed envelope to 4918 79th Ave. West, Tacoma, Wash. 98467, Phone 564-9557.

### The ALPINE GARDEN Society

### The Quarterly Bulletin

known in 27 Countries throughout the World for its illustrations and technical standards.

ANNUAL SEED DISTRIBUTION LIST, with preferential treatment for overseas, members, of some 5,000 varieties, including new introductions otherwise unobtainable

ANNUAL SUBSCRIPTION \$7.50 — payable to the Secretary: E.M. Upward, Lye End Link, St. John's, Woking, Surrey, England

 $-Send {\it for fully descriptive folder} -$ 

A place to visit and browse.

All plant lovers are welcome at

### CHEHALIS RARE PLANT NURSERY

We grow a large selection of primula, alpine and rockery plants, dwarf trees and shrubs and many, many more unusual plants, mainly in containers.

Halfway between Portland and Seattle just off I-5 2568 Jackson Highway, Chehalis, Wash. 98532

Sales at nursery only. No list. No catalog.



### PACIFIC NORTHWEST NURSERIES, Inc.

Let us help you plan now for a beautiful garden. Our selection is now at its best.

GL 4-7173 11030-N.E. 6th • BELLEVUE

### Choice Double Auricula Seed

Hand-pollinated Balcom strain \$5 a packet

Cyrus Happy 11617 Gravelly Lk. Dr. SW Tacoma. Wash. 98499

#### INTRODUCING Marginata Hybrid 'Agee'

A neat compact plant with small dark blue flowers and beautiful foliage well mealed and margined. A product of Ivanel Agee's work in species hybridizing.

SUPPLY LIMITED—One to a customer.

### Chehalis Rare Plant Nursery

2568 Jackson Hwy. • Chehalis, Wash. 98532 (Formerly Dickson's Gardens of Seattle) Open SUNDAYs, closed Tues. and Wed. No list. Sales at nursery only.

35

### **OLIVER NURSERIES, INC.**

1151 Bronson Road, Fairfield, Conn. 06430

offers choice rhododendrons, dwarf conifers, collector's alpines and companion plants for primulas.

Open 7 days a week during spring • Sorry no mail orders

Telephone: (203) 259-5609



Make friends.

### Learn about primroses Join a "round-robin."

(That's a letter-writing circle with a few growers who share your interests.)

Write for information:
Ruth Bartlett Huston
Spring Hill Farm - P.O. Box 42
Gig Harbor, Wash. 98335

## Diary of a Primroser

### by Cy Happy

A rainy day — the sort of day made for working on the quarterly. As I write, one of our most dedicated members, Ivanel Agee, is being laid to rest. May Ivy's spirit flourish in the rest of us and partially fill the void she leaves. Her hybridizing in recent years has centered on small species in the auricula section—marginata, carniolica and especially allionii—with fine results.

Our beautiful autumn can't last forever. Put together a cold frame from planks that drifted ashore. First tenant is my best gold-laced polyanthus, followed by a plant or two of my best show prospects in the vernales group. Tacoma show will be March 31 and April 1—early! Hope there will be room in the cold frame for some late lettuce also.

### Weekend to include primula talk

Save the weekend of Feb. 23, 24 and 25 for another outstanding study weekend sponsored by Alpine Garden Club of British Columbia and American Rock Garden Society. This one is at Coach House Hotel, North Vancouver, B.C. Experts include Brian Halliwell from Kew and Dr. Ted Niehaus from Berkeley, Cal. A panel discussion on the primula is planned. Prelude to spring—don't miss it. The registrar is Mrs. Irene Mansfield, Box 102, Madeira Park, B.C. V7R 2K3.

A quick trip to Victoria, B.C., in September included a visit with Mr. Warren, horticultural consultant at Butchart Gardens. The gardens were spectacular, but I was more interested in the areas of nursery beds. The winter blooming pansies and polyanthus were starting to show color—thousands of them. Buchart is open year round, and management is searching for more winter blooming plants. The trial beds, hidden from public view, include donations from some of our members. Primulas will be increasingly important where winter and early spring color is needed.

### How to divide and transplant

Herb Dickson spoke on dividing and transplanting primula at the October Tacoma Primrose Society meeting. His recommendations:

Polyanthus: transplanting divisions. Put crown in middle of hand and trim. Cut off all leaves and roots that protrude. Replant the rest.

Acaulis: be more careful. Don't reduce to single crowns.

Candelabras: center crown disappears after flowering. Surrounding crowns are replanted as separate plants.

Sieboldii: pull apart when dormant and reset. Mark where they are planted.

Reidii: throw away old root. Reset young crowns.

He demonstrated his methods with the above, plus P. clarkii, rosea, ioessa, frondosa, yuparensis, yellow self auricula Hythe and alpine auricula Gordon Douglas. On

transplanting small seedlings, Herb has found that only when the plants begin to produce new heavy roots—usually with the advent of cold weather—can they be successfully transplanted.

### An expedition?

I jokingly suggested the primrosers should gather in mid-May at Wallowa Lake Lodge, Joseph, Ore., to look for P. cusickiana. To my surprise, several couples were interested. The lodge has 20 rooms plus several kinds of cabins with kitchenettes. Let's talk it over.

The British southern section of National Primula and Auricula Society has appointed coordinators for the exchange of seeds, plants, ideas and promotion of breeding programs for double and border auriculas. For double auriculas write K. J. Gould, Heatherdene, Milton Ave., Westcott, Dorking, Surrey. For border auriculas write R. Feline, 76 Green Lane, Worchester Park, Surrey.

### Russians work on hardy strains

Anyone working on extremely hardy forms of primula should write to Botanical Garden of Kirowsk, Murmansk, USSR. You might work up an exchange.

Had a nice note from Margaret Blethen, Waldron, Wash. She asked if Tacoma meetings always included a plant exchange. Yes, there is always an exchange. Margaret's card had a beautiful reproduction of a botanical watercolor, "Primrose, Marsh Violet, Bird's Eye Primrose and Fern" published by Gordon Franser Fine Arts, Bedford, England. Series RF 20/A 983.

### Endangered species rules change imports

Of concern to plant importers was a recent notice from the U.S. Department of Interior. Further documentation is required in order to comply with the Endangered Species Convention Regulations. Fortunately only species, not hybrids, are involved. In primulaceae only cyclamen is covered.

Long a favorite in Japan, P. sieboldii is grown and shown with great skill and taste. For exhibition four buds are planted in a 6 or 7-inch pot in winter. In late April and early May they are brought to the shows. Two major societies promote the plants: Sakurasokai, c/o Mr. Tsuneo Torii, 4774-183 Nakafuji, Musashi-Murayama City, Tokyo, and Naniwa Sakurasokai, c/o Mr. Shigeo Tanara, 2-55, Tainaka, Yao City, Osaka, Pref. Anyone planning a trip to Japan, especially at show time, should contact these groups.

### Notes from Eastside and California

Meeting announcements of the Eastside Primula Society are informative. They also feature hand-colored illustrations. If you live in the Seattle,-Bellevue area, save 7:30 p.m. of the second Mondays. Call Beth Tait at 822-6176.

Have a note from Howard Kerrigan (Kerrigan Nursery), 24249 Second St., Hayward, Cal., 94541. He grows polyanthus and once worked with Frank Rienelt and Pete Antonelli, developers of the Pacific Giant strain. He is collecting polyanthus varieties to

### About Ivie

I'm going to miss the cherry and informative notes from Ivie Agee. I've saved many of them and will pass bits on from time to time. She was a fine grower and student of primulas.

For example, "There is a plant floating around here that came from Berry's garden. Thought it was kisoana so looked it up in Smith and Fletcher. They just list Kisoana—no varieties-but do mention the super-imposed umbel in some. The Japanese garden magazine lists this one as P. kisoana var. shikokiana. It's a wee bit sturdier than the type and has a dark ring around the center. Reuben Hatch has a nice planting and gave us a start."

See what I mean?

### **Questions & Answers**

Cont. from page 29

baggy calyx and small somewhat cupped flowers which are often slightly fragrant. It is a plant of light woods and open meadows. Many variants with different sized flowers and calyx features or leaf pubescence are recognized as subspecies.

The oxslip is P. elatior. It is not common in Britain. It has frequently been mistaken for a hybrid between P. veris and P. vulgaris. It is common over wide areas of Europe and, like P. veris, has many slight variations primarily relating to differences in leaf outline and degree of pubescence. It lacks the baggy calyx of P. veris, is a light clear lemon color, has nodding blooms of a rather flattened trumpet shape. They are considerably larger than those of P. veris and usually lack the orange markings in the throat usually present in P. veris. P. elatior occupies somewhat damper possibly shadier meadows and wood margins than does P. veris.

P. vulgaris is the primrose of England. It is a plant of northern Europe, the Mediterranian islands, and extends into Asia Minor. It is immediately distinguishable by its habit of bloom. Each large flower is carried on a slender often hairy stalk in contrast to P. veris and P. elatior, which bear clusters of flowers on one or several stalks. P. vulgaris is known as the hedgebank primrose. It inhabits damp, shady, well-drained locations. In Europe the generously sized flowers are the same clear soft yellow as those of P. elatior, most often with orange markings at the throat. In other portions of its huge range it may be white, pink or purple. Many variant forms have been named, including the subspecies sibthorpii, which is pink, and abschasica, a rich deep wine shade.

Do you have a question? Ask Alice Hills Baylor, corresponding secretary, by writing to her at Stage Coach Road, Rt. 2, Stowe, Vermont, 05672. She will select questions to be discussed in her regular column.

### Rare Dwarf Slow Growing Conifers

Flowering shrubs and unusual rock plants suitable for Bonsai culture are listed in our catalogue, Alpenglow Gardens.

#### ALPENGLOW GARDENS

13328 King George Hwy.

North Surrey, B.C., Canada

### The American Rock Garden Society

(founded 1934)

cordially invites you to join its growing list of enthusiastic members

Annual Seed List . Quarterly Magazine

Family membership - \$8 Single membership - \$7

> William T. Hirsch 3 Salisbury Lane Malvern, PA 19355

LIQUINOX THE ALL-PURPOSE BLUE RIBBON FERTILIZER Contains Yucca Extract



10-10-5

17-7-0

0-10-10

Pint \$1.50 Quart \$2.50 Gallon \$4.95

### KEIFFER'S NURSERY

Kirkland, Washington 11444 98th N.E.

VA. 2-5326

