

An Auricula Handbook



Quarterly of the American Primrose Society

Volume 10

Fall, 1952

Number 2

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QUARTERLY

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AMERICAN PRIMROSE SOCIETY

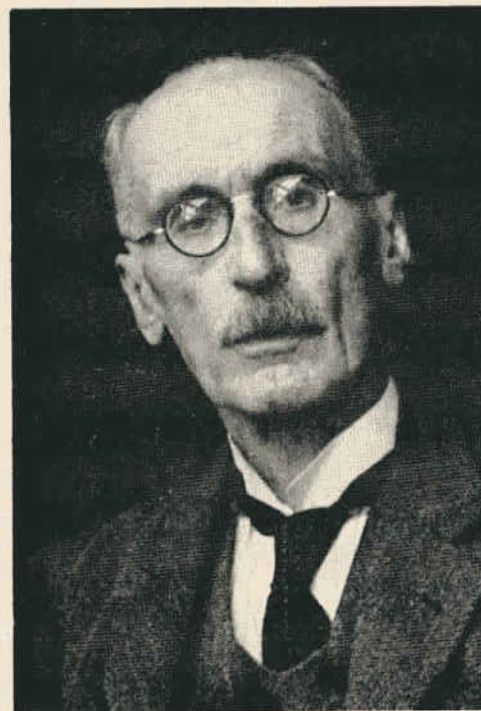
Vol. 16

OCTOBER, 1952

No. 2

Sir William Wright Smith

The Highest Authority on the Genus *Primula*



Sir William Wright Smith, 1952.

William Wright Smith was born in Dumfriesshire, Scotland, and has devoted the whole of his life to the study of plants. Honor has attended him ever since he took the post of lecturer in the Department of Botany in the University of Edinburgh, when he was twenty-seven years old.

In 1907 he went overseas to India to take charge of the Herbarium at the Royal Botanic Garden, Calcutta, and while he was there he collected plants and studied the flora of that part of the world. To quote his own words "I came to know at first-hand the details of botanical exploration of our Eastern Empire, and this, coupled with my work in the Herbarium at Calcutta, gave me a wide acquaintance with the flora of India and Burma."

The long list of his achievements in the British "Who's Who" includes The Victoria Medal of Honor which was awarded him in 1925, as well as a mention of his many scientific publications. It is difficult to do justice to a biography of Sir William because he is very anxious to remain in the background of the great

Royal Botanic Garden of which he is Regius Keeper. Never-the-less, we have found that he was knighthed in 1932, and that he has a wife and three daughters, and that his home is Inverleith House, in Edinburgh.

Of particular interest to our members are the monographs which he compiled together with his good friend and associate, Dr. Harold R. Fletcher. These papers contain a complete revision of the taxonomy of the *Primula*. We are especially indebted to Sir William and Dr. Fletcher because they have given their kind permission for the A.P.S. Quarterly to use excerpts from their systematization of the Sections *Primula*. This will help us immeasurably in the compilation of our Dictionary of the Species of *Primula* and their Synonyms.

The Lure of the Auricula

MR. ROBERT E. SAXE, SAN FRANCISCO, CALIFORNIA

"Courage, brother, do not falter, though the way be dark and dreary." If I were asked for a word of advice to the prospective grower of Auriculas, especially to one who desires to acquire a collection of Show or Stage Auriculas, the above would be my admonition. True, there is nothing dark about the adventure but long and dreary it certainly is. For example, there is no fun in annually washing and scrubbing, and I do mean scrubbing, more than 600 pots of all sizes. I tried raising Auriculas in flats, but that did not seem to work. Again, the procuring and blending of the materials in the John Innis mixture, recommended by some of the English growers, is no small job. Further, the disappointment occasioned by mediocre results from your own seed, such as few, painfully few, edged varieties, failure of the flowers to open flat, stem rot after the annual repotting, to say nothing of the repotting job itself, and finally to get a good green variety only to have it eternally damed by being pin-eyed, is almost too much to take. At this point, someone, like a member of your own dear family, says, "Well, why do you do it?" The answer is that one, just one, good edged variety is worth all the trouble.

But I was not asked to give advice. Our editor enticed me to write by saying that this article would be the only romantic one in the Quarterly. This confused me a bit, so I looked up romantic in the dictionary, and under its synonyms I found "fantastic," "fictitious," "wild," and "cimerical." That did it, and this offering is to be taken on such a basis.

I have been a lover of Primula for over fifty years. Oh, there was a time when "the primrose by the river's brim was but a yellow primrose," but after being introduced to some really good polyanthus and the Bartley strain of pulverulenta, and growing some Asiatic Primulas which arrived at my house one midnight by special delivery from Mrs. Berry of Portland, Oregon, I discovered that there were others besides the yellow primrose, beautiful as it is.

It was at Chelsea in an exhibit by Mr. Dalrymple that I first came under the spell of the Auricula, and no wonder. I can see them now, fourteen years later, in a glass case—the only flowers so honored. Not even the Orchids rated this protection. There were honest-to-goodness green flowers with black rings, gray flowers, and whites with black centers. I couldn't believe my eyes, and I swore a mighty oath to have some. In my ignorance I thought all I had to do was to buy a packet of seed. To my surprise, this was not too easy; only two English firms sold first-class Auricula seed, and they did not always have it. English friends did not have any to spare. I found out later that the edged varieties do not set seed as readily as the other kind, and an expert assured me that there are not more than one hundred *top* Show Auriculas in all England. I must emphasize the word "top." There is seed to be had of the ordinary variety. I tried importing plants, which could be done at that time, and paid \$12.50 for a \$2.50 plant by the time it arrived in San Francisco. What to do? It seemed I must hybridize my own, but I had not one edged variety to start with. Then Mrs. Berry gave me a fair green one, and shortly afterwards one or two of the same color showed up in some seed from Mr. Haysom. I was on my way, as seed seems to set well here. Although I still have nothing startling, I do have a few fair edged varieties and some good selfs.

There are two problems in connection with Auricula growing. The first is to get the plants, and the second is to grow them well. I love my native State, but I doubt that it is an ideal Auricula climate, especially as the plant has an Alpine background and our Bay District climate, is anything but Alpine. We do have cool summers, and I feel sure that is a help. I have tried all kinds of soil and composts. The John Innis mixture is good, but I have had just as good results in a loam and manure mixture. I do think that sterilizing the soil is beneficial, but not necessary. I find the plants do well in a fairly heavy compost.

Watering is an important problem—when and how much. It is easy in the spring

and early summer when the plants are in full growth, but after the annual repotting and in winter it is a different story. Again I emphasize that the plants are Alpines, accustomed to freezing conditions in winter, and the mere withholding of water is not the answer. In fact, letting the plants dry out is injurious. My plants are all in pots growing in a small cold house and some frames. I have never tried plunging the pots, but it might help.

I am wondering also about the annual repotting. Sir Roland Biffin in his invaluable new book* says that every two years is enough, but when I consulted a very successful English grower he said it would not work. I start my seed in August, prick the young seedlings out as soon as large enough to handle into eight inch pots, twelve to a pot, and later when they are about an inch across put them into two-inch pots and finally, according to size, into three and four-inch pots. I find that very few four-inch pots are needed. The trick seems to be to keep the plants growing steadily and healthily, to keep a sharp lookout for aphid, and to use the watering can intelligently, possibly the greatest trick of all.

Shading from about April 1st. to September or October is very important. Plants, especially when in flower, will not stand full sun. I use lath screens, and they prove satisfactory. I have tried mild applications of fish liquid fertilizer this spring for the first time, as the buds were forming, but I do not know enough about this fertilizer yet to recommend it.

It is my opinion that we should stand by the English standards of excellence. After all, the modern Auricula developed in England, and any let-down because the going is tough would be unworthy of us and this lovely flower. I do think, however, that we might get more fun out of the culture of the Auricula if we were to try for a greater color range. Even Sir Roland Biffin favors this. Our brethren across the water are perhaps a little too bound by conventionality and tradition.

All this seems like a lot of trouble, but it is also a lot of fun. To get even a few edged varieties and some lovely selfs, and to hear some admiring friend say, "What in the world are they and aren't they terrific?"—well, life holds no greater joy.

*THE AURICULA, by the late Sir Rowland Biffin, Cambridge University Press.

Adventure With Primulas

Mrs. Ben Torpen, Woodland Acres, Beaverton, Oregon

With the increasing popularity and interest in Show Auriculas in the United States, it is good to share our experiences in growing and creating these interesting plants.

The creating has been done for us in England and Scotland up to the present time, and we have been able to buy seed of the finest Show Auriculas in the world from there at little cost, enabling us to go forward with the many experiments and crosses to be made, according to the dictates of our individual creative imagination.

Many seedlings must be raised and many discarded before the desired Green, Grey, and White Edge varieties have been grown, but under the magic spell of the Auricula the work involved in raising hundreds of seedlings becomes a pleasure, and being sure that the finest plants are bound to come in the next packet of seed, we go on, never losing sight of our goal, that perfect Show Auricula.

With perfection in mind as we view our collection, we feel impelled to create, to bring forth beauty of our own. When this urge overtakes us, and the hybridizing becomes an accomplished fact, and the seedlings are growing well, we have experienced the ultimate in Auricula culture. The disappointments which confront us when the seedlings bloom have little effect, for one fine flower is reward enough. We must preserve nothing but the best, for there will always be another spring and another opportunity to create. No Auricula enthusiast can sit back and be content with routine growing alone.

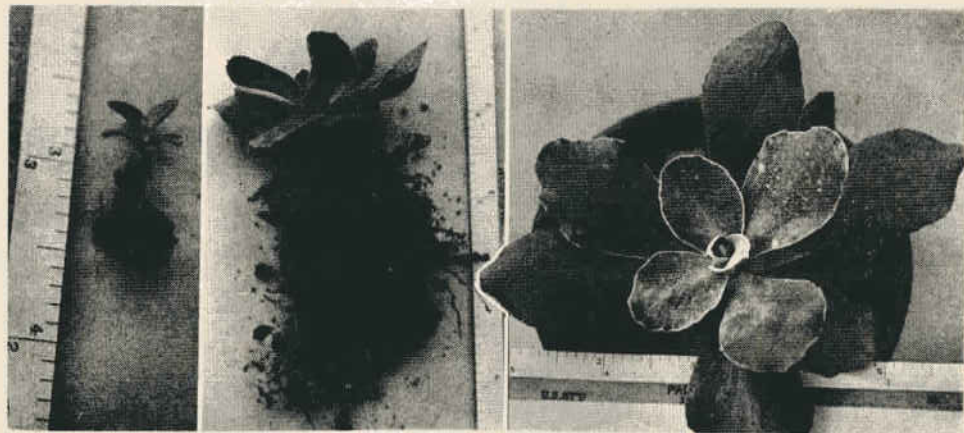
Seed parents must be chosen for vigor as well as structural beauty and color. The pollinizing should be made both ways No. 1x2 and No. 2x1, so that a record may be kept to determine which of the parents gives the strongest and finest results. It is unwise

to suppose that because two Green or two Grey Edged Auriculas have been crossed that the seedlings will all be Green or Grey Edged, or that they will all be perfect Shows because they were hand pollinated. Some of the finest Green Edge or Selves have come from Grey Edged crosses and vice versa. Auriculas, like other species, are perverse and have a way of rounding out a collection with every conceivable color and type.

Plants that were pollinized in April should contribute seeds in early June. When the capsule begins to fade and crack open the time has come to gather them, being careful to keep each type separate. The capsules may be spread out in a pan or box and placed in a warm, dry, shady place out of the wind and protected from birds and mice, to finish ripening. At that time the seeds shake out of the capsule easily with little or no chaff remaining.

There is so little seed of the best Show Auriculas on the market today that it seems almost previous to talk of the winter care of seed. However, if you do not have the proper place to care for fall sown seedlings, you may place the ripened seed in the refrigerator until spring. There will be articles in future Quarterlies which will deal with this subject more fully.

Seed may be sown as soon as it is ripe or may be refrigerated until January or February depending upon the facilities of the individual for handling the seedlings. Seeds germinate quickly but not always evenly and seed pans should be kept long after the main crop has been pricked out, to give every seed a chance to germinate and grow. Every seedling is a potential prize winner. In the following pictures seeds were sown and germinated between 40 and 50 degrees temperature and were grown on in the same atmosphere.



(From left to right): (1) A Show Auricula seedling at six weeks after being pricked out of the seed pan into a mixture of equal parts of sand, peat, garden soil, and well rotted cow fertilizer. (2) The same seedling at four months potted in the above mixture. (3) The same plant at six months in a four inch pot.

The Grey Edged Show Auricula on the cover is fifteen months from seed and is in its maiden bloom.

Auriculas are easy to grow—easy to hybridize, quick to give results. Their needs are few although exacting and yet they give the maximum in beauty and precision of form and color. These flowers of magic with their sweet soft perfume, keep us under their spell, their willing slaves. What more can we ask from "Adventure with Auriculas?"

Broaden Your Knowledge of Plants
Through Membership in

THE AMERICAN ROCK GARDEN SOCIETY
19A PITTFORD WAY - SUMMIT, N. J.

Dr. Harold R. Fletcher



Dr. Fletcher writes, "This is to introduce you to our family; my wife Betty, our daughter Veronica, now nine, and our son Andrew, who is six."

Dr. Fletcher is one of those rare individuals the psychologists call "a well rounded personality." His interests first of all center in his family; his wife, who is a knowledgeable botanist, and his two children. His professional interest is in Systematic Botany, and it is in this field that he first became so important to the Primula enthusiasts. He is also interested in other genera, particularly those of Siam and of the Western Chinese Alps, which have proved to be of outstanding horticultural importance. This interest in plants very definitely includes their culture. Dr. Fletcher writes, "I have taken a personal interest in growing successfully the numerous fresh acquisitions; in fact gardening of this kind is an absorbing hobby to me as well as a professional duty." His hobbies include the "collecting of gramophone records (orchestral and chamber music), and the works of two Scottish painters, Gillies and Maxwell." According to the Encyclopaedia Britannica he has published over forty-one scientific works.

His papers on the Primula have been printed for the most part in collaboration with Sir William Wright Smith. Dr. Fletcher spent the best part of his time from 1942-1950 doing research and examining specimens from the splendid herbarium collection of the Royal Horticultural Society in Edinburgh in order to do his part of the work on the classification of the Primula. Sir William's great knowledge of the Genus was of invaluable aid and Dr. Fletcher speaks appreciatively of "A very close working association with Sir William."

We can be grateful that Dr. Fletcher is writing a book in non-technical language which will summarize for amateur gardeners the contents of these papers which he had Sir William wrote for the Royal Horticultural Society.

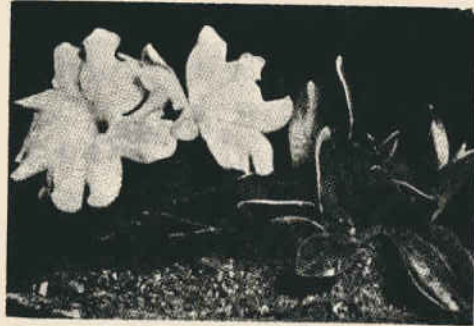
- 1933: Degree of Doctor of Philosophy, university of Aberdeen, (Thesis: "Siamese Verbenaceae").
- 1934: Botanist of Government Staff, Royal Botanical Gardens.
- 1939: Degree of Doctor of Science from the University of Edinburgh, (Thesis: "Some Contributions to the Flora of Asia.")
- 1943: Elected a fellow of the Royal Society of Edinburgh.
- 1942: Honorary Secretary of the Botanical Society of Edinburgh and Editor of the Society's transactions.
- 1944: Responsible for the Herbarium (1,750,000 specimens) and Library of the Society.
- 1949: Editor of the Scottish Rock Garden Club's publication.
- 1951—Director and Chief of the Royal Horticultural Society's experimental garden at Wisley, Surrey. (306 acres of trees, shrubs and flowers.)



*P. glaucescens (Moretti) *1*



*P. spectabilis (Tratt) *1*



*P. Wulfeniana (Schott) *1*



X P. Linda Pope

deeply toothed and beautifully farinose at the edge, and with soft lavender and mauve flowers with a white farinose eye." *6 In cultivation this is a favorite and is as easily grown as its parent plant *P. marginata* (Curtis).

P. glaucescens (Moretti) Subsection Arthritica. "This is a handsome and easily cultivated Primula. The large flowers may be rose, purple, or lavender, and are borne in umbels of from 2-6, on scapes 4-5 inches high. A suitable site for *P. glaucescens* would be a pocket in the rock garden filled with rich gritty compost." *4

P. spectabilis (Tratt) Subsection Arthritica. "A very rare species from the Tyrol which is quite readily distinguished from all others by its leaves, which are larger, broader, and combine to form a much flattened rosette. Moreover, the upper leaf surfaces are punctured by minute "pores" caused by leaf hairs which originate in minute pits on the surface and become conspicuous as the leaves mature. The species is one of the most impressive member of the section and is not difficult to grow, but it is a shy bloomer." *2

P. Wulfeniana (Schott) SS Arthritica. "This species is not difficult to cultivate." *5 "In nature it grows in meadows and on ridges on the Venetian, Carnic, and Julian Alps, being found there in matted tufts, and often growing along with *Gentiana Froelichii*. It is extremely brilliant and beautiful. The flowers are of a bright rose or rosy mauve and are white-throated, the flower scape is about 2" in length, and carries from 1-3 flowers." *1

X *P. Linda Pope* (Hort). "The pollen factor is not stated for this hybrid, reputed to have been raised by a Birmingham nurseryman, Mr. Pope, and named after his daughter. It is a plant very like *P. marginata* but with larger leaves, still



*P. rubra (J. F. Gmelin) *1*



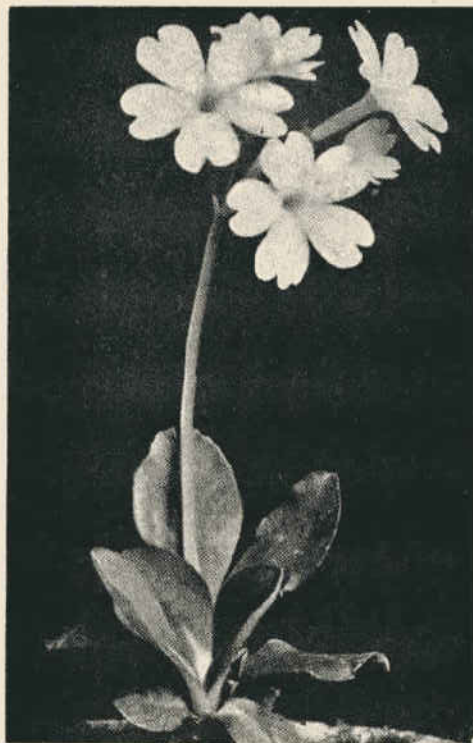
*P. villosa (Jacquim) *1*

It covers itself with bloom from January to March. Two important points in its cultivation are, first, never to spill water on the foliage, and, secondly, to remove carefully dead leaves." *9. "This is a difficult species to cultivate but it is well worth the attempt, it is usually found under over-hanging rocks and gets no direct moisture although the roots will be deep in the soil which is always damp. It must have practically no sun and not be exposed to rain and of course have perfect drainage." *7 In the October 1945 Quarterly there is an excellent article on *P. Allionii* by Walter C. Blasdale.

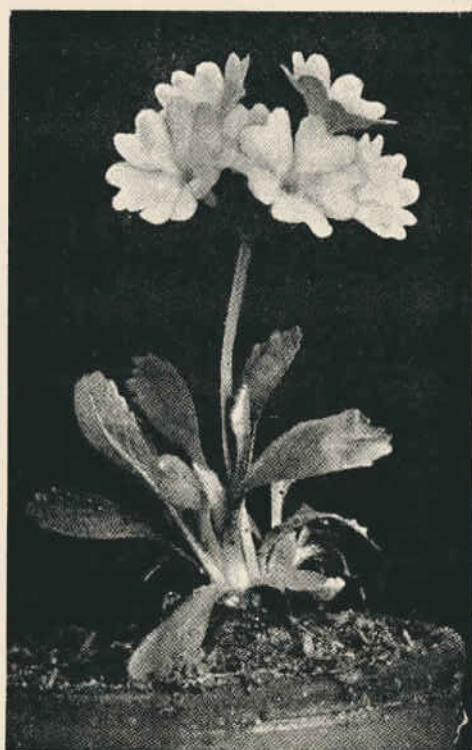
P. rubra (J. F. Gmelin) SS Erythrodrosum. "... known for over a century as *P. hirsuta* (Allioni), which was considered valid until the discovery by Schwarz in 1935 of a series of volumes by Gmelin which were published in 1775 and contain valid Latin diagnoses of a number of species. According to the rules of nomenclature *P. hirsuta* (Allioni) described in 1785, must yield in priority to *P. rubra* (J. F. Gmelin). (It is perhaps unfortunate that these long-forgotten volumes of Gmelin were ever disinterred, but meanwhile authors have no warrant to transgress the rules.) The species and hybrids of *P. rubra* have been in cultivation for over 300 years." *6 The true species (not to be confused with *P. viscosa*) is a neat plant with sticky, obovate leaves; the short scape (never longer than the leaves) carries well-shaped heads of rose, lilac, and occasionally white flowers. It should be planted among rocks or stones in a position fully exposed to the sun, but where its roots can go deeply down into the soil in search of moisture." *4 "This is one of the easiest species to grow and one of the most pleasing." *2 "A very easy and satisfactory species which has many named garden forms." *5

P. villosa (Jacquim) SS Erythrodrosum. "In the Noric Alps *P. villosa* is the substitute for *P. rubra*, which is prevalent in Switzerland and the Pyrenees." *6 "The stems of *P. villosa* are taller and the fur is coarser than those of *P. rubra* and the flowers are large and rose in color. It will thrive in the same conditions as *P. rubra*." *7

P. Allioni (Loiseleur), *8 SS Rhopidium. "It forms clumps of grey-green sticky rosettes. The almost stemless flowers vary from pale pink to reddish purple. It loves lime and although one is told that it can be grown outside, under an overhanging rock wedged in a lime-



P. pedemontana (Thomas) *1



P. daonensis (Leybold) *1

P. pedemontana (Thomas) SS Erythrodrum. The russet-brown hairs which fringe the leaf margins distinguish it from the species of the subsection *Arthritica*. "The scape reaches 5 inches and carries several rose pink, white-eyed flowers. It is rated as one of the handsomest of all the species of this section" *2. "... it is a plant which well repays the attention of its cultivator. It will flourish in a good loamy soil with a position facing the full south. It is very beautiful where it does well, the brilliant rose flowers showing well on their scape of about 6 inches high. Some grow it well in half shade in light soil fissures of rock." *1 "A rather difficult species, appreciates sunlight." *5

P. daonensis (Leybold) SS Erythrodosum. "For nearly a century called *P. oenensis* (Thomas). *6 "This is not one of the best of rock garden Primulas; it is slow to establish itself, and is difficult to transplant. *P. oenensis* has crossed in nature both with *P. Auricula* and *P. minima* to produce hybrids which are in many ways better than the species itself which is small with short, broad leaves, slightly toothed at their ends. The flowers are borne on scapes generally longer than the leaves, and they vary in color from a rather weak pink to a good rose." *4

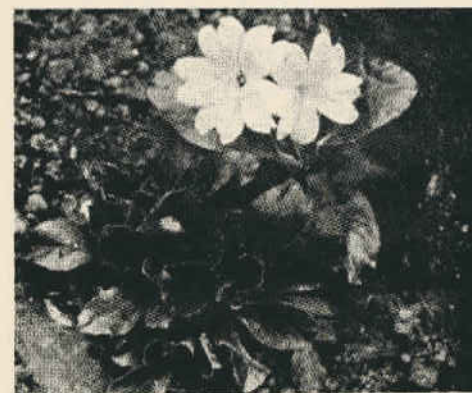
IMPORTANT NOTICE

General election of officers will be held at the annual meeting of the American Primrose Society, December 16, 1952. Members outside the Portland area in good standing who wish to vote but cannot attend the meeting may send to the Secretary-Treasurer, Mrs. Earl Marshall, 1172 S.E. 55th Ave., Portland 15, Oregon, for ballot. Marked ballots must be returned to that office before the annual meeting.

Mrs. O. J. Zach and Mrs. Lota Stone have been nominated for re-election for the offices of president and recording secretary, respectively. Mrs. H. A. Hartshorn has been nominated for vice-president. Mrs. Orval Agee and Mr. Chas. E. Scott are the nominees for the Directorships.



P. minima (Linnaeus) *1



P. Kitaibeliana (Schott) *1



P. tyrolensis (Schott) *1

P. minima (Linnaeus). This is the only plant in the Subsection *Chamaecallis*. "This plant is well named minima, as it is quite a miniature in its growth. It is by no means easy to cultivate, especially as it seems to dislike being in a bare spot. It does best when it is mingled with other carpeting plants, such as some of the smaller *Gentians*. It likes a cool, sandy, peaty loam. As a pot plant, when plunged in sand in a position facing north it flourishes and flowers well." *1 "The deep, clear pink corolla is surprisingly large for so minute a plant and often is deeply cleft or fringed. White and blush forms are known." *5 "Corolla pale to a deep rosy lilac with a white tube, or pure white..." *6

P. Kitaibeliana (Schott) SS *Rhopsidium*. "Leaves yellow-green, 1½-3 inches in length. Scape shorter than the leaves. Corolla large, lilac-rose, throat clear white and contrasting sharply. A rare species both in nature and in gardens. Not easy, best grown as a scree plant, but well worth the trouble as it is one of the tiniest gems of the Section." *5

P. tyrolensis (Schott) SS *Rhopsidium*. "An intriguing little species with glossy green, odorous leaves, finely toothed, round, and about an inch long. The scape is nearly absent and bears a few large lilac-red flowers with a sharply-contrasting white eye. This will form tiny clumps in time and appreciates scree conditions. Propagates better by layerings made by holding the rhizome to the soil with a small wire or hairpin than by cuttings, which are often hard to root." *5 "It grows on limestone cliffs and in stony meadows overlying limestone... It favors crevices." *6

P. integrifolia (Linnaeus) SS *Rhopsidium*. "... is found wild in the Pyrenees and is by no means one of the best. The leaves are broad and fairly bright green. The umbels usually carry two or three flowers of a washy rose lilac with a white glandular throat. It thrives well in an open situation in a porous peaty soil." *7

+ + +

Thank you, Mr. Allen Davis, for allowing THE AMERICAN PRIMROSE SOCIETY to hold their sale this spring on the premises of THE PORTLAND SEED AND PET STORE, 204 S.W. Yamhill, Portland 4, Oregon.

References used in "Illustrations and Descriptions from Publications on the Primula"

*1. "The Primulas of Europe" by John Macquart. This book is out of print but we have the kind permission of Country Life Limited, England, to use "Such excerpts as you wish and copy such illustrations as you desire." Since most of the illustrations come from this book, we are especially grateful to "Country Life."

*2. "The Cultivated Species of Primula" by Walter C. Blasdale, University of California.



P. integrifolia (Linnaeus)

*3. "The Auricula" by Rowland Biffen, Cambridge University Press.

*4. "Primulas in the "Garden" by K. C. Corsar, now published by Geoffrey Bles Lt., London.

*5. Mr. Donald O'Connell, April, 1947, A.P.S. Quarterly.

*6. "The Genus Primula: Sections Cuneifolia, Floribundae, Parryi, and Auricula" by Sir W. Wright Smith and H. R. Fletcher, PhD., D.Sc. Published by Oliver & Boyd, Edinburgh.

*7. "Primula for Garden and Greenhouse" by E.H.M. Cox and G. C. Taylor. Published by Dulau & Co., Ltd., London, 1928, reprinted 1938.

*8. Gardening Illustrated, 2-10 Tavistock St., Convent Garden, W.C. 2, London.

*9. From an article in Amateur Gardening Magazine, 2/6/51 by L. H. Bammall.

These descriptions, both written and photographic, have been gathered together to help illustrate the many different species of auricula. There are differences of opinion among the experts, and many times this can be accounted for by the climatic conditions in their gardens which are at times continents apart. This account is a simple compilation and avoids that "danger of enforcing a general attitude in a wholesale imposition without due regard for vagaries in nature."

S. W.



Dear Members of the American Primrose Society:

Carco was the product of the Carbon Chemical Company of Tacoma and was a proven agent in the control of the Strawberry Root Weevil when I purchased the Carco Spray Company of Tacoma 10 years ago.

We have two results from our constant experiments in the garden and laboratory: (1) An improved product, now called "CARCO-X", which has a wider range of application in the garden, and (2) a free booklet "DeBugging Made Easy" which was compiled to help you have the cleanest and healthiest garden possible. THE PLACE TO CONTROL SOIL INSECTS IS IN THE SOIL so they do not emerge as adults and lay more eggs to repeat their destructive cycle.

The welfare of your garden is my chief interest.

Sincerely,

N. J. Rea

manufacturer of GETZUM PRODUCTS.

And Yet Another Compost

Florence Levy, "Barnhaven," Gresham, Oregon

In gardening circles of a generation ago there was a saying that the only difference between an amateur and a professional grower was the latter's knowledge of when and how to water. Perhaps at that time this was true, but today the amateur whose hobby is growing flowers from seed has developed an intuitive understanding through trial and error just as his professional friend. But the professional, whose livelihood as well as his hobby is growing flowers from seed, has to contend with a greater inability to resist experiments, some of which have revolutionized plant propagation while others have proved disastrous, benefitting everyone eventually, either way.

Composts for seedling development offer a wide range for experimenting and the type of mixture influences the watering. A granular mix, short on peat, will not only give poor root growth and therefore weak seedlings, but will also require constant watering which encourages rot. A compost rich in peat, but kept open with sharp drainage, will develop vigorous root systems and require less water. However, site and weather conditions play a large part in watering. If you propagate in a hollow where the air drainage is poor, water (during ordinary weather) only when the soil crumbles to avoid rot. Test the soil by poking a finger or dibble into it. But on hot, windy days with seedlings exposed to approximately equal amounts of sun and shade, watering daily is necessary to avoid sunburn and drying. For those who garden in a good cross current of air, over-watering is not such a problem as for those with inadequate air circulation. In cool weather or on shady days, a more steady and healthy growth is encouraged by withholding water and growing on the dry side as the old-timers say. The tendency to over-water seems greater than that to under-water.

The following compost used this year has produced the most satisfactory results of any used so far. Although an amateur grower is not especially interested in speed production, yet it may stand him in good stead, especially when growing from fresh seed sown in late June or July for bloom the following spring. This summer, using quick germinating methods and this enriched compost, seedlings were shipped in less than three months from the date of seed sowing.

Top growth was that healthy, dark green foliage curling up from the soil, so beautiful to see, and the root system was equally full, compact and vigorous. This compost consisted of three bushels good garden soil, three bushels of very coarse sand, two bushels of regular peat, and two bushels of Blue Whale which is Canadian sundried sphagnum peat with whale soluble incorporated under pressure to prevent leaching and to afford a steady food supply available to the newly transplanted seedlings as soon as root growth begins.

Now it would seem we should be satisfied, and yet when we read of the John Innes composts (which include a dash of hydrated lime and 18% superphosphate) which have given such superior results, we are tempted to experiment again another year. A few thousand plants, as a check against the bulk of our crop, will be grown in a mixture according to the English formula, still using the organically fertilized peat known as "Blue Whale."

Dear Members: The size of the Quarterly, as well as the number of illustrations, is governed by the amount of advertising we carry. The amount of advertising we continue to carry is dependent upon your support. We ask you specifically to name the Quarterly when you send for a catalog or an advertised article. We can make this appeal to you with a clear conscience as there are no salaries paid to the Staff of the Quarterly and all the money from the advertising, as well as the limited subsidy from the membership fund, goes directly into the printing and distribution of the Quarterly itself. The additional pages of advertising in this "Auricula Handbook" have paid for the many illustrations and for the sixteen additional pages. We will be very grateful indeed for any suggestions to improve the advertising department. Sincerely, Mrs. C. Y. Griffin.

Advertising Director, 2946 N.E. 58th, Portland 13, Oregon.



P. Allioni, Loiseleur, courtesy of "Gardening Illustrated." (description on page 7)

Of Interest To Our Members:

We note with sadness and a definite feeling of loss the death of our Director, Mr. Ralph W. Hanna. He was always helpful and charming with a sense of humor which was equal to any situation. The Officers and Directors of the American Primrose Society, as well as the Staff of the Quarterly, have expressed the wish that their sympathy be extended to his family.

A letter from Mrs. A. C. U. Berry from Alaska states, "You ought to see where we are! Mayo—at the back of beyond! Have had five marvelous collecting days, hired a pick-up truck in Fairbanks and drove north almost to the Arctic Circle, collecting as we went—found wonderful plants." Mrs. Berry came home with a splendid collection, including *Primula cuneifolia*, *susp. saxifragifolia*. Mrs. Berry is not on the Quarterly Staff: "It is not the lofty sails but the unseen wind that moves the ship."

We can look forward to a delightful article by Mrs. Cicely Crewdson in our next issue. She was one of those who received the Air-Mail plants from the last Sherriff & Ludlow expedition.

We are very much indebted to Mr. Charles G. Crawford, 4225 Indian Road, Toledo 6, Ohio, and Chief Tester for the Hardy Primrose Testing Program of the Men's Garden Club of America. He is intelligent and energetic in the management of this program and we urge all growers to send him seed so that he can distribute it for testing among the 130 or more testers under his jurisdiction. He in turn makes out a report for the donors, compiled from all the tester's reports. In the next issue we will write about Mr. Crawford and his work with the Primrose Testers.

We regret that space did not permit going into the subject of the many Auricula Hybrids, we hope in a future issue to print the really fine article by Mr. Donald O'Connell which deals with this subject.

D.B.W. states: "Be sure to mention that efficient little dust gun, 'The Flika-Dusta' and tell our members that it is handy to get under the leaves of the Primroses. With a flick of the wrist just the right amount of dust goes just where you want it." We finally located a retail store: The Braeger's Oregon Seed Store, 140 S.W. Yamhill, Portland,

Oregon. Prepaid, \$2.50. The Flika-Dusta is made in England by the Acme Chemical Company, Stanwell-Middlesex. We shall have to send them a request to advertize!

Mrs. John Karnopp runs an "Information Please" for the Staff of the Quarterly. She is extremely generous with her splendid collection, especially with enthusiastic new members. Her precious auriculas are under her own care and they are beautifully and lovingly tended.

The cover, a Kodachrome reproduction in three colors by the Maddox Engraving Company, is a gift of Mr. and Mrs. Ben Torpen of Woodland Acres. Mr. Torpen took the picture this spring when the plant was in its maiden bloom. It was indeed hard to choose from the three best transparencies. The first was a beautiful red Self, the second a lovely yellow and the third, the one we picked, was this Grey Edged Show Auricula.

Dr. Breakey and Mr. Rae were examining a cutleaf birch leaf under a microscope and saw, in the space of seconds, a green aphid give birth to 21 offspring.

In case you are interested in the further study of the Auricula there are some splendid articles on the subject in old Quarterlies. A partial listing follows: Vol. 1, "Border or Garden Auriculas" by Lou Roberts. April 1946, "Auriculas in the East" by Dr. Worth. July, cont. in October 1946, "An Early Book on the Auricula" by Dr. Blasdale. Jan. 1948, "Sphagnum Propagation of Auriculas" by Mr. G. L. MacAlevy. October 1950, "The Strange Story of the Auricula" by Lord Biffin and "On the Auricula" by an Old Countryman. Oct. 1951, "Growing & Exhibiting Auriculas in My Youthful Days" by Mr. Wm. T. Harding, "Raising Auriculas in Pots" by Mrs. John Karnopp, "Auricula Culture in Wisconsin" by Mrs. Alfred W. Dess and "Growing Auriculas in Montana" by Clare W. Regan.

We apologize for having omitted these two names from our membership list: Mrs. O. J. Zach, Rt. 2, Box 155, Portland 10, Oregon, and Miss Louise Linthicum, 2605 S.W. Buena Vista Place, Portland 1, Oregon.

Mrs. Boyd Meyers, our Membership Chairman, has moved and her new address is Rt. 3, Box 269, Sherwood, Oregon.

The following names are those of new members (since July):

Mrs. Michael M. Borodin, P.O. Box 186, Cambria, California.

Mrs. Raymond Glenn, 4620 Johnson St., Gary 10, Indiana.

Mrs. Suzanne Goodloe, 6323 S.E. 29th, Portland, Oregon.

Mrs. Wm. Heilman, Rt. k, Box 213, Brooks, Oregon.

Mr. Walter Marx, Walter Marx Gardens, Boring, Oregon.

Mrs. Jay L. Protheroe, Rt. 6, Binghamton, N.Y.

Miss Ethel Cruse, Picture Rocks, Penna.

Cliff Cannon, 715 E. 15th, Olympia, Washington.

Vancouver Island Rock & Alpine Garden Society, c/o Col. Joan Kennedy, Box 146, Victoria, B.C.

Mrs. Keith Price, Rt. 2, Fairfax, Va.

Dennis Johnson, Rt. 1, Box 83, Cornelius, Oregon. (Junior Prize Winner in Show).

Mrs. Robert C. Nimmo, 5716 S.E. Insley, Portland 6, Oregon.

Mrs. Jay D. Cray, 17400 S.E. Oatfield, Milwaukie 22, Oregon.

Mrs. Wesley Foulal, 9000 S.E. 82nd Ave., Portland 66, Oregon.

Farris Edgley, Box 1269, Pocatello, Idaho.

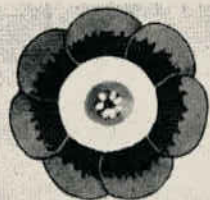
Cecil C. Smith, Rt. 1, Aurora, Oregon.

+ + +

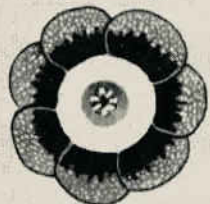
Proposed Amendment to the Constitution:

"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 \$2.50. The other persons in the household may have full memberships (without subscriptions) for \$1.00 each."

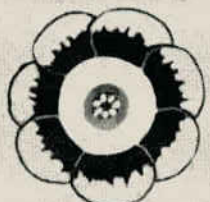
Types of Auricula



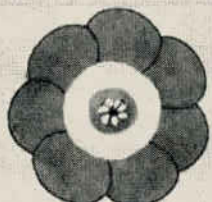
Green Edge



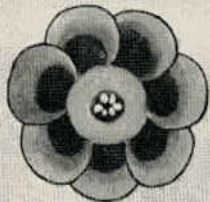
Grey Edge



White Edge



Self



Alpine

An Edged Show Auricula is an Auricula with leaf tissue in the petals. These have been called "Stage" or "Florist" Auriculas and constitute "the highest and most wonderful development of this flower."**

The Green Edge Show Auricula has a pure green edge which is absolutely devoid of meal or farina.*** As in all Show Auriculas the paste is smooth, round and pure white.

The Grey Edge Show Auricula will have farina in varying degrees, over the green edge, giving it a grey-green or grey appearance, depending on the amount of farina the plant produces. "The Grey Edge, a strong class, are those in which a sprinkling of meal, like hoar frost upon springing grass, lies delicately over a Green Edge, without hiding it further than to give a pearly effect."

The White Edge Show Auricula must be a pure white on the edge, the green completely covered with a fine white farina. Next to the edge, and flashing into it, is the body color, usually dark, at times appearing black; this must, in all Edged Auriculas, join the white paste center in a perfect circle. The tube or throat, like all Show Auriculas, should be a rich yellow, with the stamens pointing in, hiding the stigma. "The White Edges are exquisitely fair and lovely. The whole face of the flower, except the dark velvet rim of ground color, must be deep under a snowy meal, usually of finer grain on the edge than on the middle of the flower."

The Self Show Auriculas do not have the green leaf tissue in their petals. They have a "pure, densely mealed White Centre (paste) and are of one velvety unshaded colour." These Self Shows may be any color, light or dark, but there will not be any farina on the petal edge.

The Alpine Auricula has no farina on the petals or center. The centers are either white, cream or gold, the term "gold" covers a range of tints varying from lightest to sulphur yellow. The throat of the tube is usually the same color as the center. The body color is dark, next to the center and shades out to the edge of the petals. This shading is gradual in some cases, and in others there is a more definite change from dark to light.

* We have been asked to clarify the term "Show." All well grown primula, of course, are show material. (You will notice that show is not capitalized and is used as an adjective.) When the word Show is capitalized (as it is in the case of "Show" Auricula or Edged "Show" Auricula) it is used as a Proper Noun and is the name of a class of Auricula with specific qualifications.

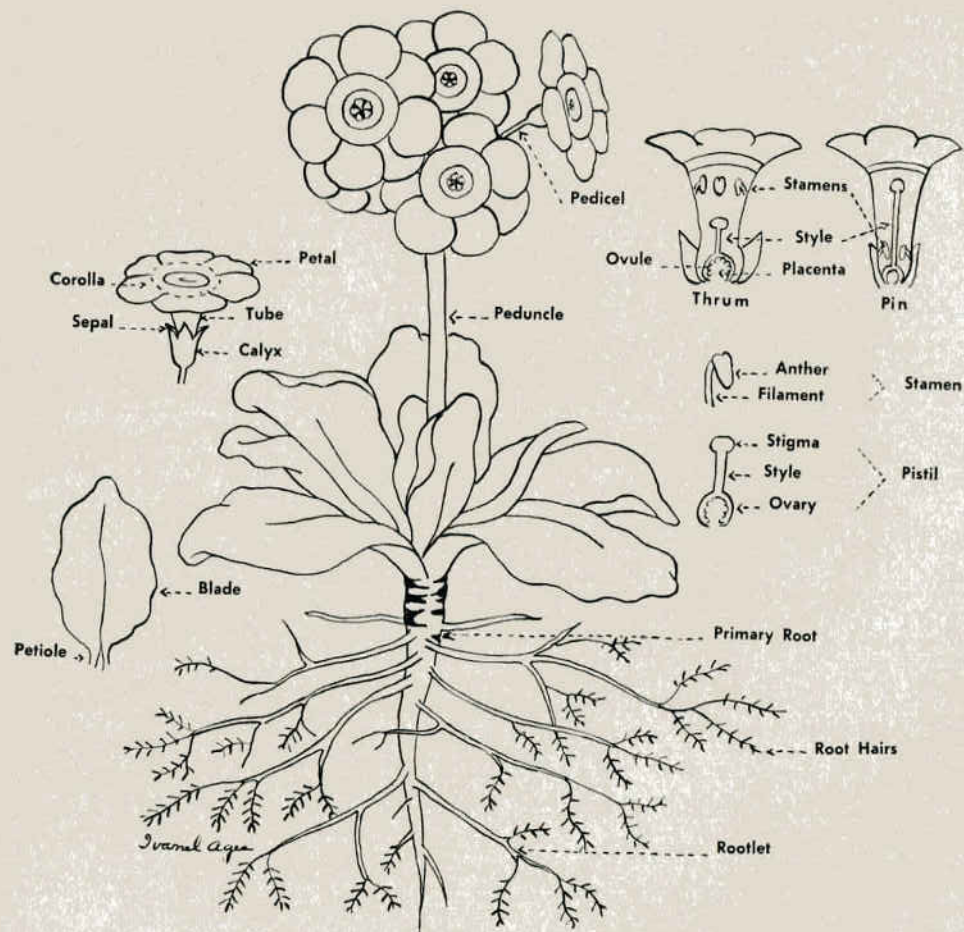
** The material in quotations is by the late Mr. J. J. Keen, and was taken from the 1949-1950 Yearbook of the National Auricula and Primula Society of England. (Northern)

*** Many of the Primula have a powder usually white, but at times yellow. This "farina" or "meal" is produced by gland tipped hairs. The dense powdered center is called a "paste."

Mrs. Ella Torpin, our Horticultural Advisor, or I, will be glad to consider and to do research on any point in question and we welcome correspondence containing questions about our favorite subject. Our addresses are on the inside cover.

Ivanel Agee

Parts of an Auricula Flower



The petals of the flower, with the tube, together form the corolla, or pip, on the Auricula. The upper spreading portion of the corolla is the limb and the narrow part, the tube. The calyx is a green cup below the corolla, its petal-like points are called sepals. The pollen bearing anthers are held out from the tube on a little stalk, called the filament; the anther and filament together are the stamen. The pistil is composed of the stigma, the round sticky top, the style, and the seed bearing ovary.

Two types of flowers were cut in two, to show the different structure, when these two distinct forms show in the same species, it is known as dimorphism. The "thrum eye" has a short style with the stamens set well up in the tube, while the "pin eye" has the long style and the stamens set lower than the stigma.

The peduncle is the stalk of the plant, sometimes called the scape. The little stalk holding each separate flower is a pedicel. The cluster, or truss of flowers on a stalk is an umbel, each little flower pedicel coming out from a central point on the peduncle like the frame of an umbrella. The leaf stalk is the petiole, while the wider part of the leaf is the blade. The primary root, or "carrot," is the main root in the Auricula. The rootlets branch off the main root, ending in tiny feeding roots called root hairs. These are many in a strong plant and it was necessary to eliminate most of them in the drawing, to show the root structure.

I.A.

The World of Primulas

Howard W. Lynn, Fircrest, Tacoma, Washington

INTRODUCTION: With this issue we start a project that has long needed doing; the compiling of a dictionary of the Genus *Primula*. As all know who have worked with these plants, the nomenclature, classification, etc., is not to be found in any single volume; in no single volume published is there to be found a listing of all the species of the Genus, let alone with their correct names. This is going to be a long term project, in which I am merely acting as the front man for a larger group to whom most of the credit for this work should be given. No listing can be given for those acting on any single phase, and credit will have to be given when the project is completed.

We plan to publish in the Quarterly of the American Primrose Society the parts of this work as they are completed, and when finished perhaps we shall be able to publish in one volume. Following this initial presentation of the Sections of the genus we shall give you a pronouncing dictionary of all the species, giving their Sectional and Subsectional status with a brief description; thus, if you cannot find the name of your favorite *Primula* in the listing below, wait until the dictionary is published and you will perhaps find that it has another and more correct name than that which you have known it by.

IF AT ANY TIME WHILE THIS WORK CONTINUES, THERE ARE ANY SUGGESTIONS AS TO HOW WE COULD IMPROVE OUR WORK WE SHOULD BE MOST HAPPY TO HAVE THEM.

Classification of the higher plants is based on the fact that all of the higher plants have leaves, and five other modifications of them; the bracts, calyx, corolla, stamen and pistil. All of these organs were originally designed as leaves, and were modified by nature to perform functions other than the manufacture and storage of food. By measuring these, and grouping together plants with similar measurement, we arrive at large groups known as Families. Within the "Family" we arrange together groups of plants that are most like each other, and call them a genus, or genera. The Genus is broken down into plants that are most like one another and these large or small groups are known as Sections, and the Sections are in turn broken into Subsections. These groupings are important to the gardener, for they furnish a clue as to the cultural conditions that a plant will need. Not all *Primulas* want the same conditions. Not all the members of a Section want exactly the same treatment, although they generally are quite similar in their needs; but when we come to the Subsections we can be very sure that the plants in that group will not only be very similar in a general way, but that they will want the same conditions. Thus if *P. marginata* has done well for you, you can be very certain that *P. carnolica* and *P. viscosa* of the same Subsection will do well if given the same conditions.

These are the Sections of the Genus with the plants belonging to each. I repeat, if one of your favorite plants is not found in this listing it is most probably because the name for it that you know is not correct. When the list of species and their synonyms is printed you will undoubtedly find it.

After each name of a species is found the name of the person or persons who first described the plant in a botanical journal. It is important that this name be given when a species is noted. An excellent example of why this is so important is found when we consider *Primula farinosa*. A very large number of plants have been named *P. farinosa* at one time or another, but only the plant described and named by Linnaeus is now known as *P. farinosa*, so we note the plant as *P. farinosa* (Linnaeus), and when we see *P. farinosa* (Eastwood), we know that the plant is actually *P. specuicola* (Rydbetter). The wisdom of the Rule of Priority is obvious; it does away with all argument, as the first validly published name must stand.

SECTIONS OF THE GENUS PRIMULA

Section AMETHYSTINA—(Pronounced am-eh-thist-EEN-a)

- | | |
|---|--|
| <i>P. amethystina</i> (Franchet)* | <i>P. Faberi</i> (Oliver) |
| subsp. <i>argutidens</i> (Smith & Fletcher) | <i>P. Kingii</i> (Watt) |
| subsp. <i>brevifolia</i> (Smith & Fletcher) | <i>P. odontica</i> (Smith) |
| <i>P. Dickiena</i> (Watt) | <i>P. silaensis</i> (Petitmengin) |
| var. <i>chlorops</i> (Smith & Forrest) | <i>P. Valentiniana</i> (Handel - Mazzetti) |
| var. <i>aureostellata</i> (Fletcher) | <i>P. Virginis</i> (Leveille) |
| var. <i>Gouldii</i> (Fletcher) | |

Section AURICULA—(pronounced or-IF-youl-a)

Subsection ARTHRITICA—(Pronounced arth-RIT-ik-a):

- | | |
|--|---|
| <i>P. Clusiana</i> (Tausch) | <i>P. glaucescens</i> subsp. <i>longobarda</i> (Widmer) |
| <i>P. Clusiana</i> var. <i>crenigera</i> (Beck) | <i>P. spectabilis</i> (Trattinick) |
| <i>P. glaucescens</i> (Moretti) | <i>P. Wulfeniana</i> (Schott) |
| <i>P. glaucescens</i> subsp. <i>calycina</i> (Pax) | |

Subsection BREVIBRACTEATA—(pronounced brev-i-BRACT-ee-aa-tuh):

- | | | |
|----------------------------------|------------------------------|-----------------------------|
| <i>P. Carniatica</i> (Jecquelin) | <i>P. marginata</i> (Curtis) | <i>P. viscosa</i> (Allioni) |
|----------------------------------|------------------------------|-----------------------------|

Subsection CHAMAECALLIS—(pronounced kam-ay-KAL-iss):

- P. minima* (Linnaeus)

Subsection CYANOPSIS—(pronounced SY-ann-op-sis):

- | | |
|--------------------------------|------------------------------|
| <i>P. decorum</i> (Velanovsky) | <i>P. glutinosa</i> (Wulfen) |
|--------------------------------|------------------------------|

Subsection ERYTHRODOSUM (air-rith-ro-Dough-some):

- | | |
|--------------------------------|--|
| <i>P. apennina</i> (Widmer) | <i>P. villosa</i> (Jacquin) |
| <i>P. pedemontana</i> (Thomas) | <i>P. villosa</i> subsp. <i>commutata</i> (Widmer) |
| <i>P. rubra</i> (Gmelin) | <i>P. villosa</i> form <i>cottia</i> (Ludi) |

Subsection EU-AURICULA (you-or-IK-yule-a):

- | | |
|---|--|
| <i>P. auricula</i> (Linnaeus) | <i>P. auricula</i> var. <i>serratifolia</i> (Ludi) |
| <i>P. auricula</i> subsp. <i>Balbisi</i> (Widmer) | <i>P. auricula</i> var. <i>Widmerae</i> (Pax) |
| <i>P. auricula</i> var. <i>Obristii</i> (Beck) | <i>P. Palinuri</i> (Petagna) |
| <i>P. auricula</i> variety <i>monacensis</i> (Widmer) | |

Subsection RHOPSISIDIUM (pronounced rop-SID-ee-um):

- | | |
|---------------------------------|-----------------------------------|
| <i>P. Allioni</i> (Loisleur) | <i>P. integrifolia</i> (Linnaeus) |
| <i>P. Kitaibeliana</i> (Schott) | <i>P. tyrolensis</i> (Schott) |

NATURAL HYBRIDS* OF THE SECTION AURICULA

xP. alpigena (Dalle Torre), *xP. alpigena* var. *pumila* (Widmer), *x. P. alpigena* var. *Widmerae* (Pax), *xP. alpina* (Schleicher), *xP. Berninae* (Kerner), *xP. Bowlesii* (Farrer), *xP. biflora* (Huter), *xP. Caesarea* (Farrer), *xP. Carueli* (Porta), *xP. Caesarea* (Farrer), *xP. Crucis* (Bowles), *xP. Dimyana* (Gusmus), *xP. discolor* (Leybold), *xP. Escheri* (Brugger), *xP. Facchinii* (Schott), *xP. Floerkeana* (Schrad.), *xP. Gobellii* (Kerner), *xP. Heerii* (Brugger), *xP. Huteri* (Kerner), *xP. Juribella* (Sundermann), *xP. Kolbiana* (Widmer), *xP. Mauretiana* (Monitzi), *xP. obovata* (Huter), *xP. pubescens* (Jacquin), *xP. salisburgensis* (Floerke), *xP. Seriana* (Widmer), *xP. Steinii* (Obrist), *xP. Sturii* (Schott), *xP. vochinensis* (Gusmus).

*A natural hybrid is a hybrid occurring in the wild in which both parents are known. Most plants were probably natural hybrids in the beginning, but rose so long ago that one or both parents have died out.

Editor's note: Descriptions of hybrids as well as of species will occur in the dictionary of the *Primula* which is now in the process of being compiled.

A Timely Tribute To Our Great Hybridizer

MR. CYRIL G. HAYSOM, *by Mr. Dan Bamford**

Our Editor has asked me to write a tribute to Mr. C. G. Haysom and it gives me the greatest pleasure to have the honor of doing this in our Quarterly Journal. It was rather late in his gardening career when he took up the cultivation of the Auricula and to appreciate fully his achievements I will go back a little to the days when the Auricula was in the early stages of its development.



Mr. Haysom; picture taken by his son, Donald.

It was during the 19th century that the Auricula reached its peak of popularity and to none can we hand our greater praise than to those skilled craftsmen, the handloom silk weavers of Lancashire and the North Country. When they first took it in hand at the beginning of the period I mention, it was indeed a very imperfect flower, but they quickly laid down standards for a perfect flower and then set about achieving it in a most determined manner. In the course of that century they developed the Auricula to an amazing state of perfection, in fact I will go much further and say to a state of perfection which has never been equalled in any flower and will probably never be attempted again. Note that I used the expression "developed to a state of perfection" which is *totally different from breeding for size of colour and I might*

add vastly more difficult. Towards the end of the century the last of the old craftsmen had departed and the popularity of the Auricula began to decline. It is sad to recall some of those departed faces, in appearance many like the old patriarchs. Alas, we shall not readily see their like again. There were however a few notable raisers who carried on, George Lightbody, the Reverend F. D. Horner, Richard Headley, Ben Simonite, Sam Barlow, and others, these were indeed fortunate in inheriting imposing pedigree stock. When they departed the great enthusiasm for the Auricula which had swept through the 19th century with such triumph gradually faded and the two world wars dealt it another shattering blow. Fortunately about the year 1929 the late Mr. G. H. Dalrymple of Bartley acquired the collection of Auriculas from Mr. Ken Thompson. I knew this collection well, it was quite a comprehensive one and contained a few of his own varieties, two of the best being Grey Mantle and White Mantle.

From the time this collection arrived at Bartley, Cyril Haysom fell under the spell of the Auricula. All our members will know of the world famous strain of Bartley Freesias and Primula pulverulenta, "Bartley Strain." C. G. Haysom, as manager for G. H. Dalrymple, played a very important part in developing the coloured Freesias and Primulas which gained the highest awards here and in other countries. At this stage Haysom could

**"One of the last remaining old Lancashire Florists." "A most respected authority and judge of Auriculas." Mr. Dan Bamford, is a man of many accomplishments, he is known all over the world as an inventor, and as a noted grower in other genera than the Primula, notably orchids and rhododendron.*



This shows but a few of the Show Auriculas in flower in the greenhouse of Mr. C. G. Haysom.

have rested on these achievements but in 1929, when he was thirty-seven years of age, the Thompson collection arrived at Bartley and inspired him to take up the task of raising new varieties and in a few years new varieties began to flow from these famous gardens. Auricula growers the world over can be grateful for the Haysom interest, for at that time the Auricula was fast declining in other quarters. Year after year new varieties emerged from Barley. I think the vintage year for Cyril Haysom was when he came to Manchester to exhibit some of his new varieties and I suspect he came with some trepidation. I watched him unpack his plants and when he had finished I slapped him on the back and said, "Haysom, there is nothing here that can stand up to you." He returned home, the proud possessor of four First Class Certificates, and he had earned them. I do not know, neither do I think he does, how many awards he has received, but one thing I assert, during the short 22 years he has grown them, no grower, past or present, has turned out more new or worthy varieties.

He has, I am pleased to say, aimed to reach the rigid standards of perfection laid down by our old florists both in form and colour. I should be writing absolute nonsense if I said all, or any, of his crosses are perfect, no man has ever reached absolute perfection

in a florist's flower and never will, but he has gone as far in that direction as any man and I think we can look for still further progress along that difficult road.

If space permits I will list a few of C. G. Haysom's best seedlings:

GREEN EDGED: "Donald Haysom" F.C.C. "Houndsdown" F.C.C. "Dan Bamford" (not yet exhibited). "Longsdawn" F.C.C. "Pennerley" F.C.C. "Lymington" F.C.C.

WHITE EDGED: "S. G. Holden" F.C.C. "Wilverley" F.C.C. "Hinton Admiral" A.M. "Picket Post" F.C.C. "Whiteparish" A.M.

GREY EDGED: "Landford" F.C.C. "Sherfield" F.C.C. "Sway" A.M.

SELS: "Alice Haysom" F.C.C. "Melody" A.M. "Kingsgarn" A.M.

These are but a few of the really fine varieties he has raised, but alone they are a formidable achievement, considering that prior to 1929 he had never grown a Show Auricula. If we add to these the number of other meritorious seedlings he has raised, I say without fear of any contradiction, that he has been the principal figure in saving the Show Auricula from extinction and restoring to it some of its old world glory.

I pay this tribute, not because we are friends and good companions, but because of his achievements in the sphere of which I write. If he had no successes I should attempt no praise, but if we were enemies and he could show these successes I would be the first to pay him this tribute. As far as I am concerned it is achievement that matters and I care not two hoots whether it is from Magnate or Pauper, as the great Philosopher put it "By their works ye shall know them."

There are some in this young society who now grow the Show Auricula. I trust that some among you will strive to emulate his achievements and my hope is that you will aim for the high standards he has accomplished and for which our humble forbears on this side of the Atlantic laboured so long and so well.

One of the things that pleased me most in our Auricula Year Book for 1951* was the hope expressed by Mrs. Ella Torpin that you in America "Will never lower the standards that the British have long since established." To the good Lady I say, "Well said."

I will close by saying to the great Auricula raiser of our time, "Cyril Haysom I take off my hat to you! May the departed spirits of the handloom weaver growers of Lancashire and the florists of the North Country peacefully hover round you as you tend your plants in the New Forest and may you be spared for many years to give us still more treasures for the enjoyment of this and future generations.

* Available through Mr. R. H. Briggs, Honorable Secretary for the National Auricula and Primula Society (Northern Section), "High Bank" Rawtenstall, Rossendale, England.

The Auricula Month by Month

C. G. HAYSOM

October: Plants that have been standing in the open in shaded summer quarters should now be placed in the cold house or frame for the winter and they should be given the benefit of all the autumn sunshine possible before they go to rest. As soon as the plants show signs of this, the watering should gradually be decreased.

November and December: These are two critical months for the Auriculas, but with care and attention they will pull safely through. Abundance of fresh air must be allowed, and the plants kept as dry as possible overhead. No water must lodge in the heart of the plant, and the soil must be kept sweet. If the soil should become sour from damp, mischief will follow. Very little watering will be necessary, still, if the weather be open, a little will sometimes be necessary to prevent the plants from becoming dust-dry, which is at all times a source of great evil.

(to be continued)



C. G. Haysom and the writer (D. Bamford) inspecting Auriculas in Mr. Haysom's Greenhouse, at Totten, Southampton.

THE AURICULA by Sir Rowland Biffen

\$3.75 at all Bookstores

Cambridge University Press, 32 East 57th Street - New York 22, N.Y.

"This book will be an important one to all who love and grow auriculas . . ."
THE GARDEN JOURNAL of the New York Botanical Garden.

Sir Rowland Biffen completed the manuscript of this book shortly before he died in July 1949 at the age of 75, but he was too ill to give it a final revision. This was accomplished by his friend and confidant, F. T. Brooks, Emeritus Professor of Botany, University of Cambridge, who writes of Sir Rowland, "From boyhood days at Cheltenham Sir Rowland Biffen was a keen gardener, and he rapidly acquired an amazing knowledge of garden plants. During his early career at Cambridge he was one of the pioneers of Mendelian experimentation, and he subsequently became famous as a breeder of new wheat varieties. In his private garden, and constantly assisted by his wife, new kinds of peas, strawberries, Delphiniums, Gladioli, etc., were produced, but, above all, Auriculas were his chief and most constant love . . . Biffen most happily combined genetics and plant breeding in his techniques, and his perception as an artist of no mean skill also contributed to the creation of flowers of outstanding beauty.

Just before he died Sir Rowland sent some of his choicest Auriculas to M. C. G. Haysom in the hope that they would be used for further breeding. Others found a home at the Cambridge Botanic Garden, where they will be maintained.

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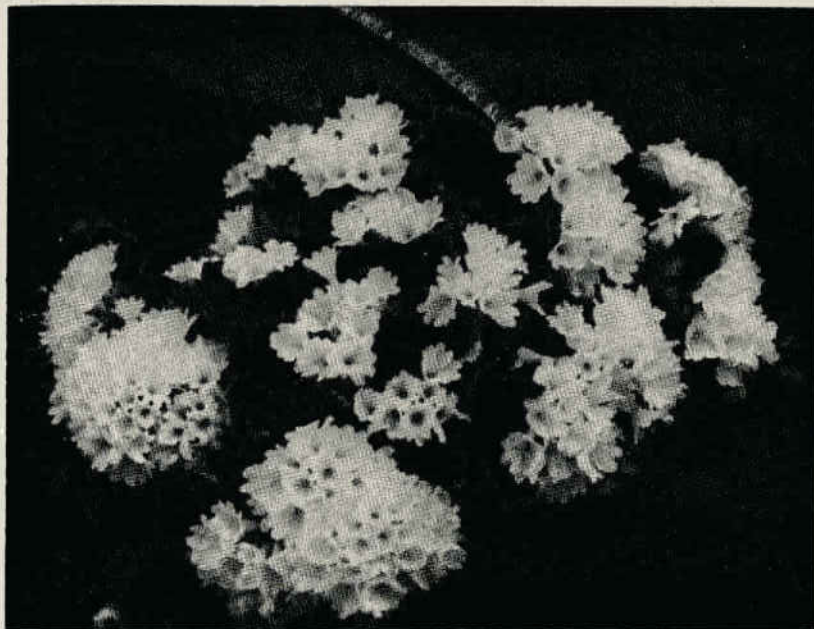
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- In combining the Whale Soluble with the Sphagnum Moss, the increased value lies not alone in the fact that the Whale Soluble is held in the Moss and supplied without loss to the plant growth. The great value of this combination lies in the fact that the Whale Soluble creates in the Sphagnum Moss a strong Bacterial action which, in turn, creates healthy and sustained fertility—the Organic way. This composting action once started continues indefinitely until the combined product is used up in the plant growth. Keep moist and use no chemicals with BLUE WHALE.

BLUE WHALE is of special value for Bulb planting in Fall or Spring—use a large handful under each bulb mixed with the soil. You can place the bulb right in the material—it will not burn.

For plants such as—Violets—Violas—Pansies—Primroses—Polyanthus—Auriculas—Wall flower—and all spring flowering plants—place a good handful of the BLUE WHALE close around the roots (it will not burn). Do it now in the Fall for best spring flowering results. For Roses and Shrubs place the material close to the roots.

For a good velvet lawn in Spring and Summer use BLUE WHALE as a Fall top-dressing—use it liberally.

For your nearest dealer in Oregon—contact Chas. H. Lilly Co., Oregon distributor for BLUE WHALE. 305 S.E. Third Street, Portland. Phone: EA 1147.

The Washington state wholesale distributor for BLUE WHALE® is the Vic Nelson Co., 3104 Western Avenue, Seattle—Phone: ALder 7110.

BLUE WHALE is a Product of ACME PEAT PRODUCTS, Ltd., 789 W. Pender St., Vancouver, B.C.

California and Washington dealers listed on opposite page.

CONTROL

The Primrose Killer

By E. M. Llewellyn, former Editor, Stars & Stripes

In test gardens at Sumner, Washington, N. F. Rea, owner of Getzum Products, has proved the killer of primroses can be killed. The product used to gain control is CARCO-X, a new mixture of chemicals that works four ways, as a repellent, as a soil treatment, as a contact spray and as a fungicide.

Root weevils are the basic primrose killer. These are the small white grubs that feed on the roots of primroses, strawberry plants, azaleas, raspberries, rhododendrons, and many other garden treasures. CARCO-X mixed with water, one teaspoonful to the quart, is the combination that gives protection. Soak the soil around each plant with this solution so that it will penetrate deeply under the plants and all around the roots. This treatment at this season is ideal for it will destroy the larvae from eggs laid by the adult pest earlier this year.

In the CARCO-X test gardens at Sumner, visitors will find a wide variety of plants, shrubs and trees which enjoy the protection of CARCO-X treatments. These include azaleas, Irish yews, Lawson cypress, Blue Canyon cypress, junipers, laurels, spruces, heathers, Candle pines, camellias, daphnes and border flowers. This display is kept in order to show compatibility of the various shrubs and tender plants to the powerful, protecting CARCO-X Treatment.

Tests to prove control of root rot and root weevil action have established beyond question of a doubt that CARCO-X used as directed can be backed by the Getzum guarantee of complete satisfaction.

Primrose growers interested in using CARCO-X can have this product shipped to them postpaid at \$1.20 a half pint, \$1.75 a pint, \$2.85 a quart, and \$6.45 a gallon. With each order you will receive FREE the booklet "Debugging Made Easy" which will provide you with complete year round information on the proper use of CARCO-X. Address all mail and orders to Getzum Products, Box 37 PS., Sumner, Washington.