

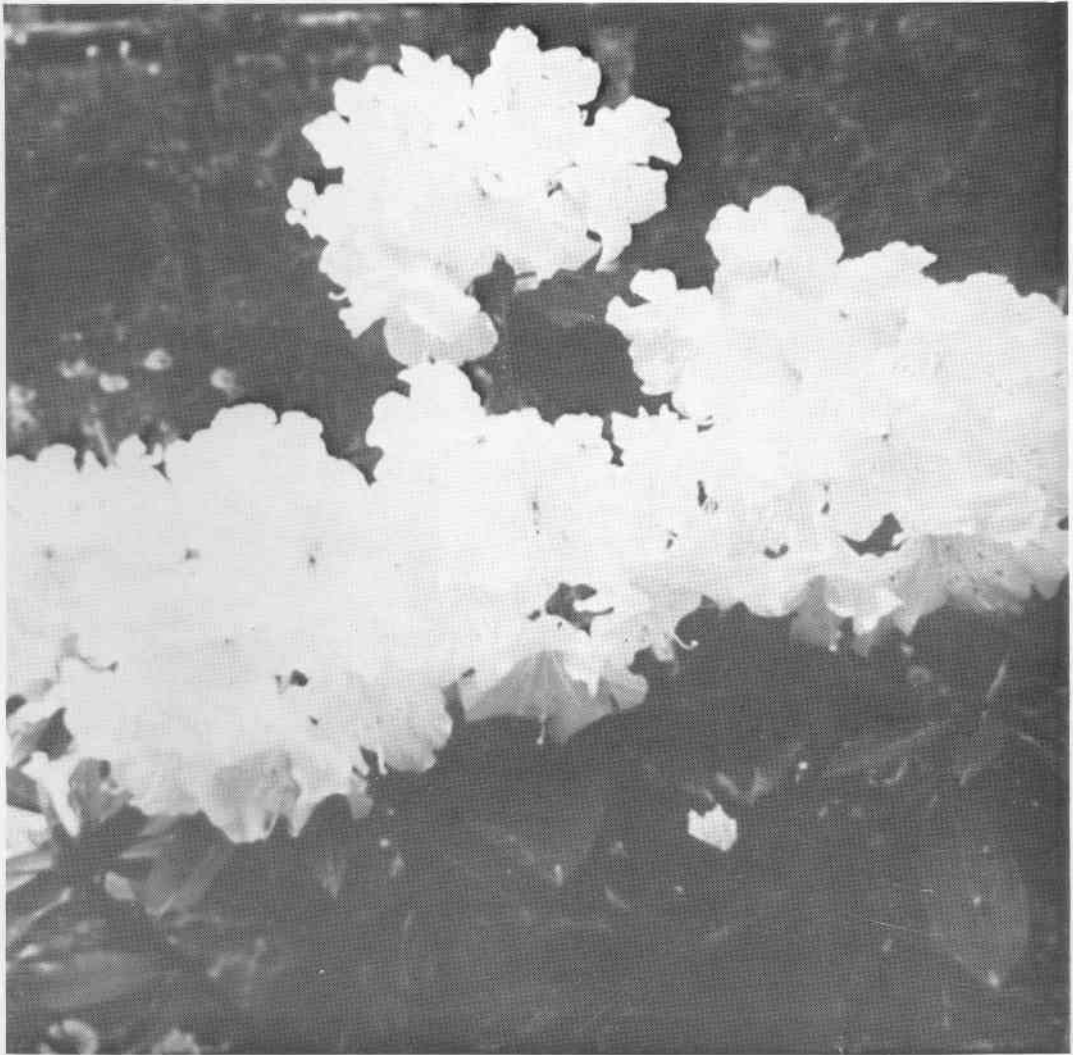


**Rhododendron
Society
of
Canada**

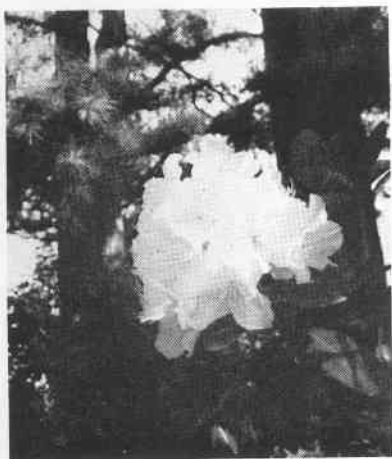
Bulletin 1972

Volume 1 Number 3

**Société
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EDITORIAL COMMENT

Since the publication of our last bulletin we have passed the first milestone of our history, the birthday of the formation of our Society on October 30th, 1971. As our Honorary President Dr. Frank Palmer said in our first bulletin — “We are on our way and, hopefully, the Maritimes, Central Canada, and British Columbia together will build a strong Society.”

The aim of your Executive and Directors is that the Society will be a medium to provide something of lasting benefit to all its members. Even deeper I think, is the hope that *as a country* we may make a positive contribution to world knowledge and appreciation of the beautiful genus *Rhododendron*.

To do this we must not only share any knowledge gained with people in countries of similar climate, but also invite rhododenarians in these lands to contribute their knowledge to our pages. In this way all are enriched. Quite apart from having beautiful plants and flowers in our gardens, there will be an increasing sense of international friendship.

At the present time these may be but dreams and hopes, but hopes which will become reality if we steadily work toward that end. The first step is to develop our own consciousness as a national entity. In this issue we are starting a column of Regional Notes. This can be developed to represent many communities small and large.

Make up your own active group even if it is less than half a dozen members. Size is not necessarily the criterion: being an active part of the whole Society is what counts.

A Merry Christmas and Happy New Year to all.

DOWN TO EARTH ADVICE

Captain R.M. Steele Halifax, Nova Scotia

Nova Scotia's soil, and the climate, are particularly suitable for a wide range of ericaceous plants. We could quite easily attain world renown for beautiful gardens employing these plants grown in settings of their natural habitat.

There are a substantial number of rhododendrons which perform well and give a great deal of satisfaction in this particular area. Some require some protection and some shade. The majority prosper and bloom magnificently in full sun. Nearly all benefit from limited protection against winter sun and any desiccating dry winds which should occur while their roots are solidly frozen. There are a number that will stand these conditions and worse, yet still perform beautifully if provided with acceptable basic requirements.

Let us consider the basic requirements for growing rhododendrons:

There are certain absolute requirements for these plants: Drainage, Moisture, Light, Acidity.

Drainage: It is essential to these plants to have a supply of air around their roots, and any soil or container which permits water to stand on the roots drowns the plant. They can be successfully grown on clay soil by building up beds of humus (peat moss + sand + soil; or, leaf mould, woods rubble, gravel + sand) above the clay so that all the excess water drains from the root area.

The shaly loam and gravelly loam and the stony-sandy subsoil in this area are excellent for these plants, provided clay soil has not been added to the extent that it eliminates fairly rapid percolation.

The plants are doomed to fairly rapid decline and death when planted in good soil but in a clay pocket which holds the water.

Moisture: Rhododendrons require continual moisture from the soil to replace the moisture which the large evergreen leaves are continually transpiring into the atmosphere. Our rainfall in this area is usually entirely sufficient for their needs if there is enough humus in the soil to hold that moisture available for the plants. In long dry spells a good watering which wets the soil to several inches is an advantage to the plants. The roots should never be permitted to entirely dry out; however in hot dry weather it is not unusual to see the new leaves in a somewhat wilted condition in midday. If they perk up again during the night they are not in significant distress; if they do not, they are in immediate need of water.

A substantial drought in July and August will often send the plant into dormancy. Heavy rains and warm weather in September may bring the rhododendron into a flush of growth, and if this is followed by an early freeze — then substantial damage can occur. Similarly if a long, warm fall without cold nights (below 42°F) keeps the plants from hardening-off and conditioning for the winter, then they are hit by very cold deep freezing weather, this also can cause very substantial damage.

Light: Rhododendrons require light for the photo-synthesis process by which the plant lives and grows. Their requirement is less than that of some other plants, and they can survive in quite a bit of shade. However, insufficient light will weaken the plant and eventually kill it. Too much direct sun will have the same effect on some rhododendrons, where heavy sun scalding damages the leaves so that they cannot perform the photo-synthesis function. the majority of rhododendrons that are hardy in this climate benefit from some sun during the day and many of them can stand full sun.

The amount of sunlight a rhododendron gets has a direct effect on the growth and on its blooming. The more sunlight a plant receives without damage, the more compact

the growth and the more profuse the bloom. Also the plant will be encouraged to bloom at an earlier age. The flowers of rhododendrons, however, last longer in partial shade.

The original habitat of the particular rhododendrons's ancestors will tell the amount of sun that it prefers (i.e. the *R. catawbiense* which originated from the bald at the top of Roan Mtn. and the *R. yakusimanum* which came from the bald top of Mt. Miyanoura in Japan, thrive in full sun. *R. maximum* and others that normally grow in some tall shade, prefer partial shade).

Acidity: If the soil is not suitably acid (i.e. pH 5.5 or lower), the rhododendron cannot assimilate the very, very small amount of iron that is essential to the life of this plant. They can be grown in soil that prohibits the movement of iron into the plants if it is provided by spraying the foliage at appropriate intervals with a solution containing chelated iron. This is an unsatisfactory arrangement if any other permanent correction can be made.

A couple of corrective actions which can be satisfactorily undertaken are the alteration of the pH with ferrous sulphate or with sulphur (never use aluminum sulphate).

Buying Rhododendrons

When purchasing rhododendrons, the plants should have a good firm ball of moist earth, completely filled with close growing fibrous roots. It should be firmly wrapped in burlap, or polyethylene which has drain holes to prevent waterlogging of the roots. Container grown plants can be entirely satisfactory, but unless you know the grower to be a competent and careful plantsman, you will probably get a plant below the quality and health of a good field grown rhododendron.

The plant itself should be compact, broad and with thick, strong branches. They should have good foliage and a healthy appearance. Although insect damage to the previous year's leaves is not generally of any real consequence, I prefer undamaged plants.

The plants should be kept out of the sun and wind and in a cool place and planted as soon as possible. If they seem to be drying out — soak them in a pail of water for a couple of minutes but do not let them stand in the water and make sure it drains completely from the root ball.

Site: The nurseryman should be able to advise you whether the rhododendron you are purchasing requires shade or can stand full sun. This is the first consideration for the site. He should also advise the eventual size of the plant and this is the next consideration. Mark out on the ground its circumference in 15 years' time (it will seldom be less than 6 feet). This indicates the distance it should be planted away from other objects. Under the roof line . . . may mean water deluge, icicles or sliding snow . . . too close to a young growing tree (or shrub) can mean interference with each other

... too close to a maple means root invasion and deprivation of nutrients ... too close to the street or road could mean salt splashing in winter.

Preparation. This is the Most Important Aspect in the Culture of Rhododendrons

You cannot later modify the soil to meet the requirements of the plants unless you remove the plant. No surface amendment can later restore to healthful vigour the specimen that has grown lean and scrawny from lack of the right ground work at the time it was planted.

If your soil is good draining acid loam – dig 4-6" of this soil from an area of not less than 30 inches diameter (and preferably wider) and lay it to one side.

Spread on the bottom of the hole at least 3" (and preferably more) of peat, well rotted manure, leaf mould, forest litter or any other good source of humus, add several handfuls of bone meal or an appropriate amount of Magamp, and thoroughly mix this with under-soil in the hole down to a depth of 12 more inches.

Mix an equal amount of the manure, etc., with the soil which you removed.

If your soil is clay or slow draining – make a mix with good sandy loam as described above and then use this for a planting bed entirely above the clay. Do not dig a pocket in the clay and plant with this mixture in the pocket because the clay will maintain a hole filled with water and thus drown your plant.

Planting: Scoop out a depression in the prepared soil in the planting excavation so that when the rhododendron is placed in it, the top of the root ball is 4" or slightly more above the original soil level. With the rhododendron temporarily thus placed, stand back and see which side of the plant you consider the best and which direction that should face.

When you are satisfied how the plant should be placed – carefully remove its wrapping and then place the soil about the root ball so that it does not cover the roots more than 1/2" above the top of the root ball. Dish the replaced soil so that the rain will not run off but will be retained and percolate down through the roots.

Water: Completely soak with a light spray and then cover the new soil with 2" mulch of pine needles, oak leaves or some coarse material. Do not use peat because the roots will come up in this when it is wet and be killed when it dries out.

The Kentville Research Station has made enormous strides in establishing, breeding and developing rhododendrons for the Canadian climate. They are leaders in North America. This has been done by Dr. Don Craig and Geo. Swain working voluntarily outside of their normal program. It has been my great fortune to have been closely associated with them.

THE DEVELOPMENT OF THE DECIDUOUS AZALEAS PART I THE GHENT AND MOLLIS AZALEAS

Ken Duncan Don Mills, Ontario

Some of the most spectacular flowering shrubs available to the keen plantsman to-day are the hybrid deciduous azaleas. These plants are really deciduous rhododendrons — a fact which is confusing to the average gardener. The foliage is certainly different from the usual rhododendron hybrid. However, by retaining the word azalea, the plants are set apart from the rest of the genus, perhaps diminishing the confusion a little. One thing is sure, they are easier to grow than the rhododendron hybrids.

Over the last 150 years, hybrid deciduous azaleas have been developed mainly from nine species, six of these native to North America. These plants became available to European hybridists between 1730 and 1870, and were used by them in different combinations to develop the various hybrid groups.

The following species, all members of the subseries Luteum of the series Azalea, were used extensively in Britain, Belgium, and Holland for breeding hybrids:

North American species

Rhododendron arborescens (*Azalea arborescens*). Sweet azalea. Small white or white tinged pink flowers, very fragrant. Blooms late in June — early July. Tall.

Rhododendron calendulaceum (*Azalea calendulacea*). Flame azalea. Medium sized funnel shaped flowers, yellow, orange, or red. No scent. Late May — early June. Tall.

Rhododendron nudiflorum (*Azalea nudiflora*). Pinxter azalea. Small tubular flowers, white to violet red. Sweet scented. Mid May. Medium to tall.

Rhododendron occidentale (*Azalea occidentalis*). Western azalea. Large flaring tubular flowers, creamy white to bronze pink, yellow blotch. Very fragrant. June. Tall.

Rhododendron speciosum (*Azalea speciosa*). Oconee azalea. Small funnel shaped flowers, orange to red. No scent. Mid — May. Low growing.

Rhododendron viscosum (*Azalea viscosa*). Swamp azalea. Flower a slender tube, white to cream white. Spicy fragrance. July. Tall

European species

Rhododendron luteum (*flavum*) (*Azalea pontica* or *lutea*) Pontic azalea. Small yellow flower. Fragrant. Mid — May. Tall.

Japanese species

Rhododendron japonicum (*Azalea mollis*) Japanese azalea. Large funnel shaped flowers, red, orange red, or occasionally yellow. Slightly scented. Mid — May. Medium.

Chinese species

Rhododendron molle (*Azalea sinensis*) Chinese azalea. Large funnel shaped flowers, rich yellow. Slightly scented. Mid — May. Not hardy.

Except for colour and hardiness, *R. japonicum* does not differ much from *R. molle*.

Other species used to a lesser degree, all North American members of the subspecies *luteum*, are: *R. bakeri* (*cumberlandense*), *R. prunifolium*, and possibly *R. canescens*. The distinction between some American species is still being resolved by botanists. It is better not to confuse the issue by mentioning more names.

Ghent Azaleas (*R. gandavense* Rehder)

Also known as Hardy Ghents or Pontica azaleas.

During the 1820's, P. Mortier, a baker of Ghent, Belgium, began crossing *R. calendulaceum* with *R. nudiflorum*, and so produced the MORTIER HYBRIDS (x Mortier). He crossed these with *R. luteum*, *R. speciosum*, and *R. viscosum* in various combinations. At about the same time in England, J. Gowan, gardener at Highclere, the estate of the Earl of Carnarvon, crossed *R. viscosum* with *R. luteum* to produce the ORNATUM HYBRIDS. Gowan also crossed *R. molle* with *R. viscosum* to produce Altaclarensis. Isaac Davies nurseryman, of Ormskirk, Lancs., England produced Daviesii from the same crossing. These azaleas were varieties of the VISCOSEPALUM HYBRIDS. Similar work was being carried out in Britain by Loddiges, Lee and Kennedy, Osbourne, and Michael Waterer of Knap Hill.

In 1834 Mortier sold all his seedlings to Louis Verschaffelt of Ghent who continued to hybridize. Van Cassel and Van Houtte also were leading producers of hybrids. Eventually GHENT AZALEAS was the name designated to all the hybrids in Belgium and England between 1825 and 1880. In Holland they are also known as PONTICA AZALEAS.

The number of hybrids produced was considerable. In 1850 the stud book of the Standish and Noble Nursery (now the Sunningdale Nursery) in Surrey England, reached 500 varieties. Some of these plants are still growing there. I have photographed very large plants on the property — one in particular, Unique, originating there, which is 16 feet high and 30 feet across. The Knap Hill Nursery, also in Surrey, has some very large plants. The original plant of Viscosepala is still growing there. There is no reason why plants of this stature should not grow in this country in time, provided that they are on their own roots. Our Editor, Les Hancock, has some very large plants growing on his property just west of Toronto.

Ghent azaleas are upright and tall. They broaden with age. The blooms are from 1 to 2¼ inches wide and are tubular and fragrant. They bloom from late May to mid June. The colours are from white through yellow, orange, scarlet and pink. Included are mauves, violet reds and mauve pinks. Most have undertones of a second colour. They go well together. The Ghent azaleas are very hardy, many withstanding 20 to 25 degrees below zero. They are very attractive, and an old bush in flower can stand up to any of the modern large flowered hybrids. They are very free flowering.

The oldest Ghents have latinized names and some are still available. The following is a list of plants available in Canada including the date of European introduction: Bouquet de Flore (before 1869 Verschaffelt) pink with orange markings; *Coccinea Speciosa* (1838 Seneclosure) orange red; Daviesi (1840 Davies) white with yellow markings; Fanny (syn. Pucella) carmine pink with orange markings; Nancy Waterer (before 1876 A. Waterer) large yellow; Unique (before 1850 Standish & Noble) buff orange.

If one wishes to make a collection of Ghent azaleas, particularly the older clones, and they are unavailable in Canada, I suggest writing to the Sunningdale Nurseries, Windlesham, Surrey, England, and ask for their list. The last one I saw had over 80 clones listed, all offered on their own roots. Import only by air freight.

Double Ghent Azaleas

Between 1850 and 1873 Louis Van Houtte of Belgium named several small flowered double azaleas. These were raised mainly from *R.luteum* and *R.nudiflorum* and are fragrant. Charles Vuylsteke of Belgium also introduced some doubles in 1900. Plants available today are: Bartolo Lazzari (before 1869) orange yellow; Corneille (1900 Vuylsteke) pale pink; Herione Plena (before 1871 Rinz) white and shell pink; Narcissiflora (before 1871 Van Houtte) clear yellow; Quentin Matsys (1900 Vuylsteke) dark rose.

Mollis Azaleas

Mollis azaleas are forms of the Japanese azalea *R.japonicum*, and hybrids of *R.japonicum* and the Chinese azalea *R.molle*, that is, *japonicum* x *molle* or *molle* x *japonicum*, as it is usually written. A complication arises in the fact that *R.japonicum* is also known as *Azalea mollis*, also *R.molle* is known as *Azalea sinensis*; therefore Mollis hybrids are often listed as *mollis* x *sinensis* hybrids, now *molle* x *japonicum* hybrids.

Van Houtte of Belgium bought seedlings of *R.japonicum* from P.F. van Siebold's nursery in Leiden, Holland. During the 1870's he named twenty forms, some of which are still grown today. Included are: Alphonse Lavalee (1873) orange with pink; Chevalier de Reali (1875) pale yellow; Compte de Papadopoli (1873) salmon pink; W.E. Gumbleton (1872) yellow. Ambrose Verschaffelt of Ghent and others were also at work. The Dutch in 1890 produced two varieties of *R.japonicum* with red flowers, namely J.C. van Tol and Micheline Alberts, which when crossed produced Hugo Hardijzer, another bright red.

In 1892 Koster of Holland acquired from F. de Coninck of Belgium a collection of hybrids of *molle* x *japonicum*. These are known as *R.kosterianum*, some of which are: Anthony Koster, yellow with bronze buds; Frans van der Bom, apricot to salmon; Hortulanus Witte, orange yellow, and Hugo Koster, poppy red. In 1901 he also produced Adriaan Koster, pure deep yellow, which is still regarded by many as the

finest Mollis azalea of its colour. Charles Vuylsteke of Belgium added *Elegantissima Odorata*, a small white azalea probably from *R. viscosum* to the group. Also introduced by Wezelenburg & Son were: *Lemonora* (1912) apricot yellow tinged pink, and *Queen Emma*, deep orange with salmon glow.

In 1899 Kersbergen Bros. of Holland obtained many seedlings from Dutch and Belgian sources, mostly of the pure species *R. japonicum*, but also *molle x japonicum*. They named 120, including these two well known varieties: *Babeuff* (1918) light salmon pink and *Multatuli* (1919) light orange red. At this time also, two very fine hybrids were developed from *R. japonicum forma J.C. van Tol*, namely *Dr. Oesthoek* (1920 *Oesthoek*) mandarin red, and *Mevrouw G. van Noordt* (van Noordt) salmon pink.

Now the descendants of *R. japonicum* and the descendants of the *molle x japonicum* hybrids were interbred. Some of the very finest are: *Koster's Brilliant* (1918 *Koster and Son*) reddish orange; *Christopher Wren* (*Endtz*), synonym *Goldball*, orange yellow; *Mrs. Peter Koster* (1935 *Koster and Sons*) deep red; *Spek's Orange* (1944 *Spek*) poppy red; *Dr. Jacobi* (1948 *Hardijzer*) signal red; *Snowdrift* (*H. White*) white with orange spotting

Mollis Azaleas from Seed

There is also a group of Mollis azaleas that are not clones, but seedlings which come fairly true to the colour of the mother plant. These seedling strains are given the name of the mother plant. Some examples are; *Babeuff Strain* (*Kersbergen*) light salmon pink; *C.B. van Nes* (*van Nes*) orange red; *J.C. van Tol* (*van Tol*) red. Another group of hybrids also are not clones but line hybrids produced by repeated crossing of two selected clones. An example of this are seedlings of *Koster's Brilliant*. (Editor's note: Our experience has been that these seedlings cannot be relied on to come fully true to the rich colour of the original *Koster's Brilliant Red*.)

Mollis azaleas are the first deciduous hybrids to bloom in the spring, about mid May. The flowers have a colour range from yellow, orange, red, pink to white. They have larger blooms than the *Ghent* azaleas, 2½ up to 4½ inches across for the newer ones, and all are singles. Each truss has from 6 to 12 flowers. The plants flower just as the foliage is about to break. There is not much scent. Mollis azaleas are upright to about 6 feet. They are not as hardy as the *Ghents* but have done well for me in Toronto if they are on their own roots. The advertisers in this bulletin should be able to supply many of the plants mentioned. Mollis azaleas are very easy to force into bloom in a greenhouse. Thousands of them are forced for the Easter trade each year in Europe. Some years ago I tried this through several Toronto florists. I don't think the public was ready for flowering shrubs with no foliage. I still think it is a good idea.

(Part 2 of this article will include the *Occidentalis* hybrids *Rustica Flore-pleno* and *Knaphill-Exbury* hybrids, and will appear in a future bulletin.)

RHODODENDRONS AT VINELAND

R.A. Fleming, K.S. Begg Vineland Station, Ontario

The Rhododendron family of plants and others associated with them in public and private plantings are far from a recent venture of the Horticultural Research Institute of Ontario at Vineland.

When the writer was appointed to staff in 1951, fresh out of college and still quite ignorant of many of the ornamental plants, azaleas were, and had been growing for a number of years in the then, small gardens area. Someone, obviously knew their general requirements as the soil in which they were growing was deep, rich in humus and in a well drained location. Each year, until a redesign of the gardens was undertaken, these few plants bloomed regularly each spring.

The first attempt at growing Rhododendrons came in 1952. Through the generosity of Miss Louisa Heringa of the Department of Horticulture at the Ontario Agricultural College (now one of the colleges in the University of Guelph) — a small collection of deciduous and broad leaved Rhododendrons was given to the Institute.

A bed was excavated 18 inches deep — 6" of well rotted manure was put in the bottom and the balance filled to 6 or 8" above the surrounding area with a good long fibred peat which was, at that time, quite readily available in bulk. This seems to have been an ideal setting, a northern exposure plus the peat and manure, as the plants responded with exceptional vigor and grew and flowered year after year.

The director of the Institute at that time, Dr. E.F. Palmer, realized the possibilities of Rhododendrons as ornamentals of great value for certain areas of the province. Under the terms of a Horticultural Trust set up by Dr. Palmer, a project was begun to test species and varieties of rhododendrons for their adaptability to the climate of Southern Ontario. The work was launched in 1957 — 1958 by developing a method of growing seed under greenhouse conditions. This proved quite successful and the first *R. catawbiense* seedlings grown are now large evergreen plants which create a beautiful display along the creek at the Institute in early June.

The Institute was fortunate in 1958 to acquire as a technical assistant, R. Roy Forster — a Kew garden's graduate whose knowledge of things Ericaceous added a great deal to the basic knowledge already learned. Under his guidance the Rhododendron project expanded rapidly to encompass an intensively cultivated area devoted to displaying better species and varieties and a second, a woodlot area, for the evaluation of lesser known species, species of unknown hardiness, seedlings of the Institute breeding program and selections of promise from seedlings.

At present both areas are the Institute centres of interest during late April, May and June with something new to see each day as the various species and their varieties come into flower.

Under the direction of Mr. Ken Begg, the work is continuing. At the present time, more emphasis is being placed on cultural conditions, the selection of hardy varieties, and methods of propagation.

The following hybrids have shown great promise in the Institute trials.

VEESPRITE (Introduced in 1966 by H.R.I.O. hybridizing by R.R. Forster)
(*R. impeditum* x *R. racemosum*)

A dwarf, small leaved Rhododendron ideal for a rock garden or a protected pocket in the foundation planting. The plant grows to a height of about 10", is compact in habit, with masses of rose coloured flowers in early May. It is winter-hardy only in the milder areas of southern Ontario, requiring winter protection in other southern areas.

6111 (*R. smirnowii* x Lady Bessborough) crossed by R.R. Forster. (see cover)

This is one of the first hardy yellows of the large leaved rhododendron groups. Ten selections have been made from this cross and 61111 has won numerous awards in U.S. Rhododendron flower shows. Most of the selections have large glossy pointed leaves and the average height is five feet. Further breeding will, hopefully, bring out maximum hardiness, and intensify the colour of this strain.

61081 (American x Dr. Ross) crossed by R.R. Forster

An outstanding, large leaved, red Rhododendron. The height of the plant after ten years is four feet and is not as leggy as the variety America in growth habit. The color is very clear with no blotch. Hardy in the Niagara Peninsula.

6225 (America x *R. yakusimanum*) crossed by R.R. Forster

One of the hardiest pink Rhododendrons. For three consecutive years this series has won the hardiest pink hybrid award at the Great Lakes Chapter of the A.R.S. About fifteen selections are presently being propagated for introductions as hardy pinks for the colder parts of Ontario. Plant height from 1½' to 3', compact growth with ruffled pink flowers.

Exbury Azaleas

Ten selections are being tested from this deciduous azalea series. Two reds show promise for mildew resistance as well as outstanding color. Large truss yellows, that are relatively easy to propagate and hardy to -25° show a great deal of promise. One pink and numerous orange-red shades have well formed flower heads of superior size and color and are mildew resistant.

PROPAGATING HARDY AZALEAS

D.L. Craig and R.J. Newbery Kentville, Nova Scotia

For the past 5 years, the Kentville Research Station has invited the public to come and view their plantings of azaleas and rhododendrons during the months of May and June. Each year thousands of people respond to this invitation. We have noted that during the viewing of the many plantings that the group of plants that receives the greatest attention is the Knap Hill azaleas. The cultivars Gibraltar, Brazil, Satan and others are viewed and photographed from every conceivable angle. The most common exclamation is, "How unfortunate it is that we cannot secure this kind of azalea to grow in our garden". Few realize how very simple it is to propagate these hardy, beautiful azaleas. At the Research Station propagation is a very simple procedure.

Propagation in Intermittent Mist in a Glasshouse (Figure D)

By following the procedure listed below, it is possible to produce flowering plants in 2-3 years.

Cut 3-4 inch softwood cuttings between June 20 and July 10. Use only new growth that is limber. Growth that has become hard will not root well. Remove basal leaves and reduce tip leaves to 3 to cut down on water loss from the cutting. If tip leaves are unduly long, reduce their length by one-third. Place cuttings in a rooting medium of equal parts of perlite and peat or clean sand and peat. Space the cuttings in the propagation trays 2 inches apart in the row and 2 inches between rows. Insert cuttings 1.5 inches into the rooting medium and lightly compact the medium around the cuttings. Maintain moisture with intermittent mist operated by a time clock. Supply bottom heat (70°F) with a heating cable. Cuttings root in 6-8 weeks. Pot up in a 1-2-1 (sand-peat moss-soil) mix and grow in a glasshouse or outdoor cold frame. During the winter, place plants in a cool glasshouse (50°F) or in a cool storage room (35-40°F).

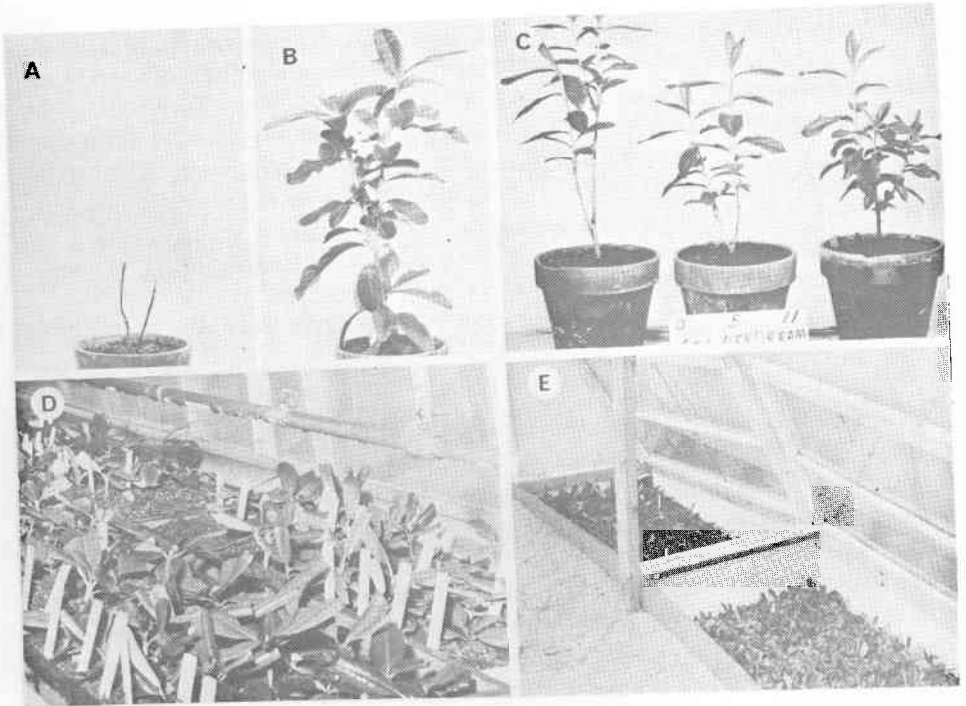
Chilling Requirements

Azaleas that are propagated in a mist line during the summer and then grown in pots in a cool glasshouse, do not require exposure to cold temperatures (40°F or lower) for normal growth (Figure B).

Propagating in the Glasshouse During the Winter Months

Propagation can continue throughout the winter in a glasshouse. Bring stock plants into the glasshouse early in September when they are still in an active state of growth. They must not be left too late because the hardening off processes will have begun. Maintain the glasshouse night temperature at 60°F and the day at 70°. Use a 16-hour photoperiod controlled by a time clock. The 60-100 watt reflector type incandescent lights are spaced 2.5 feet apart and 2.5 feet above the plants. Soft wood cuttings can be harvested every 6 weeks (Figure A). The rooted cuttings if grown under the same conditions as noted above, will furnish additional cuttings. This propagation technique makes it possible to produce a great number of plants by the time it is safe to transplant them to outdoor nursery rows.

Editor's Note: The dates given in this article for taking the cuttings apply only to Nova Scotia. The Atlantic coast has a late spring due to the cold sea current. For Quebec climate begin one week earlier, and for Southern Ontario two weeks earlier.



- A An azalea plant from a cutting taken on July 1, 1970; rooted in an outdoor solar frame and grown in a pot during the 1971 growing season.
- B A 6-month-old azalea plant from a cutting taken July 1, 1971; rooted under mist and grown in the glasshouse in a 16-hour photoperiod, a 70°F day and 65°F night temperature.
- C Azaleas photographed in glasshouse April 1970. Left — no chilling; remained in cool glasshouse until April. Center — chilled 5 weeks (Dec. 29 to Jan. 30), then returned to cool glasshouse. Right — chilled 11 weeks (Dec. 1 to Feb. 16) then returned to cool glasshouse.
- D Glasshouse intermittent mist propagation bed.
- E Solar frame for propagation of azaleas outdoors.

Per cent rooting of Knap Hill azaleas under glass-house mist line and in outdoor solar frame.

Cultivar	Glasshouse mist line		Outdoor Solar Frame	
	No. Cuttings	% Rooted	No. Cuttings	% Rooted
Brazil	14	92	6	66
Gibraltar	28	83	6	50
Golden Dream	26	78	7	85
Knap Hill White	5	100	4	75

Propagating Azaleas in Outdoor Solar Frames

Use a solar propagation frame as illustrated in Figure E to propagate azaleas outdoors. Face the solar frame north to eliminate direct sunlight on the cuttings. The materials and methods for propagating in a solar frame are identical to those outlined above for propagating in a glasshouse. The exception is that the heating cable is not required. Moisture is maintained by watering regularly and keeping the sash (Figure E) closed. From the time the cuttings are first inserted until they are rooted the frames are kept tightly closed except for watering and pest control. Leave the sash open after the cuttings have formed roots and new top growth becomes apparent. Leave the rooted cuttings in the solar frame until spring. Slatted the solar frame beds will ease the snow load on the cuttings. Poison bait will help eliminate mice that may injure the cuttings. When growth appears in the spring, pot up the cuttings or transplant them to a nursery row (Figure C).

The percentage of cuttings that root is generally higher from the glasshouse mist bed than from the outdoor solar frame because the glasshouse provides better control of light, temperature and moisture. There is also considerable variation between cultivars in the ease of rooting but 50-100% rooting can be expected (See Table following).

At the Kentville Research Station, 45 Knap Hill azalea cultivars are on test. They range in color from white, yellow, orange, pink, red to dark red. No other garden shrub can match the beauty of their flowers. Take a little care with a few cuttings and within 2 or 3 years you too will have azaleas flowering in your garden.

THE QUEST FOR A TRULY HARDY YELLOW RHODODENDRON

Leslie Hancock Mississauga, Ontario

I would like to discuss briefly in these pages the tremendous interest that has been developing during the last twenty-five years in the above subject. For our front cover illustration we have chosen the new yellow flowered hybrid No. 61111, produced at the Vineland Horticultural Research Institute by Roy Forster during the period of his rhododendron research work there. Also within the bulletin is a photo of *Rhododendron chrysanthum* which flowered at Woodland last spring on a small plant given to us by Captain R.M. Steele.

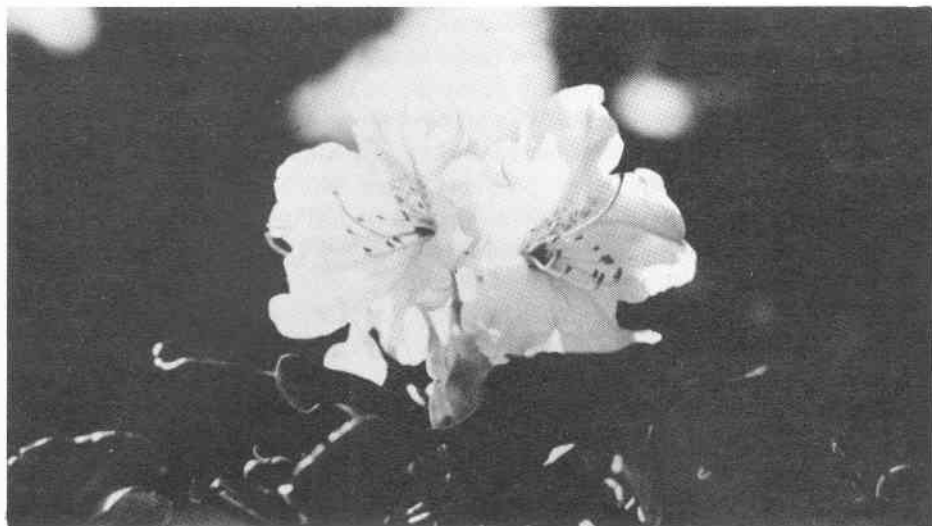
The attempt to create hardy yellow rhododendron hybrids for general garden use is not new. In his book "Rhododendrons en Azaleas", published in 1954, Herman Grootendorst of Boskoop, Holland states as follows: (liberally translated) "Already half a century has passed since the firm of M. Koster & Sons of Boskoop attempted to broaden the color range of rhododendron hybrids by bringing in the yellow colour. Yellow coloured azaleodendrons were known but these little resembled evergreen

rhododendrons. Rather they were more like azaleas. The choice of parent material at that time was fairly restricted as the yellow blooming species of western China had not yet been discovered and imported. Breeders had at their disposal the following species: a. *Rhod.caucasicum* (Caucasus) in the light yellow blooming form *luteum*. b. *Rhod.chrysanthum* (Siberia, Mandshuria and N. Japan) with small (2½ - 3 cm) blooms of light yellow colour. This species is very winter hardy but difficult to propagate. c. *Rhod.campylocarpum* (Eastern Nepal and Sikkim-Himalaya) Sir Joseph Hooker brought this species into England in 1851. This low growing shrub is one of the most beautiful yellow. The truss is composed of 6-8 blooms each about 4 cm." Later in the text comes this most revealing sentence "In 1904 Koster crossed common garden hybrids with *Rhod.chrysanthum* without result!"

It is surprising how one man's failure can so influence later developments. Though the chapter goes on to describe how many fairly good yellow hybrids were later produced, hardy enough for at least the European gardens, nowhere is there mention of any later attempt to use *R.chrysanthum*. Not only is this species one of the hardiest known evergreen rhododendrons, it also carries a clear though rather pale yellow colour. It seems strange that it and its allies have been so neglected in the quest for good hardy yellow hybrids. In a study of "The Species of Rhododendron" edited by J.B. Stevenson for the Rhododendron Society of Britain, one finds in the hardy northern Sub-series *Caucasicum* at least four species with pale yellow or near yellow flowers, one of which is *R. chrysanthum*. Also in the same work one finds listed in the tender southern *Thomsonii* Series or its Sub-series all the best yellow species, three of which have already been used in extensive breeding work. It would seem logical that these richly coloured southern species from the West China-Himalayan region should be mated directly with the hardy far northern pale yellow or near yellow species without recourse to species in other series of doubtful colour purity.

This has been done by some breeders to a slight extent but not carried far enough. Though widely separated geographically both groups appear to be happily related in regard to chromosome affinity. As evidence of this is a remark by Friedrich W. Durre of Germany in "The Breeding of Hardy Rhododendrons" (A.R.S. Quarterly Bulletin July 1972). He says "Species of the *Thomsonii* Series or at least varieties with *thomsonii* inheritance are partners of the first rank with *brachycarpum*". So now we have it; *brachycarpum* is a member of the Sub-series *Caucasicum*, and we have the authority of a leading rhododendron breeder that they are compatible. Also in the July 1972 A.R.S. Quarterly bulletin is a good colour photo published courtesy of Dietrich Hobbie, of a yellow hybrid (*R.brachycarpum* var. *tigerstedtii* x *wardii*). *R.wardii* is one of the finest yellow species in the *Thomsonii* series. It would seem that we are on the verge of an important break-through. The above sub-species of *brachycarpum* as tested in the Musila Arboretum, Finland, has proved to be one of the hardiest known rhododendrons. Doubtless our German rhododendron friends will have more to tell us in the near future.

Rhododendron chrysanthum in bloom at Woodland Spring 1972. This northern species has tough rugged cold resistant foliage and is only a few inches high in its most prostrate forms. It has already been satisfactorily crossed with *R. campylocarpum* in Europe.



DISEASES OF SEEDLING RHODODENDRONS

W.J. Brender à Brandis Carlisle, Ontario

Rhododendron seedlings, like the seedlings of many other plants, are very susceptible to the "damping-off" disease. In order to be accurate, we should state that damping-off is not a single disease caused by one fungus, but a complex of diseases giving similar symptoms on the plants, but caused by several species of the genus *Rhizoctonia*, *Pythium*, *Phytophthora* and sometimes *Fusarium*. All these fungi are living in the soil and practically all soils which support any kind of plant life are infected. In practice, we use the word "damping-off" as if it is one disease. It is a common problem on germinating seed and seedling plants throughout the temperate climate zone, particularly under greenhouse and similar confined conditions, where the moisture level and the temperature are high, thus creating favourable conditions for the disease development. Many plants can be grown from seed in outdoor seedbeds without severe loss from damping-off, but unfortunately, outdoor seeding is not possible with rhododendrons.

The symptoms of the damping-off disease are poor germination due to the killing of the germinating seed, or browning and shrinking of the stem of young emerged plants, which then fall over and die. Once the infection has taken place, there is no way to save infected plants, but it may be possible to protect the surrounding healthy plants by watering every week with either benomyl 50% wettable powder at the rate of 1 level teaspoonful, or captan 50% wettable powder at 6 teaspoonfuls per 1 gallon of water. Benomyl is likely to be more effective than captan. Keeping the temperature and air humidity low is of some help, but dry air is not favourable for the young rhododendrons.

No wonder that all growers aim at prevention instead of cure. Fortunately, this is not difficult. Natural soils are not a good medium for seedling rhododendrons in any case. Milled dried sphagnum moss is far superior for the seed germination, as well as seedling growth and it is free from the various fungi which cause damping-off. A mixture of peatmoss and sand is less satisfactory, because peatmoss from some sources may contain the *Rhizoctonia* fungus and peatmoss is very difficult to sterilize. As all soils are infected with these fungi, we should suspect any used seed flats, pots and tools as being sources of infection. Seed flats can be painted with Pentox which should soak into cracks and joints, or new flats should be used. Used plastic trays and tools can be disinfected with a strong bleach solution. Pots and tools can be sterilized by heating them in a kitchen oven at 180°F. for one hour. It is good practice to treat the seed before sowing by shaking the seed in the envelope or in a jar with a pinch of captan fungicide.

Prevention of damping-off becomes somewhat more difficult when transplanting the young plants into a mixture of topsoil or leaf-mould, peatmoss and sand. With great care, wet peatmoss, leafmould and compost can be sterilized in the oven when spread thinly on metal sheets; if the temperature exceeds 180°F., it will burn. Topsoil and sand can stand somewhat higher oven temperatures. Chemical sterilization is not practical on the small scale required by the non-commercial grower. Small bags of sterilized topsoil can be purchased. If benomyl in water is applied each week, sterilization of the soil mixture for transplanted seedlings may not be necessary, but sufficient information on the effectiveness of this treatment is not available.

Later when young plants are planted in an outdoor bed, the danger of damping-off is practically over, despite the presence of the fungi in that soil. The hardening of the stems makes them less susceptible and the air circulation causes them to dry much faster after watering, than in the confinement of a greenhouse, a cold frame or a plastic tent in the basement.

Botrytis blight is another disease which may infect young seedlings if the seed is sown too thickly and the seedlings are too crowded in the flat or pot. A grey mould is then noticeable on the leaves and stems. This disease usually spreads very fast. Drastic removal of all infected plants is necessary. Weekly watering with benomyl, as described earlier, gives control of this disease, but wetting of the foliage with plain water must be avoided once the disease has been noticed.

"Benomyl" is the common name for the ingredient of a new fungicide which has a systemic action. This means that it is absorbed into the plant sap and is then translocated inside the plant tissue. It is available to commercial growers in 3-pound bags as DuPont "Benlate" 50% wettable powder, and to home gardeners in ½-pound containers as Niagara "Pomogreen" Rose and Flower Fungicide. It may be of interest that this fungicide also gives excellent control of black spot on roses and powdery mildew on roses and other ornamental plants.

GROWING RHODODENDRONS FROM SEED UNDER ARTIFICIAL LIGHT

Ray E. Halward R.B.G., Hamilton, Ontario

Have you tried to grow Rhododendrons from seed?

I am sure many Rhodo enthusiasts have tried and succeeded but there are those who have experienced difficulties. A lot depends on the facilities you have for growing. If you have a greenhouse, usually light and humidity are no problem and raising Rhodos from seed is standard procedure. I am thinking particularly of the homeowners who have a Rhodo planting and are interested in raising more plants from seed, whether they be seeds from a seed exchange or seed collected by the individual, or purchased from a source of quality seed. If you have not tried growing under fluorescent lights, I am sure you will be amazed at the results you will obtain. I have been growing plants under artificial light for about 10 years and have had the opportunity to evaluate methods and results with this method of propagation.

Collecting Seed

Rhododendron seed should be collected when the capsules are mature, when they turn from green to brown, preferably before the capsule starts to split. When taken into a warm room, many types will open within a few days. Others may have to be opened forcibly by rubbing on a coarse screen and then separating seed from chaff with finer screens. Many seeds are ready to sow as soon as collected and an early start will mean larger plants to set out the following Spring. If you need to store seed until a later date, store in a plastic bag, sealed, in your refrigerator and they will keep viable for a much longer period of time.

Seeding

Seeding mixtures are many and variable. I have used an acid soil mix with sifted sphagnum on top and also a peat-perlite mix, ½ and ½ with sifted sphagnum on top and I do prefer the latter. The more open texture allowing more aeration grows better seedlings. I use plastic boxes for seeding as they are clean and are less likely to harbour disease. The seeding mix should be well firmed in the seed box within ½ inch of the top and topped off with a thin layer of sifted sphagnum peat or milled sphagnum, if you can get it. Sphagnum moss has a natural inhibitor against fungus diseases so less problems will be encountered. I take no chances and use captan 50W, a well known fungicide, in the dry form, and before sowing mix some with the seed. The seed is easier to see with a white covering and more evenly distributed. The seed is sown on top of the mixture and light covering of captan spread on top and watered in with a fine spray.

The boxes are labelled with date, name of seed and treatment and sealed in large clear plastic bags. They are then placed under lights on a 16 hour light day. Distance from the lights to start is about 8 inches from the seed box and after germination is complete about 12-15 inches. Germination will quite often take place in about 10 days. About a week or so later gradually remove the plastic bag.

Feeding with a liquid fertilizer can begin a week after germination. The fertilizer I have used is Ortho evergreen and Azalea plant food which is an acid fertilizer and used according to directions can provide the nourishment necessary for healthy Rhodo seedlings.

The lights used for growing are 40 watt "Duro-test Vita-lites" which I have used extensively for starting and growing and are said to be about the nearest to natural light in the artificial light field.

Transplanting to outdoors from under lights in the spring of the year, when all danger of frost is past, requires a hardening off period for about a week under a shaded cold frame.

THE START OF THE (SLIDE) LIBRARY

R. Behring Laval, Quebec

Finally I am able to report, that the first contribution of slides has been made. Mr. Hancock was the donor, he deserves to have number 1 in the Name catalog. More about the catalogs and their uses in the article titled: "Instructions & Rules".

My slides had been ready for some time, but I waited for that all important first donation. In other words I am #2. We are on our way to be able to view, learn and enjoy the other members' momentos. Keep them coming, even a small donation will help.

While waiting for slides, I had the idea for a publications library. Not all our members have the financial means to subscribe to all the other Rhododendron societies. What better way then, than to receive donations of publications from some members.

Mr. Brender à Brandis is so kind as to send some bulletins from the A.R.S.. The German Rhododendron Society (D.R.G.) and our Society have become members of one another and we have already received a large number of back copies of their publication. We should gain from their Yearbook, hopefully the German members can profit from our articles as well.

Are there any members who would like to sponsor publications of other societies? (from Great Britain etc.). Any publication booklet size would be appreciated.

The formation of a book library was considered but left for another time. How do members feel regarding this subject?

In the summer a draft was sent to the Directors outlining the operation of the slide library. To my surprise, a free hand was given in setting it up. If my ideas and rules do not turn out to be appropriate, only I am to blame. Hopefully somebody will point it out so that it can be corrected.

Now on to these instructions and rules.

In order to prevent loss of information that would have to be supplied separately with each slide, a system was devised to have all major data typed onto the slide mount, in the same order as information requested when donations are made. Additional information might be typed on the reverse side. A sample slide is shown below.

Detail	56 -TRUSS- 287		General Slide
Donor # (Name Catalog)			Catalog #
	CATAW. GRANDIFLO.		Title of slide
Location of plant	shaded/ Fence June		Season of bloom
Hardiness	H1, 10Y, 8 x 10' 36		Growing location
Age			Height & breadth

Four different catalogs will be made and loose leaves sent to members.

1. **General Slide Catalog** – constantly growing. Each sheet has 50 slide numbers followed by titles. A number will only be removed if a slide is permanently lost. Order from these sheets by individual number, making up box.
EXAMPLE: 287 (Followed by donor, title etc.)
2. **Name Catalog** – constantly growing, periodic correction of addresses. A list of donors, breeders, parks etc. and their addresses.
EXAMPLE: 56 (Followed by name and mailing address.)
3. **Subject Catalog** – periodic changes. The subject number and title is followed by numbers from the General Slide Catalog of the most appropriate slides regarding that subject. Periodic slide changes to list the best available Order by S # only.
EXAMPLE: S 5 – Alpine Rh. 27, 112, 227, 228 etc.
4. **Publications Catalog** – constantly growing. A number will only be removed on loss of publication. Order by P # only.
EXAMPLE: P17 D.R.G. 1971 Yearbook

When making slide contributions, which are greatly appreciated, please send the following information on a spare sheet to be processed by the library:

1. Name and address of donor. 2. Name of plant. 3. Location of plant (open, shaded, park, garden, orientation related to buildings, fences, shrubbery, etc.) 4. Season of

bloom. 5. Hardiness rating. 6. Age of plant when photographed. 7. Height and breadth. 8. Colour of flower or truss. Do not hesitate to donate if only limited information is known.

Mailing address for orders and donations:

(Slide) Library

744 Giroux

St. Dorothee, Laval P/Q.

Telephone (514) 689-0350

LIBRARY RULES

General

1. Only members of the Society may borrow from the library.
2. Responsibility for the loan rests with the member.
3. Material shall be requested one month in advance.
4. The loan shall be of two weeks duration.
5. First come, first served. Priority for meeting requests.
6. Material may be passed on to other members, as long as library is first notified, to get clearance.
7. Special arrangements may be negotiated with the librarian.
8. Loans are free of charge, although Postage stamp of current value (8¢ per slide box, 12¢ for publication) is requested to offset mailing expenses.

Slides

1. Request per box (36 slides) only, limit 3 boxes (108 slides)
2. Only projectors with slide cooling system are acceptable.
3. A fee of 30¢ for every burnt, torn or damaged slide will be charged.
4. All boxes are to be mailed back separately. (to prevent total loss)

Publications

Limit 2 publications per loan.

REGIONAL NOTES

HALIFAX Captain R.M. Steele

Four of the Nova Scotia members of the Rhododendron Society, Doctors Fraser Nicholson, S.C. Robinson and Ken Hall along with Commander Tony Law (The Noted Canadian Artist) volunteered their skills on Remembrance Day to completing a small Greenhouse that had been started by an aged war veteran, but who had become caught up by the advance of both years and cold weather.

Despite a very cruel winter and a long period of dry weather this summer, there appears to be quite a good bud set for bloom next spring.

The Fall colour among ground covers and ericaceous plants started much earlier than usual in the Maritimes and was probably the brightest and most prolonged for many years.

MONTREAL Professor J. Ronsley

Members of the Rhododendron Society in the Montreal area will hold their first meeting on January 12, 1973. Rhododendron enthusiasts in this area comprise a very exclusive group — that is to say, there are very few of us —, but we like to think we will be much more numerous within the next few years. At present there are some among us who have not yet planted a rhododendron but who joined the Society as a matter of potential interest and friendship. Others have become interested, possibly fanatic, within the last couple of years, and at least two members have longer experience growing the rhododendrons and azaleas that nearly every nurseryman and horticulturist in the area asserts emphatically will not grow here.

While there are certainly some beautiful gardens in Montreal, it is striking how little imagination as a general rule one finds in the choice of plant material, even for so relatively severe a climate. Perhaps the nurserymen in the area are largely responsible: the businessman dominates the horticulturist in nearly all of them, and since lilacs, honeysuckles, mock-oranges, and the like are the safest and most profitable items to sell, there is little interest in exploring further afield. Somewhat more variety can be found in Toronto-based firms, but these, to all appearance, operate as branch outlets which are of secondary importance to the home offices, with the obvious consequences. Professional horticulturists outside the nursery business also discourage the growing of "exotic" plants such as rhododendrons and azaleas. The foreman at the Morgan Arboretum, for instance, is convinced that even *Azalea Schlippenbachii* cannot be grown successfully, and other persons connected with the arboretum have displayed a remarkable lack of interest. Rudi Behring has encountered a similar lack of interest at the Montreal Botanical Gardens, where he found the small planting of rhododendrons growing without a mulch. It would appear there is a concerted effort to keep rhododendrons off the island.

Yet books on the subject all indicate that there is a considerable variety of both rhododendrons and azaleas which will thrive here, and members of the Plant Research Institute in Ottawa have written on rhododendron culture there, where it is even colder than it is in Montreal. Moreover, while my own experience is still too limited to provide much evidence of their adaptability, at least two of our members do have sufficient experience to do so. Dr. Louis Schwartz has a beautiful garden in suburban Senneville containing over a hundred deciduous azaleas up to twenty-five years old. He provides no winter protection, but the plants range up to six and seven feet tall and bloom spectacularly each year. Mr. W.H. Gilbert of Lakefield, Quebec — off the island

where the temperature sometimes drops to -40° — has had over fifty evergreen rhododendrons for over five years. He does provide winter protection, but in addition to the extremely low temperatures he has a southern exposure and a strong wind off the lake. He reports little winter damage, even to flower buds. It appears then, that rhododendrons and azaleas can be grown here successfully, and especially on the Island of Montreal where the climate is considerably less severe than throughout the surrounding area, and where also there is a quite dependable snow cover for protection, at least for the alpine and other low growing types. (David Leach has said that with snow protection plants of H-3 and H-4 hardiness would survive, and that in Finland some very tender ones thrive because they are covered with snow all winter.) We hope to prove the local professionals wrong.

At our first meeting, which will include members from the neighborhood of Quebec City and Ottawa as well as Montreal, Les Hancock will provide us with a slide lecture and, undoubtedly, the answers to innumerable questions. Also we hope to have Mr. A.R. Buckley and Mr. Trevor J. Cole of the Plant Research Institute in Ottawa with us as well. It goes without saying that we feel most fortunate in both cases, and that we expect the meeting to be small, but highly successful.

MIDLAND, ONTARIO E. Egelkraut

Getting started with azaleas and rhododendrons can be quite an experience, especially if you don't know too much about it! In 1958 I decided to start off with two azalea plants. A garden book illustration showed the construction of a pit for isolating acid soil from the alkaline soil surrounding it. I followed the instructions word for word, digging three feet down and across, put sand and cinders on the bottom and bricks on top of it. Wood planks and cinders went around the outside. The book also recommended aluminum sulphate for acidification of the soil.

The pit was located in front of a group of spruce trees with the following results: the wood planks rotted, bringing moles which didn't stop just to burrow around the planks but also liked to tunnel under my azaleas; the spruce tree roots invaded the pit and took over completely; the aluminum sulphate blackened the roots of the azaleas; in a word — Disaster! And to top it all off, my soil was acid in the first place!

Then in 1959 Mr. Ken Duncan, our Vice President, saved my life, or should I say, my azaleas. I wonder if he still remembers his informative article about azaleas in the Canadian Homes and Gardens, May 1959. The rhododendron and azalea plants are now located on the northwest side of the house, which is not really the ideal place. The plants are separated from the sidewalk by only 6" of crushed stone and a plastic strip. A regular application of ferrous sulphate is used on the stones. I don't use it on the plants. For watering only rain water is used. For fertilizing R x 30 is used, with very careful attention to timing and amount, and it seems to work very well. Some Lady Slippers were put in, pink, yellow and showy (*Cypripedium acaule*, *C. parviflorum*, *C. reginae*) which do very well indeed on rhododendron soil.

We live in a heavy snow area. Last year we had thirteen feet of snow, sometimes a lot more than that. The plants are mulched with 4" of pine needles and oak leaves which are increased in winter to 8". I enclose them with plywood panels to protect from heavy snow and extreme cold, Midland is on a peninsula in Georgian Bay. The prevailing west and northwest winds blow in from across the lake. Every year we have one or two very cold days, 20° - 25° below zero, with very dry northerly winds. In late winter parts of Georgian Bay start to freeze over, the air getting drier. So the protection really pays off.

If there is sometimes a setback, it is no discouragement, because if there was no challenge in growing this beautiful plant in a cold climate, we wouldn't have so much fun doing it.

WINNIPEG

Dr. C.V. Greenway, our first member in the Prairie provinces, writes that he would like to try a planting in North West Ontario near Kenora. We have advised him to start with the very hardiest species such as *R. dauricum*, and its hybrid P.J.M. (P.J. Mezitt). We wish him every success. After all, Kenora is below the 50th. parallel, and we have one member trying them in Reykjavik, Iceland, above the 64th. parallel Editor

BRITISH COLUMBIA Roy Forster goes to Vancouver, B.C.

We congratulate one of the founding Directors of our Society on his appointment as Curator of the newly established VanDuzen Botanical Garden in Vancouver, B.C. Roy is a graduate of Kew Gardens, London, England. He was in charge of the rhododendron breeding work at Vineland, Ontario from the time of its inception until recently when it was taken over by Kenneth Begg. One of the results of his work there was the creation of the new primrose yellow flowered rhododendron No.6111, shown on the front cover and described more fully in Kenneth Begg's article. We are fortunate in having Mr. Forster to represent our Society in B.C., which gives us Directorship representation from coast to coast. We print below his letter to the Editor

Dear Leslie:

Since I was unable to visit you and many other friends before my departure from Ontario, I think that some indication of my whereabouts and what I am doing would be of interest to the members.

I am Curator of the VanDusen Botanical Garden in Vancouver. This is a new Botanical Garden under development by the Vancouver Board of Parks and Public Recreation. The founding of the garden is an interesting history not without some drama, but in short, the 55 acre site was saved from the hands of housing developers at the eleventh hour after construction had actually begun.

This achievement is due to the vision of a public-spirited group of private citizens, The Parks Board, and the efforts of Superintendent of Parks, S.S. Lefeaux and Deputy W.C. Livingston. The result of these combined efforts is a site that offers just about everything one could ask for as a Botanical Garden. Pleasantly sloping land, good soil and magnificent stands of mature conifers all situated high above the city. The dramatic view of downtown Vancouver with the coastal range mountains beyond provide just the right blend of urbanity and naturalism. Above all, the garden is centrally located and can thus serve all the citizens of Vancouver and surrounding municipalities.

One of my first and most pleasant tasks is the organization and planting of a large collection of rhododendrons. These are being set out in groups according to hybrid background. For example all *R.griersonianun* hybrids in one general location, all *R.catawbiense* hybrids in another. Thus the visitor can go to a particular location and compare hybrids directly. An added touch might be to add one plant of the dominant species parent to each group for the purpose of comparison. This system poses some interesting problems to solve in landscape arrangement and color harmonies – not to mention tangled parentages and genetic dominance.

The natural soil is a sandy glacial till, acid, but low in organic matter. We use large quantities of leaves, and local peat-moss. An eye-opener for me was the use of a backhoe to mix the ingredients. This breaks up any hardpan and leaves the mix “chunky”. This is better than the homogenized effect produced by a rototiller. However, at the risk of seeming facetious I must add, that the method is economical only if you carry a backhoe in your inventory.

Our rhododendron collections will be quite extensive. We can be of service to Ontario rhododendrons breeders by providing pollen of high quality “tender” rhododendrons. We will also be able to offer testing facilities for new hybrids. Indeed! among the first to be planted will be some of the H.R.I.O. hybrids produced during my years at Vineland.

To return to the Bulletin, may I offer a suggestion in connection with the seed exchange? If seeds are distributed as species the parent plant should be selfed or hand pollinated with pollen from a plant of the same species. I think this is most important. Almost invariably, seed from open pollinated species gives an undistinguished lot of hybrids often inferior to the parent.

I do not wish to sound like a purist, but I feel strongly that one of the duties of our Society is to preserve our heritage of rhododendron species. It may be useful to point out that the future of wild rhododendron species is by no means secure. After all, they are used as firewood in some parts of the world.

Yours sincerely,
Roy Forster,
Curator,
VanDusen Botanical Gardens.



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Front Cover Yellow flowered hybrid bred at Vineland from *R. smirnowii* x Lady Bessborough. Hardy in the Niagara Peninsula

Above The beautiful, double pink Ghent azalea, Corneille.
The Ghents are most attractive landscape shrubs.

Below Golden Sunset One of the rich yellow Exbury hybrids

