THE HARDEST AZALEAS

OVER four thousand species and varieties of azaleas have been catalogued as being grown in America and even this number is increasing. It is obviously impossible for one individual to be familiar with the characteristics of each one of this large number of plants spread over a growing area of thousands of square miles. Consequently, this discussion will be limited to those azaleas which have proved hardy in the Arnold Arboretum at Boston, Massachusetts, an area in Zone 5 with expected winter minimum temperatures going to $-10^\circ$ F.

Azaleas are among those nursery grown plants which are frequently sold in hardiness zones where they are not hardy. People who are unfamiliar with hardiness limitations become fascinated with the "Indian" and Kurume hybrids of the South and are continually trying to grow them in the North.

In general, the azalea groups which are not hardy in the Arnold Arboretum include the "Indian", Kurume, Bobbink & Atkins Macrantha, Glenn Dale, Occidentale, Pericat, Rutherford, Satsuki and probably the Yerkes hybrids. Also lacking in hardiness would be $R$. alabamense, canescens, indicum, obtusum, occidentale, simsii and several others less well known.

Since this is a listing of the hardiest azaleas, mention should be made of the native Rhodora ($R$. canadense) which used to be in a separate genus by itself ($Rhodora$), but is now grouped with $Rhododendron$. This is truly the hardiest of the azaleas, being native far up North in Labrador, in Zone 2. The next hardiest species (Zone 3) are nudiflorum, roseum and viscosum; with arborescens, mucronulatum, schlappenbachii and vaseyi being hardy in Zone 4.

It will also be of interest to note the sequence in which these azaleas usually bloom in the Arnold Arboretum. It is as follows:

Mid-April

R. mucronulatum

Early May

R. mucronatum
Azaleas Hardy in the Arnold Arboretum

Mid-May

R. albrechtii
R. canadense
Gablev Hybrids
R. obtusum kaempferi
R. obtusum arnoldiana hybrids

R. schlippenbachii
R. vaseyi
R. yedoense
R. yedoense poukhanense

Late May

R. arborescens
R. gandavense hybrids
R. japonicum
Mollis hybrids

R. nudiflorum
R. roseum
Vuyk hybrids

Early June

R. calendulaceum
Knap Hill hybrids

Mid-June

R. arborescens

Late June

R. viscosum

This is a rare but very beautiful azalea with flowers colored a uniform rose color, without the lilac color common to so many others. It blooms in mid-May before the leaves are fully developed and the foliage turns yellow in the fall.

An extremely fragrant, white flowered variety blooming in mid-June after the leaves are fully developed. The long, gracefully arching stamens are purplish, adding to the colorful interest of this plant when in bloom. The autumn color is a dark glossy red.

Arborescens rubescens – with pink flowers. This makes a beautiful addition to the species in mid-June when they both flower.

Barely existing in a protected spot in the Arnold Arboretum, this is always recommended as one of the few azaleas with stoloniferous growth. Its very fragrant white flowers, flushed crimson, appear in late May and the plant is used in naturalistic plantings. However, it is much more at home farther south where the climate is warmer.

Everyone who has visited the Great Smoky Mountains of North Carolina and Tennessee is familiar with this orange flowered azalea blooming in early June.
It is the most showy of our native azaleas and one of the very few which can be grown in full sunshine without seriously effecting the lasting qualities of the flowers. Many of the Asiatic azaleas fade markedly when planted out in full sunshine. This species sometimes can keep its flowers in good condition for two weeks in such a situation. The flowers vary from light yellow to orange, and occasionally one finds a plant with scarlet flowers. Most of the plants in the wild are usually deep yellow to light orange.

calendulaceum aurantiacum — flowers orange to scarlet

calendulaceum croceum — flowers light yellow

calendulaceum ‘Smoky Mountaineer’

This was selected from a batch of Rhododendron calendulaceum seedlings growing in the Arnold Arboretum in 1941. It is probably a hybrid of R. calendulaceum and I have noted it in bloom for the past twenty-three years with considerable interest because of the strong, reddish-orange color of the flowers (9.R 5/11 of the Nickerson Color Fan and earlier noted as Mandarin Red (17/1) of the Royal Horticultural Society Colour Chart). The flowers are generally similar to those of R. calendulaceum in size and shape, and appear at the same time. They are of a uniform color, without a yellow blotch on the inside of the corolla. Like most R. calendulaceum plants, it keeps its color well in the sun and does not fade. It seems to be unique among R. calendulaceum seedlings.

Plants have been distributed under the Arnold Arboretum No. 22690 to over 50 cooperating individuals or organizations in the spring of 1958 for trial. Reports received from those areas where this species does well have been enthusiastic, so that the name ‘Smoky Mountaineer’ has been given this plant, to be registered with the International Rhododendron Authority.

canadense 3'  Zone 2  N.E. North America  Rhodora

The rose-purple flowers of this azalea appear before the leaves in mid-May and are a common sight in the bogs and moist places of southwestern Canada and New England in early spring. It is not an outstanding ornamental as an individual plant but is best massed and used in moist places for naturalistic plantings.

canadense albiflorum — with white flowers

ejaponicum 6'  Zone 5  Japan  Japanese Azalea

Although the large, conspicuous flowers of this species are two to three inches in diameter, they have a bad odor. Hence, it is not an azalea to use in the close proximity of the house or sitting areas. Its vigorous habit and profuse orange-red to brick-red flowers have made it valuable to the hybridizer.
mucronatum 6–9' Zone 6 Japan Snow Azalea

The white, fragrant flowers of this plant are excellent. They appear in early May, and the plant is frequently known, incorrectly as *R. ledifolia alba*. The foliage is evergreen in Pennsylvania, but here in New England it is not completely evergreen, nor is it completely hardy except in a very protected place. Where it can be grown, it is often spoken of as the only evergreen azalea this far north. There are one or two varieties of this species barely existing in the Arnold Arboretum, but should not be considered for general planting here. The comparatively new variety 'Delaware Valley White', a seedling of *R. mucronatum*, may be slightly more hardy than the species.

mucronulatum 6' Zone 4 China, Korea, Japan Korean Rhododendron

Rosy-purple flowers of this hardy azalea are among the first to appear in the spring, usually in mid-April. In Seattle, it may bloom the latter part of January. However, the early blooming flowers can be killed sometimes by late frosts, so here at least it might best be planted with a northern exposure.

mucronulatum 'Cornell Pink' – This is a truly excellent variety with soft pink flowers containing none of the rosy-purple color of the species so objectionable to many people.

nudiflorum 6' Zone 3 Eastern U.S. Pinxterbloom

A common plant in the fields and woods of the eastern United States often referred to as ‘Wild Honeysuckle’ it has light pink and white flowers in late May at a time when the leaves are half grown. The flowers are odorless.

obtusum kaempferi 5–10' Zone 5 Japan Torch Azalea

The flowers of the Torch Azalea have been considered the most vividly colored of all Japanese introductions made by the Arnold Arboretum. The flowers are profusely borne—fiery red, before the leaves. It does better in partial shade for in full sun the flowers quickly fade. It is just hardy this far north, and even here an occasional severe winter may kill the flower buds.

roseum 9' Zone 3 Northeastern North America Roseshell Azalea

Similar to *R. nudiflorum* except that the flowers are bright pink. Both are found growing together in the same places in the wild but the flowers of this are fragrant, those of *R. nudiflorum* are not.

schlippenbachii 15' Zone 4 Korea, Japan Royal Azalea

The pink flowers of this excellent shrub are often 3 inches in diameter and appear in mid-May just before the leaves. They have about the largest flowers of any azalea species hardy in the Arnold Arboretum. An added point of interest is the yellow, orange and crimson autumn color of the foliage every fall.
Above: *Rhododendron flavum* from Europe; *R. japonicum* from Japan; *R. nudiflorum* from North America (left to right). Below: *Rhododendron arborescens* growing well at the Royal Botanic Gardens, Kew, England.
vaseyi 6-9' Zone 4 North Carolina Pinkshell Azalea

Another of the few azaleas to have light red autumn foliage, this pink flowering azalea does best in moist soil situations, although it will grow and flower well in drier soils. It is one of the very best of the native azaleas, blooming in mid-May before the leaves are fully developed.

viscosum 9-12' Zone 3 Eastern United States Swamp Azalea

Often considered the last of the azaleas to bloom in New England, this fragrant, white flowered shrub is usually found growing in swampy areas. It is especially valued for its late blooming flowers.

viscosum rubescens — with pink flowers. This makes an excellent addition to any clump of the white blooming species in late June when they flower.

eyedoense 5' Zone 5 Korea, Japan Yodogawa Azalea

Not reliably hardy every year in the Arnold Arboretum, this cyclamen-purple double flowered azalea is conspicuous in mid-May. It does very well in Philadelphia and even lower New York, but in New England it is sometimes injured by winter cold.

yedoense poukhanense — This is a lower growing, single flowered variety, with flowers of the same difficult-to-use cyclamen purple color as the species. It is always unfortunate to observe it planted against a red brick wall, for the color of the flowers and the brick do not go well together.

Hybrids

Note: those marked with an asterisk (*) are judged to be among the best as ornamentals.

\( \times R. \text{ gandavense} \) 6-10' Zone 4 Hybrids Ghent Azaleas

This is a bright flowered group of hardy azaleas blooming in late May, some of which have proved hardy as far north as central Maine where the winter temperatures reach consistent lows of \(-20^\circ\) F. They are crosses of several species and hybrids, starting back as far as 1820, with \( R. \text{ calendulaceum, nudiflorum, flavum} \) and \( \text{viscosum} \) all mixed up in their parentage.

Of some 90 named varieties, the following 62 are growing in the collections of the Arnold Arboretum:

**Altaclarensis** — tall and upright in habit, flowers late, single, white with an orange blotch

*Ariel* — flowers late, single, white with a yellow blotch

*Aurore de Rooighen* — tall and upright in habit, flowers single, violet red with a yellow blotch, \( \frac{2}{3}'' \) in diameter
‘Barthole Lazzari’ – tall and upright in habit, flowers late, double, orange-yellow, 2” in diameter

*‘Beaute Celeste’ – tall and upright in habit, late bloom, flowers late, single, orange red

*‘Bijou des Amateurs’ – tall and upright in habit, flowers late, single, red with yellow blotch

*‘Bijou de Gentbrugge’ – flowers late, double, white, flushed with pink

*‘Bouquet de Flore’ – tall and upright in habit, flowers late, single, 2” in diameter, dark rose, white stripes, yellow blotch

*‘Charlemagne’ – upright in habit, flowers 2’ in diameter, single, marigold-orange with yellow blotch

*‘Coccinea Grandiflora’ – flowers orange red, single with blotch of orange yellow

‘Coccinea Major’ – flowers blood red

*‘Coccinea Speciosa’ – flowers single, tangerine orange

*‘Compte de Flandre’ – tall, upright in habit, flowers late, single, 2” in diameter, orange red with orange blotch

*‘Corneille’ – flowers double, pink, late bloom

‘Crimson King’ – flowers deep crimson

‘Cuprea Ardens’ – flowers orange red with orange blotch

‘Cuprea Pulchella’ – flowers orange red

*‘Cymodocee’ – flowers single, 2½” in diameter, a uniform salmon red, blooms late

*‘Daviesi’ – tall upright in habit; blooms late, flowers single, 2¼” in diameter, pale yellow to white blotched yellow

‘Decus Hortonum’ – flowers single, 2’ in diameter, an excellent pink with an orange yellow blotch

‘Delicata’ – flowers single, flushed salmon with an orange blotch

**‘Dr. Chas. Baumann’ – flowers single, carmine with yellow blotch and frilled, blooms late

‘Electa’ – flowers single, scarlet and orange, large yellow flare with small orange line

*‘Emma’ – flowers single, salmon pink with orange yellow blotch

*‘Flamboyant’ – tall and upright in habit; flowers single, reddish orange, blooms late

‘Flora’ – tall and upright in habit; flowers single, 1½” in diameter, orange red

‘Général Chasse’ – flowers scarlet

‘General Trauff’ – flowers light violet rose shaded with orange
Above: Craggy Gardens on the Blue Ridge Parkway, Asheville, N.C. This is the habitat of *R. catawbiense*. Some of the plants are 200 years old. In this same general area *R. calendulaceum* is native. Both these species bloom here between the middle and the end of June. Below: *Rhododendron* 'Smoky Mountaineer', probably an *R. calendulaceum* hybrid.
**'Gloria Mundi'** – tall and upright in habit, flowers single, frilled, $2\frac{1}{2}$" in diameter, late mid-season bloom, orange with saffron yellow blotch

**'Graf Alred von Niepperg'** – flowers salmon spotted with yellow, edged red

**'Graf von Meran'** – tall and upright in habit, late mid-season bloom, flowers double, red

*’Guilder Rose’* – flowers single, yellow flushed apricot, yellow blotch

**‘Heroine Plena’** – flowers double, white flushed with pink

**‘Heureuse Surprise’** – tall and upright in habit; blooms late, flowers single, $1\frac{3}{4}$" in diameter, white shaded rose

**‘Hollandia’** – flowers double, orange with yellow, early mid-season bloom

*’Ignacea Nova’* – tall and upright in habit, flowers single, $\frac{3}{4}$" in diameter, orange red with yellowish orange blotch; blooms late

**‘Joseph Baumann’** – flowers red with yellowish orange blotch, blooms late

*’Josephine Klinger’* – tall and upright in habit; flowers single, $1\frac{3}{4}$" in diameter, salmon pink, blooms late

*‘Laelia’* – flowers pink and orange

**‘Louis Hellebuyck’** – flowers dark rose with white stripes, yellow blotch, blooms late—probably the same as ‘Bouquet de Flore’

**‘Minerva’** – tall and upright in habit, flowers single, $2\frac{1}{2}$" in diameter, light salmon orange, flushed yellow, blooms late

**‘Madame Gustave Guillemot’** – flowers red, $\frac{3}{4}$" in diameter, fringed

*‘Mrs. Harry White’* – flowers white, suffused violet red, blooms late

**‘Nancy Waterer’** – flowers large golden yellow, late mid-season bloom

**‘Narcissiflora’** – tall upright in habit, flowers double, $1\frac{3}{4}$" in diameter, sulfur yellow, sweet scented

*‘Nosegay’* – flowers single, pink

‘Oscar I’ – flowers salmon rose paling to center of flower, orange blotch

**‘Pallas’** – tall and upright in habit, flowers single, $2\frac{1}{4}$" in diameter, flushed orange red, with orange yellow blotch, early mid-season bloom

**‘Prince Henri de Pays-Bas’** – tall and upright in habit; blooms late, flowers single, $2\frac{1}{4}$" in diameter, yellow orange and orange red

*‘Pucella’* – flowers deep purplish rose with bronze blotch, single

‘Queen of England’ – flowers deep rose, orange blotch

**‘Raphael de Smet’** – tall and upright in habit; late mid-season bloom, flowers double, $1\frac{3}{4}$" in diameter, pale rose

**‘Rembrandt’** – tall and upright in habit; flowers single, $1\frac{1}{2}$" in diameter, dull violet red, blooms late

**‘Roi des Feux’** – tall and upright in habit, flowers single, red, $2$" in diameter, blooms late
Rhododendron vaseyi in the Arnold Arboretum.
"Sang de Gentbrugge" - tall and upright in habit; blooms late, flowers single, 1 1/2" in diameter, orange red

'Taylor's Red' - flowers red

'Unique' - tall and upright in habit; late mid-season bloom; flowers single, 2" in diameter, yellowish orange

'Versicolor' - flowers light salmon, deeper stripes, yellow blotch, blooms late

'Volcano' - flowers unusual scarlet red; tight balls of flowers

"Vulcan" flowers orange red blotched with yellowish orange

'Willem III' - tall and upright in habit, early mid-season bloom; flowers single, 2 1/2" in diameter, orange red with yellowish orange blotch

R. obtusum arnoldianum Hybrids

These originated in the Arnold Arboretum about 1910 as chance seedlings—crosses between R. obtusum amoenum and kaempferi, but are more hardy than R. obtusum amoenum. None of them have proved popular because of the violet tinge to the violet red flowers.

'Briarcliffe' - flowers violet red, single, 1 1/2" in diameter

'Cardinalis' " " " " 1 1/2" "

'Dexter's Pink' " " " " 1 1/2" "

'Early Dawn' " " " " 1 1/2" "

'Mello-Glo' " " " " 1" "

'Mossieanum' " " " "

R. obtusum kaempferi Hybrids

These are crosses of R. obtusum kaempferi and an azalea clone called 'Malvatica'. The hybrids are slightly more hardy than the Kurume azaleas. Of some 20 clones, the only ones alive now in the Arnold Arboretum are:

'Carmen' - flowers single, 2 1/2" in diameter, red

'Charlotte' - flowers dark orange red

* Cleopatra - flowers bright pink, single, 2 1/2" in diameter

'Favorite' - flowers deep pink, fringed

'Fedora' - flowers single and deep pink

'Gretchen' - flowers single, reddish violet with a darker blotch

'H. Whitelegg' - flowers deep rosy red

'Lakme' - flowers pale red

'Lilac Time' - flowers bright lilac

'Norma' - flowers single, 2 1/2" in diameter, violet red with lighter throat and darker blotch

'Orange Beauty' - flowers bright orange

* Othello' - flowers single, 2" in diameter, red and considered better than 'Hinodegiri'
Willy’ – flowers bright pink
‘Zampa’ – flowers violet red
These are just barely hardy in Boston and certainly are not reliably hardy every year.

**Gable Hybrids**

These were mostly originated by Joseph B. Gable of Stewartstown, Pennsylvania, beginning in 1927. Nearly 50 clones have been named by Gable, most of them being azaleas with purple or purplish colored flowers, because he used *R. yedoense poukhanense* in much of his hybridizing work. He also used *R. obtusum* varieties as well, especially *kaempferi*, but other species were also used by him too. Many of these crosses have proved hardy in Boston, but because of the purple flowers of many, they have not been too well accepted in New England, even though they are hardy. They do not retain their foliage completely throughout the winter acting in this respect as *R. yedoense poukhanense* does by dropping all but a very few of the tip leaves by mid-winter.

Of 47 clones accredited to Gable, the following 23 are growing in the Arnold Arboretum:

*‘Big Joe’ – flowers single, 2½” in diameter, mallow purple—a vigorous growing variety
‘Boudoir’ – flowers single—violet red, 1½” in diameter
‘Caroline Gable’ – flowers 1½” in diameter, hose in hose, red or neyron rose in color, with darker blotch
*‘Claret’ – flowers single, 1½” in diameter, dark red, dwarf
*‘Elizabeth Gable’ – a spreading shrub with single red flowers, 2½” in diameter, with darker blotch
‘Ethelwyn’ – flowers single, pink. This variety is not as hardy as some of the others
‘Herbert’ – flowers hose in hose, reddish violet with darker blotch, 1½” in diameter, plant of medium height but spreading
‘Kathleen’ – flowers clear pink
‘La Lumiere’ – flowers single, violet red (claret rose) and 1½” in diameter. It is similar to ‘Cherokee’.
*‘Louise Gable’ – flowers semi-double, salmon pink, 2¼” in diameter
‘Marjorie’ – flowers a bright orchid color
*‘Mary Dalton’ – flowers hose in hose, orange red, 1½” in diameter
*‘Mildred Mae’ – flowers reddish violet (orchid purple), single. The plant is compact in habit of growth.
‘Miriam’ – flowers single, violet red (neyron rose), 1½” in diameter
‘Nadine’ – flowers a light clear pink
‘Old Faithful’ – flowers single, reddish violet with darker blotch, 2¼” in diameter
‘Purple Splendour’ – flowers are a deep purple color hose in hose, similar to those of ‘Herbert’

*‘Rosebud’ – flowers are double (17 petals), 1 3/4” in diameter and a soft rose color. This makes a low, dense shrub.

*‘Rose Greeley’ – a spreading low, dense shrub, with flowers hose in hose, 2 1/2” in diameter, fragrant and white

‘Shell’ – flowers a light shell pink

‘Springtime’ – a tall shrub with single violet red flowers 2” in diameter

*‘Stewartstoniana’ – flowers a bright clear red and the winter foliage colors a wine-red

*‘Watermelon’ – flowers pink

Knap Hill Hybrids

These were mostly introduced in England after World War II and are various crosses of R. molle, calendulaceum, occidentale × molle and arborescens. Two of these species, R. molle and occidentale are not reliably hardy in the Arnold Arboretum, and so it might be expected that some of these hybrids might be unsatisfactory also if grown as far north as Boston.

Over 145 varieties have been listed, originating at four or five places—Waterer’s Knap Hill Nursery, the Goldsworth Old Nursery (Slocock), Lionel de Rothchild’s Estate at Exbury—all in England, and some have come from the Ilam Estate in Christchurch, New Zealand. It is quite a group of large flowered, beautiful azaleas and when one sees the color of some of the varieties it is easy to agree that for color combinations in the flowers this group contains some of the best ornamental azaleas there are available today. However, some are just not reliably hardy as far north as Boston. Others are. One can not say that the entire group survive winter temperatures of −10° to −20° F.

One thing I have noticed is that many of these varieties have such large flowers that they wilt appreciably in the hot sun of late May and early June so it might be advisable to plant them where they obtain some high shade. The flowers of some varieties are four inches in diameter.

As yet these azaleas have not been given a complete trial at the Arnold Arboretum. Only 21 varieties are being grown at present, all of which have come through the last two winters in a wind swept nursery fairly well. However, some other varieties have died out completely and even some of those listed below have been partially injured by the winter. Hence more complete trials with more varieties are needed to determine which varieties are reliably hardy here, but it is safe to assume that all the Knap Hill or Exbury hybrids are not hardy in this latitude. Those that are growing are:

‘Aurora’ – flowers salmon pink with an orange flare, often blushed and striped rose
‘Balzac’ – flowers a good red with flame markings on the upper petals; fragrant
‘Bazaar’ – flowers brick red
‘Brazil’ – flowers rather small with a slightly frilled edge, bright tangerine red, darkening with age
‘Coronation’ – flowers salmon pink
*‘Debutante’ – flowers 4” in diameter, carmine pink with an orange blotch, often pink striped
*‘Eisenhower’ – flowers fire red with orange blotch
‘Exbury White’ – flowers white with orange yellow blotch
‘Firecracker’ – habit stiffly upright and young foliage bronze, flowers a currant red
*‘Gibraltar’ – large fringed rich orange flowers flushed red, bud a deep crimson orange
‘Ginger’ – deep orange carmen buds, flowers a brilliant orange overlaid with a pinkish flush, deeper lines down each petal
*‘Glowing Embers’ – flowers orange red with an orange blotch
‘Golden Eye’ – flowers deep vermilion with a bold orange blotch spreading over most of the top petals; foliage tinted bronze
‘Golden Horn’ – flowers large, deep golden yellow fading to ivory, tipped and flushed rose
*‘Golden Sunset’ – flowers yellow with an orange blotch, 3” in diameter
‘Kathleen’ – flowers pale salmon with an orange blotch, burning easily in full sunshine
‘Lady Rosebery’ – flowers small, dull scarlet with a dull suffused orange blotch
‘Marion Merriman’ – flower trusses of 18–30 flowers, chrome yellow flushed Indian yellow with a large cadmium orange blotch
‘Pink Ruffles’ – flowers pink, orange blotch
*‘Rocket’ – flowers reddish apricot, orange blotch
*‘Sun Chariot’ – flowers golden yellow, 3½” in diameter

**Mollis Hybrids**

It is apparent from the record that Boston is just not the place for these hybrids to grow. Of the 140 or more clones over 50 have been tried at the Arnold Arboretum over the years and of these 50 only 17 are now alive—mostly young plants recently obtained within the last few years. It is not fair to assess these few. Because of lack of hardiness, greater susceptibility to mildew and borers, graft union troubles and possibly other ailments, this group of hybrids is not reliable in this area. Although they may be classed as hardy in Zone 5, they apparently do not grow well here, possibly for reasons other than hardiness.

**Rustica Flore Pleno Hybrids**

These are crosses between double, Ghent hybrids and Mollis hybrids, possibly
also crossed with *R. japonicum*, mostly introduced from Belgium over sixty years ago. All have double flowers. We have grown most of the 11 clones, but the ones now alive are:

- **'Aida'** – double flowers, pale rose with darker margins on upper petals; 1\frac{1}{4}" in diameter
- **'Byron'** – double flowers, white, 2\frac{1}{4}" in diameter
- **'Milton'** – double flowers, white to blush pink, 2\frac{1}{4}" in diameter, fragrant
- **'Norma'** – double flowers, reddish orange, 1\frac{1}{4}" in diameter
- **'Phidias'** – double flowers, light orange yellow, 1\frac{1}{4}" in diameter
- **'Phebe'** – double flowers – sulfur yellow, 2" in diameter

**Yerkes-Pryor Hybrids**

The parents of these hybrids include the Kurume azaleas and sometimes *R. obtusum kaempferi*. They are the work of two men in the United States Department of Agriculture who at first were interested in obtaining evergreen azaleas for florists. Thirty or more clones have been named and are still being tried out in various places, but it was expected that these would only be hardy in the same area where Kureumes can be grown. However, it is of interest to note that the three varieties—‘Eureka’ (hose in hose and lavender pink); ‘Polar Bear’ (hose in hose and white); and ‘Guy Yerkes’ (hose in hose and salmon pink) have been able to withstand the last three winters out-of-doors in the nurseries of the Arnold Arboretum. It will be interesting to see what happens to these plants when temperatures go below −5°F as they sometimes will.

**Vuyk Hybrids**

Introduced by the Vuyk van Nes Nursery of Boskoop, Holland, these hybrids originated about 1921. The objective was to make hardy evergreen azaleas. Most of the dozen hybrids have been tried at the Arnold Arboretum but all except ‘Palestrina’ (which has been called ‘Wilhelmina Vuyk’ incorrectly) and ‘Vuyk’s Scarlet’ (a deep cherry red) have died. These clones have done fairly well although they still can not be listed as dependably hardy evergreens year in and year out, in this climate. The white flowers of ‘Palestrina’ are 2\frac{1}{4}" in diameter and are conspicuous against the green foliage when they open in mid to late May.

The 158 azaleas listed in this article are only an extremely small percentage of the 4000 supposedly being grown in America today. These are the hardiest of the group but there are others which might also have been included. Growers in the northern part of the United States would do well to look this group over first before they include other varieties for selling in areas where the winters are comparative with those at Boston, Massachusetts.

**Donald Wyman**

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