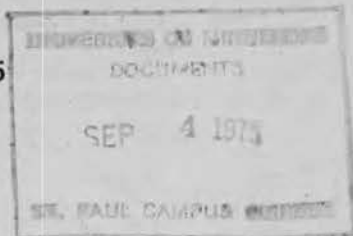


3 Arboretum Review



ARBORETUM REVIEW NO. 26—1975
 LEON C. SNYDER



Broad-leaved Evergreens

Conditions in Minnesota and adjoining states are not favorable for broad-leaved evergreens. Particular attention must be given to soil preparation and to planting these evergreens where they will receive adequate snow cover and winter sun protection. Most species and cultivars that can be grown here are low, spreading shrubs or vines. The following are being observed in the arboretum:

***Andromeda glaucophylla* (Bog-rosemary).** This low shrub grows about 18 inches high. It is native in acid, sphagnum bogs. Its narrow, evergreen leaves are covered underneath with whitish hairs, especially when young. The bell-shaped flowers are pink and are produced on recurved pedicels. This plant must be grown on acid soil and does best on soils high in organic matter. Watering during dry periods is essential.

***Arctostaphylos uva-ursi* (Bearberry).** This species is circumpolar, occurring on acid soils throughout the northern states and Canada. We have had success with it only on soils having acid sand or acid peat added. On sufficiently acid soils, the bearberry makes an excellent ground cover, forming a dense carpet with small, dark green, leathery leaves. White to pink, bell-shaped flowers form in late May and early June. Red berries persist into winter.

***Asarum europaeum* (European Wild Ginger).** The leaves on the European wild ginger are small and heart-shaped, hiding the reddish flowers that form in early spring. Plants are growing well in our shaded wild flower area and under lath shade in our ground cover area. This is a non-aggressive ground cover useful for covering small areas.

***Buxus microphylla koreana* (Korean Boxwood).** The Korean form of the littleleaf boxwood has been much harder than is the species or the Chinese form, *B. m. sinica*. Under our conditions, plants grow about 18 inches high and may have a spread of 2 feet. The plants grow in full sun or in partial shade. It is best to plant them where they will receive winter shade and, preferably, snow cover. The small, green leaves turn an olive green in the fall, but turn green again in the spring. Occasionally, winter burn necessitates some spring pruning. The cultivar 'Winter-green' keeps its green color in the winter. The Korean boxwood makes an attractive, small, clipped hedge, or it can be grown as an informal shrub.

***Buxus sempervirens* (Common Boxwood).** Several cultivars of the common boxwood have been tested, including: 'Abilene,' 'Navicularis,' 'Truedwarf,' and 'Vardar Valley.' None have been hardy. A selection obtained from Detroit, Mich., was planted in the arboretum in 1964. This plant is now about 30 inches high and appears about as hardy as the Korean. A hedge of this selection shows some dieback in our hedge collection, but no worse than the Korean boxwood. This selection retains a good green color in winter. Further testing is needed before it can be recommended for general planting.

***Calluna vulgaris* (Heather).** Several cultivars of this species were planted in a shaded area near the azalea planting. The plants were protected by inverting a bushel basket filled with leaves over them in late fall. They grew and bloomed for several years, but they were never thrifty. Gradually, they have died. The plants may have done better in full sun; further testing is desired to determine whether any of the heathers can be grown successfully in our climate.

***Chamaedaphne calyculata* (Leatherleaf).** This is another native of our northern sphagnum bogs. The small, leathery leaves and the small, white, bell-shaped flowers make this an attractive small shrub. Our plants, transplanted in our bog area, are doing well. As with most members of the heath family, this shrub needs an acid soil and ample moisture.



European Wild Ginger

Japanese Spurge



***Chiogenes hispida* (Creeping Snowberry).** It is a low, creeping plant with small, alternate leaves. The flowers are small, white, and borne singly in the axils of the leaves. The fruits are small, white berries. This plant requires a moist, acid soil.

***Daphne cneorum* (Rose Daphne).** This is a delightful low shrub with fragrant, pink flowers borne in flat clusters. It requires a cool, well-drained soil and may need some winter protection. It is an ideal plant for a rock garden.

***Epigaea repens* (Trailing Arbutus).** This is a low, creeping evergreen native on acid, sandy soils. The large, leathery leaves and the pale pink, very fragrant flowers make this a most desirable plant. Unfortunately, it is difficult to transplant and requires an acid soil. Plants grown from seeds or cuttings should be used rather than attempting to move established plants.

***Euonymus fortunei* (Wintercreeper).** Numerous cultivars are of this species. Only the creeping forms survive Minnesota winters, and these should be

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used only where they will receive winter shade and good snow cover. The following cultivars are doing well in the arboretum: 'Campell,' 'Coloratus,' 'Gracilis,' 'Longwood,' and 'Minimus.' The leaves of 'Coloratus' turn a purplish-green color in the fall. 'Minimus' and 'Longwood' have small leaves, and the leaves of 'Gracilis' are variegated.

Gautheria procumbens (Wintergreen). A low evergreen with short, upright stems, it grows from creeping rhizomes. The leaves and red berries have a decided wintergreen flavor. This plant is native in acid soils and prefers some shade.

Hedera helix (English Ivy). Most cultivars are lacking in hardiness and should be grown only as house plants. Two strains, the Ogalalla from Nebraska and a Balkan strain, are quite hardy when planted where they receive no winter sun and have a dependable snow cover. Plants have survived for 5 years on the north side of our house and for 10 years in the arboretum when planted on the north edge of a natural woodlot. Further testing is needed to determine the usefulness of these hardier strains.

Ilex spp. (Holly). Several evergreen hollies have been tried, and none has proven hardy. The species tested were *I. crenata*, *I. glabra*, and *I. opaca*.

Kalmia latifolia (Mountain Laurel). This beautiful native of our eastern forests has not proven reliable. We have had difficulty getting plants established in the arboretum, and this may be part of the problem. The plant needs an acid soil and should be planted where it will have protection from the winter sun. A plant, dug from a native stand in Pennsylvania, is doing well in our yard and appears to be well-established.

Kalmia polifolia (Swamp Laurel). This native of our northern, acid bogs is fully hardy. However, it is difficult to transplant from native stands and should be grown either from seeds or rooted cuttings. The leaves are narrow and folded under, exposing a band of white hairs. The small flowers are a rose-purple and are produced in the axils of the upper leaves. An effort should be made to hybridize this with the Mountain Laurel.

Ledum groenlandicum (Labrador Tea). The habitat is similar to that of the Swamp Laurel. The narrow leaves fold under, exposing a band of brownish-white hairs. The flowers are small, white, and produced in terminal racemes. This plant needs an acid, moist site, high in organic matter.

Leucothoe fontanesiana (Drooping Leucothoe). This broad-leaved evergreen has been tried and found to be completely lacking in hardiness.

Mahonia aquifolium (Oregon Grape). The Oregon grape is a popular ornamental in milder climates. The bright yellow flowers in May and the grapelike clusters of fruits add seasonal interest. Under our conditions, this species has not proven satisfactory. It kills back to the snowline each winter.

Mahonia repens (Creeping Mahonia). This species is similar to the Oregon grape and, because of its low, creeping habit, is much easier to protect over winter. Being native in the foothills of Colorado and the Black Hills of South Dakota, it is probably much hardier than is *M. aquifolium*. Plant it where it will receive protection from the winter sun and will receive a dependable snow cover.

Mitchella repens (Partridge-berry). This small, creeping evergreen plant has terminal white flowers in June and red berries in the fall. The plant needs a moist, shaded site and a soil high in organic matter. It is also a fine plant for a terrarium.

Pachystima canbyi (Canby Pachystima). This low evergreen with small, hollylike leaves makes an excellent ground cover. Winter burn can occur if plants are exposed to the winter sun; however, if plants are carefully located, such injury can be largely avoided.

Pachysandra terminalis (Japanese Spurge). This is a good ground cover plant to use on the north side of buildings or along the edge of a woods where snow cover will protect the evergreen foliage from the winter sun. Small, white flowers are produced in the early spring on terminal spikes. These are followed in the fall by white berries.

Polypodium virginianum (Common Polypody). This low, evergreen fern makes an excellent ground cover in shade. In nature, it is usually found growing in crevices of a rock or on decaying tree trunks. If grown in soil, the soil should be high in organic matter. The plant spreads by rhizomes, but individual leaves are erect and about 6 inches tall.

Polystichum achrostichoides (Christmas Fern). This fern produces leathery, evergreen leaves that radiate out from the center, forming a rosette. Planted at the base of a tree or stump, it makes a charming addition to a wild flower garden.

Rhododendron spp. The rhododendrons and azaleas are covered in a separate arboretum review. Only a few of the evergreen species have sufficient hardiness to recommend them. With protection from the winter sun, the following are usually satisfactory if attention is paid to soil acidity: These are listed in the order of their bloom.

Rhododendron 'PJM'

Rhododendron carolinianum (Carolina Rhododendron)

Rhododendron catawbiense (Catawba Rhododendron)

Rhododendron maximum (Rosebay Rhododendron)

Rhododendron micranthum (Manchurian Rhododendron)

Rhododendron smirnowi (Smirnow Rhododendron)

Vaccinium vitis-idaea (Mountain Cranberry). This is a low evergreen not more than 6 inches tall. It makes a fine ground cover on acid soils. The flowers appear in late May and are bell-shaped and pink to red. The fruits are dark red.

Vinca minor (Periwinkle). This low, creeping evergreen ground cover does well in shaded areas where there is good snow cover. The flowers are blue to white.

Yucca filamentosa (Spoonbill Yucca). This is a most attractive plant. Tall spikes of pendulous, white, lilylike flowers appear in late June and early July. This species should be planted in well-drained soil in full sunlight, preferably where it will receive good snow cover.

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