

New and Outstanding Plants

Vancouveria hexandra

northern inside-out-flower

Berberidaceae

Wilbur L. Bluhm

Northern inside-out flower, *Vancouveria hexandra* (Hook.) Morren & Decne., a Pacific Northwest native, is an attractive, reluctantly deciduous, herbaceous, groundcover for shade and semi-shade sites along the Pacific coast. It grows naturally in coniferous woods west of the Cascade Mountains.

Its common name, inside-out-flower, comes from exposure of the ½-inch long stamens and pistil by the sharply reflexed sepals and petals. The sepals and petals are both white, but the petaloid sepals are the larger and showier of the two. The nodding flowers, in open panicles above the foliage, are each about a half-inch wide.

The foliage, however, is the quality making this plant a useful landscape subject. Some people say it's airy, or fern-like. Compound leaves stand up to a foot high on wiry stems which emanate from ground level. Individual leaflets are up to 2 ½ in. long and nearly as wide, often ovate in shape overall. The leaflets are quite unique, having three rather indistinct lobes with shallow sinuses.

The light green color of the foliage gives the plant a fresh appearance from spring until the leaves drop in late fall or winter. Leaflets sometimes show a bronzing, adding further interest to the plant. Leaflets turn dull yellow a few weeks before falling, commonly in December in Oregon's Willamette Valley. It may be nearly evergreen in warmer climates of its range.

Vancouveria hexandra spreads by slender woody rhizomes. Planted at 1 ft to 18 in. on center, it may provide solid cover after little more than a year or two of growth in an organic soil. In a soil without considerable organic matter, it may take several years to fill.

Vancouveria hexandra is useful west of the Cascade Mountains in the Pacific Northwest and along the coast to Southern California if irrigated. Everywhere it may benefit from occasional irrigation during dry summer periods. It is tolerant of temperatures to 0F (-18C) or lower, especially with snow cover.

This plant is useful as a groundcover under deciduous as well as conifer trees. It has potential to emerge afresh in spring through fallen leaves, and not be laden with leaves as would evergreen groundcovers. Tree roots seem to be no problem. It can also be grown among rhododendrons and other shrubs. The only observed problem is root weevils. Adults feed on the foliage and larvae, presumably, on the root system.

Interest in *V. hexandra* is spreading. There is reported interest in its use in Midwestern U.S.A. and it is soon to be featured in a *Wall Street Journal* article.

Nursery propagation is by seed or division. Fresh ripe seed is sown in the fall and overwintered in flats or pots. Divisions in early spring, planted in pots with an organic soil mix or directly planted into beds, has been successful. Rhizome cuttings might be tried. Smith (1992) reports "unrooted portions of the slender rhizomes can be planted as cuttings in pots or flats, with no rooting hormone."

Two closely related species, *V. chrysantha* E. Greene, golden inside-out-flower, and *V. planipetala* Calloni, redwood inside-out-flower, are native to southwest Oregon and the northern coast of California. Both are evergreen and considered by some to be more desirable as ornamentals. The golden-inside-out-flower, showiest of the three in flower, has the reputation for being difficult in cultivation, but the shiny and leathery-leaved redwood inside-out-flower is very attractive and nearly as easy as *V. hexandra*. The useful range of redwood inside-out-flower appears not to be as far south in California as that of *V. hexandra*.

Vancouveria is closely related to *Epimedium* and has similar foliage, but different flowers. Overall they are similar in appearance. Both are in the barberry family.

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Itea virginica

Virginia sweetspire

Saxifragaceae

Tamara Buchanan

A semi-evergreen shrub standing 1 to 2 m tall with a 1 to 2 m spread. It has a dense, compact form and a moderate growth rate. The leaves are simple, elliptic, serrulate, bright green, and glabrous in an alternate leaf arrangement. The inflorescence is a fragrant, white, raceme appearing in June to July. *Itea virginica* is a low maintenance plant and can be used as a background plant, foliage accent, specimen, barrier, hedge, or around a pool. It has a multi-trunk habit, is valued for its fall color and is pest-free. It will grow in acidic, organic, heavy, wet or fertile soils. It's adapted to full to half sun exposures and heat and humidity. It is propagated by cuttings. It is especially valued for its incredible winter interest.

Heuchera cylindrica

no common name

Saxifragaceae

Tamara Buchanan

A herbaceous perennial standing 10 to 15 cm tall with a 15 cm spread. It forms a clump and grows slowly. The leaves are simple, reniform, lobed/incised, light green, and smooth. The inflorescence is a white raceme appearing in June to October. *Heuchera cylindrica* is a low maintenance, drought tolerant, and pest-free plant and can be used in the landscape as a foliage accent, groundcover, shade, border, container, hillside or rock garden plant. It will grow in sandy, organic, rocky, light, dry, well-drained, sterile, or fertile soils and will withstand full to half sun, dust, and heat. It is propagated by seed, cuttings, and division.

Polygonum vacciniifolium

Himalayan fleece flower

Polygonaceae

Tamara Buchanan

A semi-evergreen herb standing 14 cm tall with a 1 m spread. It grows as a mat with a moderate growth rate. The leaves are simple, oblanceolate, entire, and smooth in an alternate leaf arrangement. The inflorescence is a light to dark pink raceme appearing in June to November. *Polygonum vacciniifolium* [syn. *Persicaria vacciniifolia*] is a low maintenance plant and can be used as a foliage accent, shade, cascade, or poolside groundcover. It has outstanding fall color and is pest-free. It will grow in acidic, organic, light, heavy, wet, well-drained, or fertile soils and will withstand shade to full sun, dust, heat, and humidity. It is propagated by seed, cuttings, and division.

Abutilon palmeri

no common name

Malvaceae

J. Michael Evans

A herbaceous perennial native to San Diego County (California), Baja, California; Sonora, Mexico; and Arizona standing 1 m tall with a 1 m spread. It grows fast as a dense sub-shrub. The leaves are simple, cordate, blue-grey green, pubescent with incised margins and net venation. The inflorescences are yellow axillary or terminal panicles appearing in April to October. It is monoecious with light brown, non-edible, capsule fruits appearing in the summer. *Abutilon palmeri* is a low maintenance plant tolerating alkali and drought. It can be used as a foliage accent, border, hedge, hillside, poolside, container, or rock garden plant and is pest-free. It will grow in sandy, light, rocky, dry, or well-drained soils and will withstand full sun and heat. Hardiness is to 28F with some damage to growing tips. Plant will not tolerate severe freeze. It is propagated by seed and cuttings.

Magnolia denudata

Yulan magnolia

Magnoliaceae

Roger Gossler

A deciduous tree standing 10 to 15 m tall with a 10 m spread. It grows fast when young. The leaves are simple, obovate, entire, green, and smooth in an alternate leaf arrangement. The cream-colored inflorescence is terminal, fragrant, and appears in March to April. It is monoecious having pink, non-edible, spindle-shaped fruits, 10 cm long appearing in August to October that contain 1.5-cm black seeds surrounded by orange pulp. *Magnolia denudata* is pest-free and can be used as a multi-trunked or specimen tree. It will grow in acidic, sandy, clay, organic, moist, or well-drained soils and will withstand half to full sun. It is propagated by seed, layering, budding, grafting, and cuttings.

***Magnolia stellata* 'Jane Platt'**

pink star magnolia

Magnoliaceae

Roger Gossler

A deciduous tree or shrub standing 5 m tall with a 3 to 4 m spread. It has a bushy form and a slow growth rate. The leaves are simple, narrow, oblong, green, and smooth in an alternate leaf arrangement. The pink inflorescence is terminal, lightly fragrant, and appears in March to April. It is monoecious having pink, non-edible, spindle-shaped fruits appearing in August to September containing 2-mm, black seeds surrounded by orange pulp. *Magnolia stellata* 'Jane Platt' is valued for its fall color and as a multi-trunk specimen tree. It can be grown in containers. It will grow in acidic, sandy, clay, organic, moist, well-drained, or fertile soils and will withstand half to full sun. It is propagated by layering, budding, grafting, and cuttings.

***Athyrium filix-femina* 'Fancy Fronds'**

dwarf fimbriate lady fern

Dryopteridaceae (Aspleniaceae)

Judith Jones

Deciduous; 6 to 8 in. The parent to these sporlings has delicately dissected pinnules set closely together and embellished with fimbriate edges and tips. The uncrested parent has yielded two distinct dwarf forms as well as some larger setigerate forms with flabellate tips. The dominant form that occurs from spore is an exquisite lightly fimbriate congested form with a demure apical crest.

This named form is offered as a strain since spore production is not 100% true to the parent. *Athyrium filix-femina* cultivars are not known for their reliability from spore although there are exceptions. The variations that occur from the 'Fancy Fronds' parent have all been of a superior caliber and I am pursuing further selections. One other selection already made is a form with highly developed pinnae and apical tips which I call the Frilly fronds strain. (Zones 3-8)

Osmunda regalis 'Purpurascens'

purple-stemmed royal fern

Osmundaceae

Judith Jones

Deciduous; 4 to 6 ft. This is a fern of unparalleled mimicry with its sterile fronds copying the locust tree leaves and its fertile panicles echoing faded astilbe seedheads. In the spring there are curious woolly caps on the fiddleheads which detach as the unfurling progresses. This English form has purply-red new growth which is maintained on the stipe throughout the year. The thick woody rhizomes overlap and interlace, forming a dense spongy mass. Given ample root moisture the fronds will stand exposure to sun and wind with impunity.

This fern comes true from spore with few complications. Young plants respond readily to rapid potting on for maximum size in minimum time. Young sporlings may be kept from going dormant to gain growing time but once they are beyond 4-in. pot size it is best to let them have a winter dormancy. (Zones 3-9)

Dryopteris dilatata 'Jimmy Dyce'

Jimmy's upright broad buckler fern

Dryopteridaceae (Aspleniaceae)

Judith Jones

Evergreen; 2 ft. This fern was just known at the nursery as an upright broad buckler fern until The British Pteridological Society (BPS) Centennial meeting in London in 1991. On that occasion the BPS *Pteridologist* editor, Martin Rickard, and I determined that it should bear Jimmy Dyce's name in honor of being its discoverer.

Here in the Pacific northwest 'Jimmy Dyce' is gaining a reputation as a top notch landscape plant. Because of its stiffly erect habit and its attractively domed caudex complimentary plantings may be meshed right up to the crown and still be clearly visible. The frond has a 3-D carved character due to the dichotomous nature of having the surface concave, curled forwards and convex, curled back at the same time. (Zones 5-9)

Dryopteris lepidopoda

sunset fern

Dryopteridaceae (Aspleniaceae)

Judith Jones

Evergreen; 1-2 ft. This is one of the most exciting ferns I brought back from England in 1991. Superficially one might say this fern bears a similarity to *D. wallichiana* while sharing the sunset tints of *D. erythrosora*. Actually *D. lepidopoda* has new fronds which begin flushing in orange-gold tones and the frond surface is lightly polished. The ovate frond is bipinnate with blunt, oblong, minutely serrate-edged pinnules and the pinnae apices echo the long acuminate fused frond apex with tips curled up like the waxed mustache of melodrama villain. The basal pinnae droop earthwards while the pair above seem undecided whether to cast their lot up or down. I truly believe this fern will become a garden classic. (Educated guess: Zones 6-9)

Fallugia paradoxa

Apache plume

Rosaceae

James F. McConnell

A small, densely branched shrub with small scale-like, gray-green leaves. It can grow to 7 ft in height and takes on an informal mound shape. The flowers are white and similar to potentilla. They appear from May through August with the heaviest bloom being in May. The flowers give way to pinkish-purple feathery plume-like seed heads. It is as attractive in seed as it is in flower.

It will tolerate dry sandy or gravelly soil, but requires good drainage. Propagation can be accomplished by seed or softwood cuttings. Seed requires no pre-treatment. Rooting of softwood cuttings can be enhanced by a quick dip in an IBA solution of 1,000 ppm. (Zone 5)

***Forestiera pubescens* [syn. *Forestiera neomexicana*]**

New Mexico privet or desert olive

Oleaceae

James F. McConnell

This plant is native to the Southwestern U.S. from central California to Colorado and Texas and northern Mexico. It grows in lowlands and along river banks, but in relatively dry locations. The foliage is gray-green and privet-like. Tiny yellow flowers cover the branches in April and May before the leaves emerge. The main ornamental value would be as a privet substitute in droughty areas. It could be trained as a small multi-stemmed tree. Plants can be either male, female or bisexual. Those plants that produce seed have blue-black fruits which ripen in early fall.

Seed germination can be enhanced by cool moist stratification. Softwood cuttings root easily and rooting is hastened by a quick dip in IBA at 1000 ppm. (Zone 5)

***Genista tinctoria* 'Royal Gold'**

royal gold common woadwaxen or royal gold dyer's greenweed

Fabaceae

James F. McConnell

Native to Europe and Western Asia. Its golden yellow flowers are borne in terminal and axillary racemes. It flowers from June to September but primarily in June. This is an erect plant of about 2 ft in height with fine-textured foliage. It would be considered a sub-shrub in Minnesota because it dies back to the crown each winter. It would be winter hardy in western Washington and Oregon. It does well in poor soils and dry areas.

Softwood cuttings root easily in June and July and rooting can be enhanced by treating the 4- to 5-in. cuttings with a quick dip in a 1000 ppm IBA solution. (Zone 4)

All three of these plants are xeriphytic. Many regions of our country experience droughty and poor soil conditions. These three plants should be quite usable in many of these sites.

PSEUDERANTHEMUM LAXIFLORUM

drividrivi

Acanthaceae

Fred D. Rauch

The genus *Pseuderanthemum*, a member of the acanthus family (Acanthaceae), includes about 60 tropical, cultivated, ornamental, greenhouse shrubs. *Pseuderanthemum laxiflorum* (drividrivi) is a round-headed shrub to about 6 ft or more high and as wide from Fiji with purple flowers produced much of the year. The opposite, dark green, entire, pointed leaves are 2 to 5 in. long. The plant can be grown in full sun or light shade in most well-drained soils in frost-free climates. It is useful as a specimen shrub or for color mass in the landscape. This plant was distributed to commercial growers in Hawaii by the Horticulture Department in 1986 and has become a popular plant in the landscape.

A series of studies including propagation, nutrition, light, and the use of growth regulators have been conducted on this plant. It roots readily from terminal cuttings in 3 to 4 weeks without root-promoting chemicals. It responds to relatively heavy feeding in container production and flowers best in high light. It responds well to growth regulators, but the rate must be reduced below the normal recommended rates.

A number of trials have been conducted to determine the potential for *Pseuderanthemum laxiflorum* as a flowering potted plant. These have resulted in the following recommendations:

Propagation: Direct stick 6- to 8-in. terminal cuttings, with a hard pinch, 3 per 6-in. azalea container. Remove from the mist after rooting (usually 3 to 4 weeks).

Medium: A well-drained mix, such as a 1 peat : 1 perlite (v/v) mix amended with Osmocote, Micromax, dolomitic lime, and superphosphate.

Growth regulator: Drench with chlormequat (Cycocel) at 100 mg/pot in 300 ml of water when the new shoots are 0.5 to 0.75 in. long. Top dress with 1 tsp Osmocote 14-14-14 per pot.

Environmental conditions: Maintain under relatively high light conditions. Can be finished in 3 to 4 months.

Treatment with the growth regulator results in a more compact plant, purple color to the new leaves, and a more showy inflorescence. The plant will continue to bloom under low light interior conditions for several months or until all the initiated flower buds have opened.

Trials are continuing to determine the potential of this plant as a low color mass in the landscape through the use of growth regulators to maintain a low, compact growth habit.

Arbutus andrachne

Greek madrone, Turkish arbutus, andrákla, eastern strawberry tree
Ericaceae

Warren G. Roberts

An evergreen tree standing 8 to 15 m tall with a 10 to 20 m spread. It grows slowly eventually forming a rounded crown. The leaves are simple, ovate, 12 cm long, dark green above, pale beneath, smooth, and usually entire with net venation. The white-pale green flowers are borne on a terminal panicle appearing in the spring and have a honey-like fragrance. It is monoecious with red, edible berries appearing in the fall to early spring. *Arbutus andrachne* is a low-maintenance plant tolerating some alkali and drought. Once established it requires no irrigation and can be used as a background plant, screen, specimen, or hillside plant and for shade. Red berries provide fall and winter color. Pest-free and tolerant, it will grow in acidic, alkaline, sandy, silty, clay, rocky, light, dry, well-drained, sterile, or fertile soils with an optimum pH of 7.0. Withstands half to full sun, dust, and heat and is hardy to about 0F. It is propagated by the 2 mm, ivory seeds (moist stratification for 2 months) and semi-hardwood cuttings. The most beautiful feature of this tree is its very smooth bark. Each fall the red-brown bark peels and drops away in small scrolls to reveal the pale green bark beneath, which becomes white then tan to brown and finally red. It's like a smaller and easier-to-grow, pest-free version of *A. menziesii*. The natural range of this species is the eastern Mediterranean including southeast Europe, Asia Minor and the Crimea. This tree is not new to horticulture, but is difficult to find in commerce.

Cneorum tricoccon

spurge-olive, olivilla
Cneoraceae

Warren G. Roberts

An evergreen shrub standing 1 m tall with a spread of 1.5 m. The growth rate is moderate, producing a rounded crown and natural hedge form. The leaves are simple, entire, dark green, smooth, 2 to 3 cm oblong, and arranged with an alternate leaf arrangement. The yellow flowers are solitary, axillary appearing in spring to mid-summer with no noticeable fragrance. It is monoecious having a red, non-edible schizocarp fruit appearing in fall to winter. Seeds are 4 mm long and brown. *Cneorum tricoccon* is a low maintenance plant and is alkaline, drought and somewhat saline tolerant. Once established it requires no irrigation. It can be used as a pest-free background plant, low screen, border, hedge, hillside, and possibly as a poolside rock garden, or container plant. Grows in alkaline, sandy, silty, clay, rocky, light, dry, well-drained, sterile or fertile soils with an optimum pH of 7.0. Tolerates half to full sun, dust and heat and is hardy to about 10F. It is propagated by seed and semi-hardwood cuttings. The best use of this shrub is as a low hedge for dry gardens, especially in part shade or full sun. If placed correctly, it should need little or no pruning. Its bright yellow flowers and red fruit add subtle but attractive color for most of the year. Medicinally, it is one of the best rubefacients, all parts are rich in tannin, and all parts are "revulsive" and "violently purgative". In the wild this is a shrub of the western Mediterranean from the Italian and French Riviera west into Spain.

Urginea maritima

sea squill, cebolla-albarrana

Liliaceae

Warren G. Roberts

A herbaceous, perennial standing 2 m tall (in bloom) with a 1 m spread growing from a very large tunicate bulb. The leaves are narrowly ovate, 10 cm wide and 40 cm with parallel venation, long, entire, dark, glaucous green, and smooth arranged in a basal whorl. The white, pink, or pale yellow flowers are borne on a narrow raceme in late summer. They are monoecious and produce dry, tan, non-edible capsules (three-valved, loculicidal) in the fall containing 1 mm, black seeds. *Urginea maritima* is a low maintenance plant and is alkali, saline, and drought tolerant. Dramatic for background, specimen, container, or hillside plant use, it is also pest-free. It grows in alkaline, sandy, silty, clay, rocky, light, heavy, dry, well-drained, sterile or fertile soils with an optimum pH of 7.0. Tolerates half to full sun, salt spray, smog, dust, and heat and is hardy to 20F. Propagation is by seed, division, and bulb scales. This is an excellent substitute for *Eremurus* in Mediterranean climates and makes a perfect tall accent for the perennial border. Leaves are produced in the fall through spring, deciduous and dormant in summer, flowers in late summer when leafless. The top of the bulb should not be buried. The plant contains medicinal glucosides that have been used as a cardiac stimulant, diuretic as well as a rat poison. Its natural range extends from the Portuguese shore and along the Mediterranean to Syria, also the Canary Islands and South Africa.

Conradina verticillata

Cumberland Mountain rosemary

Lamiaceae (Labiatae)

Chris Santana

An evergreen shrub with a moderate growth rate to 30 to 45 cm tall and 30 to 45 cm wide. The leaves are simple, linear, entire, arranged in whorls. The pink-lavender inflorescence is arranged as a whorl and appears in June. Its fragrance is similar to rosemary. *Conradina verticillata* is a low maintenance plant useful in rock gardens. It grows in well-drained soils and tolerates half to full sun and heat in Zone 5. It is propagated by cuttings. This plant is a threatened species and a federal permit is required to propagate and sell it interstate or overseas. It may only be produced asexually.

***Hydrangea macrophylla* 'Pia' PINK ELF™**

pink elf™ miniature French hydranga

Hydrangeaceae

Chris Santana

A deciduous shrub standing 40 cm tall with a 40 cm spread. It grows fast into a rounded form. Leaves are simple, broadly ovate, green, serrate with pinnate venation, and arranged in an opposite leaf arrangement. The inflorescence is a rich pink cymose corymb appearing in July to August. The fruit is a capsule containing 3 to 5 mm seeds. *Hydrangea macrophylla* 'Pia' Pink Elf™ is a low maintenance

plant useful as a foliage accent or in borders. It grows in acidic, organic, moist or well-drained soils, and tolerates half to full sun in Zone 7. It is propagated by cuttings. It maintains its rich pink flowers in acidic soils. It is a branch sport of *H. macrophylla*.

***Phlox subulata* 'Candy Stripe'**

candy stripe creeping phlox

Polemoniaceae

Chris Santana

An evergreen shrub standing 15 cm tall with a 1 m spread. It grows moderately fast into a low-lying mat. The leaves are simple, linear to subulate and green arranged in an opposite leaf arrangement. The inflorescence is 2 to 3 cm wide, non-fragrant, white with pink brush strokes and appears in April. *Phlox subulata* 'Candy Stripe' is a low maintenance groundcover. It tolerates full sun in Zone 3 and is propagated by cuttings. This plant came from Woodbank Nursery in Tasmania, Australia where it is known as *P. subulata* Tamandnagalei.

Bupleurum fruticosum

shrubby hare's ear

Apiaceae (Umbelliferae)

Barbara Selemon

The first plant I would like to introduce is *Bupleurum fruticosum*, commonly named shrubby hare's ear. It is a broad-leaved evergreen plant native to Southern Europe and the Mediterranean region. First introduced to England over 300 years ago, it is still rare in European and in U.S. gardens. Hardy to Zone 7, it grows into a rounded globe that reaches an ultimate diameter of 6 to 8 ft. It is fast growing, achieving up to 3 ft of new growth per year. It has handsome, shiny blue-green foilage. New leaves are duller and lighter in color becoming dark, shiny green with age. The leaves are long, entire, strap-like, and 1 to 2 in. wide with a prominent midrib, held on glaucous stems. In summers, nearly all terminals carry umbels of yellow flowers up to 4 in. across, a soothing contrast to the blue-green foilage. *Bupleurum fruticosum* is drought and salt tolerant. It prefers a well-drained soil, as well as some shade. Winter shade is a real benefit in protecting it from sunscald on bright sunny days when the temperature dips below freezing. It responds very well to pruning which is required when grown in containers to keep the gangly, sprawling new stems in bounds. It has no known pest nor disease problems. In the landscape it can be useful in a variety of settings, such as, sunny banks, dry shade, rockeries, underneath larger shade trees, as well as in the mixed perennial border. Its color contrasts well with darker greens and purples, as well as with white-foliaged plants. In the shadier areas, it provides a bolt of color when in bloom. It is easily propagated by seed, which the self-fertile plants produce in abundant quantities. A 1-month cold-moist stratification period hastens and evens germination. Vegetative propagation using softwood to semi-hardwood cuttings is also successful. Using a liquid hormone, Dip 'n Grow 10 : 1 ratio, in a pumice/peat medium under mist produced good results last September. The fast growth rate of *B. fruticosum* makes it both a quick-selling container plant as well as a rapidly

maturing plant in the new landscape. I highly recommend *B. fruticosum* as a new plant for the nursery trade, especially one in which unusual shrubs and/or drought-resistant plants are favored.

***Nothofagus antarctica* 'Puget Pillar'**

Puget pillar Ñirre

Fagaceae

Barbara Selemón

The species, *Nothofagus antarctica* is a southern beech, native to the volcanic peaks of Chile as well as to the arid landscapes of Patagonia and Argentina. It is a deciduous tree of medium size, with alternating 1 in. long broadly ovate leaves. The leaves are set in a singular plane, which produces a layered, distinctive look that is particularly handsome on younger trees. More mature specimens develop an open habit which makes them look sparse overall. The Washington Park Arboretum has selected a clone that is broadly fastigate, with dense, upward-growing foilage. This new clone retains many of the characteristics of the species, but it has a denser, fuller crown and upright form, making it a more desirable tree for the urban landscape. Mature trees can reach a height of 40 to 50 ft with an 18 to 20 ft spread. This clone came to the Washington Park Arboretum in 1951, received as three trees from Hilliers' Nursery in Winchester, England. One of these original clones, as well as cuttings made from the original, are part of the arboretum's collection. These mature trees have never suffered serious crotch or crown damage, even during the heavy, wet snowfall experienced during various winters in Seattle. In the U.S., 'Puget Pillar' is best adapted to the Western sections of Zone 7 or above. Open sunny areas are recommended; however, 'Puget Pillar' will tolerate shade. Supplemental irrigation is not necessary, except for extreme drought conditions. British specimens of *N. antarctica* are known to do poorly in calcareous soils; therefore, we can assume that it would respond adversely to similar situations in the U.S. No serious pest problems have occurred on 'Puget Pillar' in the arboretum; however, the grounds staff have reported finding small populations of leaf hoppers in late summer. *Nothofagus antarctica* 'Puget Pillar' is propagated by semi-hardwood cuttings, taken in late summer, using a liquid hormone, Dip 'n Grow 10 : 1 ratio, in a peat/pumice medium under mist. It is fairly fast-growing, averaging 2 to 3 ft of growth per year in the container nursery. It would make a suitable tree along roadways or in small spaces requiring narrow foilage. I highly recommend it for the urban landscape.

***Magnolia virginiana* (evergreen selection)**

evergreen sweet bay

Magnoliaceae

Arthur Lee Jacobson

An evergreen shrub or tree standing 10 to 15 m tall with a 5 m spread. It grows moderately into a large shrub or slender, arching small tree. The leaves are simple, alternate, elliptic with entire margins, glossy green above and matte whitish-blue beneath. The flowers are borne singly, rosy-lemony fragrance, creamy-white appearing in June, July, and September. *Magnolia virginiana* is a useful as a

foliage accent, background, multi-trunk, pest-free specimen plant. It grows in acidic, loam, clay, wet, organic, moist, fertile soil and tolerates full sun. It is propagated by seed and grafting. It is commonly grown as nondescript, usually deciduous, seedlings. Evergreen selections are much superior ornamentals. 'Henry Hicks' is the most familiar evergreen clone. Much selection and research on propagation is still needed.

Sorbus sargentiana

Sargent mountain ash

Rosaceae

Arthur Lee Jacobson

A deciduous tree standing 5 to 13 m tall with a 5 m spread. It has a broad, upright form and a slow growth rate. The leaves are compound with 9 to 11 leaflets, sharp-toothed, dark-green above and pale beneath in an alternate leaf arrangement. The berries are tiny and produced in enormous clusters of sometimes more than 200. The inflorescence is a fragrant, creamy-white corymb appearing in May. *Sorbus sargentiana* is a low maintenance plant and can be used as a foliage accent, specimen, pest-free plant with red late fall color. It will grow in acidic, organic, heavy, clay, fertile, or well-drained soils. It's adapted to full sun exposures. It is propagated by seed budding and grafting. Sargent Mt. Ash was introduced from west China to the U.S. in 1908 by E.H. Wilson. Overall, it is very rare and little known. It is unlike familiar *Sorbus* species, as it bears large, red, sticky buds as in *Aesculus hippocastanum*, and its foliage is so bold as to remind one of members of the Juglandaceae.