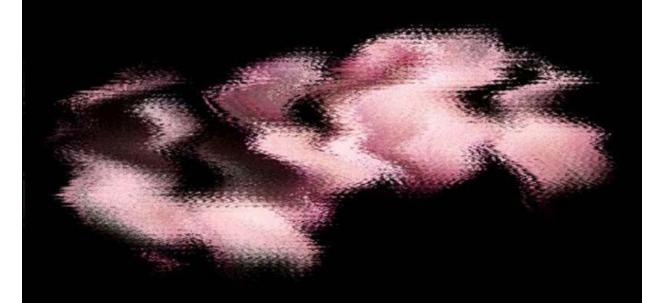
Open Registration of Cultivars



International Register of Ornamental Plant Cultivars

Book I: June 2015

www.cultivar.org

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Cover Image: RED KOUSA WIND by Larry Hatch, a digital art piece based on the first Cornus kousa 'Rubra' seen at the Raulston Arboretum in the 1980's. It looks spectacular in a 36 to 60 inch print on a wall.

When the OROC project began in the Spring of 2015, we had hoped for a steady progress rate with reasonable terms and resources to remedy the missed cultivars in the woody, perennials, interior, and conifer worlds. And by "missed" we do not mean just the Registrars, database content developers, but also societies who claim to communicate current, valid knowledge of best landscape plants and authors whose books languish on shelves without a hint to the best cultivars in our prettier, greener, genetically complex, and more durable world of horticulture. Would you buy a car or computer or camera based on a review guide book sitting on a book store shelf published in 2011? Plants are no different. Internet plus intelligence plus diligence rules the world. L.H. Bailey and Krüssman and Linneaus would have loved this technology and the promptness of delivery.

Being clueless and blissfully naive is not something we do well at cultivar.org of the New Ornamentals Society. We have a bizarre, perhaps unhealthy lust for knowledge of all new plant variations, pretty or ugly or yet to be determined, and want to know it all and share it all. Our "own the genus" theme is one we speak about often at our meetings. "They have 13 cultivars" and we go out and learn about 42 of them; or in some cases 87 or 149. Often our estimates of the world literature on the cultivars of a genus are off by dozens or sometimes hundreds from the 19th century to present. Abutilon proved to carry over 500 cultivars, Juniperus 823, Phlox closing now on 1000, and Coleus now well over 1500. You would never know these facts by the contents of most reference manuals and plant encyclopedia known today.

This is not easy work but it is fun work. Hundreds of hours reading old catalogs, emailing developers and collectors, and sorting websites (often with translation) are needed to find the whole truth. If we can do better we will. If we cannot do better...we praise, link to the owner of the genus, and hope you follow them. And OROC will look regularly to see if we can do better to keep everyone on their toes, motivated, and supremely honest. We are not selling "comprehensive" encyclopedias or guru manuals with full knowledge they are 30% complete at best or in happy denial of this world's vast, complex offerings of massively capable, charming, and shockingly elegant new cultivars. They collect big royalties, cash checks, sign books, and don't care.

**OROC at Cultivar.org** is not just another name database, joining 31 existing ones, some awesome but most worthless phone books without numbers, signifying nothing, teaching even less and glued together with the taxonomic intelligence of a fruit fly. We describe plants, note their origins and histories, landscape merits, unique traits or combinations that are new, their nomenclatural complexities, mailorder source links, and when possible provide an image or link to one.

**OROC Book I** was planned for Fall 2015 but the sad state of affairs forced us to consider a quicker, **demonstration project** to just begin to remedy years of neglect in cultivar rosters and a sad state of affairs of horticultural monographs where a publisher dictates content based on printing and shipping costs.

Some of the registration notes here are short with just a link and abbreviated description and these are known as FORMAT ONE, our preliminary, proactive style record. You can always link to read more. The FORMAT TWO and FORMAT THREE records are longer and more complete with more links and history. More and better data in the more complete formats is coming and if you would like to volunteer, please contact us at ornamentals@lycos.com.

Initially we have accepted new cultivars back originating or introduced after 2010 with some allowances for rare material and historical registrations.

The **OROC Declaration and Principles** are found at the end of this book with much more material on processes, registration tools, data formats, advanced user portals, free use of content and logos, cultivar counts, and other research at our cultivar.org website. The Principles are very likely to have been expanded, amended, and updated by the time you review this document. The cultivar.org portal is the only current, authorized reference.

Thanks to Mark Summers, Jill Dustin, Jan Lee, and Mr. C, and scores of other volunteers and new partners for making this Book 1 happen and well before the original plans. Scores more from our consortium at large contributed ideas, processes, and critiques of our early documents and work product.

# **REGISTER BOOK I (June 2015)**

ABEL001 - Abelia TWIST OF ORANGE™ 'sPg-3-069' (Hawksridge Farms) - 4-5 ft. tall x wide. Leaves margined coral-orange at first, later more gold-margined, chimera 15-30% surface, very bold as such. Flowers near white, floriferous. Developed by the Southern Plant Group or sPg.

<u>ABEL002 - Abelia SUNNY CHARM® 'MINDU01' (Plantarium.nl)</u> - 50-110cm tall x wide, dense, subglobose. Flowers dark cream to light yelow, throat also purplish-pink to pale violet on side, main throat cream with fine golden reticulations, very odd colors for this genus, buds distinctly violet to purple on exterior, calyx more copper to reddish. Selected by Pepinieres Minier, Eur. PBR 35714.

ABEL003 - Abelia x grandiflora LUCKY LOTS (Concept Plants)

ABEL004 - Abelia x grandiflora LADY LIBERTY 'Keylib' - habit compact, dense. Flower corolla white tinged pink, calyx pale dusky pink. Leaves red in fall, showy. Cold hardy to -20 deg. C. Eur. PBR to breeder Klemens Keijzers. Plantipp.eu, accessed 4.25.2015.

ABEL005 - Abelia PINK PONG® 'ABENOV41' - 1.5-2.0m tall x 1.2-1.5m wide. Flowers rich lavender-pink to violet in bud opening to light pink or lavender-pink with darker markings of golden-orange in throat, calyx more light pinkish-orange to purplish-copper, highly floriferous over a long period. Selected by INRA/SAPHINOV, a 2004 cross of A. schumannii 'Bumblebee' x A. grandifolia 'Semperflorens, sapho.fr, EU PBR pending, accessed 5.31.2015.

ABEL006 - Abelia x grandiflora GOLD TOUCH® 'BMRGOLD' - 60-100cm tall x 60-80cm wide. Twigs orangish to red, showy, contrasting well. Leaves golden-yellow, orange and copper tints in new tips, similar but stronger tones in fall. Flower near white to pale pink. Selected by Andre Briant in cooperatin with Pepinieres Minier.

ABIE001 - Abies concolor 'Buay Wuay' (Buchholz Nursery)

ABIE002 - Abies fraseri 'Green Scout' (Brotzman's Nursery) - narrowly columnar

ACER001 Acer davidii VIPER® (Minier Nurseries) - an interesting bark, mostly pale greenish-white, faint stripes

ACER002 Acer rufinerve GREAT STAR® (Minier Nurseries)

ACER004 - Acer 'Sugarflake' (A. griseum x A. saccharum)

ACER005 - Acer (Rochester Group) 'Shaved Chocolate' (Songsparrow Nursery, a Klehm introduction)

ACER006 -Acer palmatum x pseudosieboldianum ARCTIC JADE (Iseli Nursery, their own hybrid)

ACER007 - Acer palmatum DRAGON TEARS™ - Habit weeping. Leaves very bright red, deeply lobed, not classicially incised or dissected. Selected by Ray and Cindy Jackson. Heritageseedlings.com, accessed April 2014.

ACER008 - Acer 'Ample Surprise' (A. amplum x A. platanoides)

ACER009 - Acer platanoides 'Beskid' (Institute of Pomology and Floriculture, Poland) - fastigiate with twisted, curled leaves, something like 'Newton Sentry' and "Crispum' were crossed. Collectors will adore this. NOTE: this link produces an automatic PDF download which may or may not load onto your screen.

## ACER010 - Acer x freemannii SHELINA'S BEAUTY™

ACER013 - Acer palmatum RED WINE® - Habit erect, strong. Leaves with new tips very bright red, becoming green suffused and heavily tinged purple to dark red, some even bronzish-green or bronzed red, orange to red shades in fall. It is not "ever-red" in the Blloodgood sense.

ACER014 - <u>Acer NORTHERN GLOW® 'Hasselkus'</u> (A pseudosieboldianum x A. palmatum) - 20 ft. tall x 24 ft. wide, upright-spreading. Cold hardy USDA 4, giving palmatum-like looks a zone beter. Leaves green, deeply lobed, coarsely dentate to long-dentate margins, fall color bright orange and coral-red to dark red, very showy. Bred by Dr. Edward Hasselkus, University of Wisconsin, Madison.

ACER015 - <u>Acer URBAN SUNSET™ 'JFS-KW187'</u> (A. truncatum x A. platanoides) - 35 ft. tall x 20 ft. wide, compact, needling little pruning, narrowly pyramidal to upright-ovoid. Leaves dark glossy green, favoring A. truncatum for shape, silhouetted as an almost ratr-like or Liquidambar style look with broadly spaced lobes and deep lobing, fall color a rich, dark red, other times a rich orange to red Rmix. Cold hardy to USDA 4b. Jfschmidt.com, accessed 5.8.2015, their new introduction for 2015.

ACER016 - Acer buergerianum RAISING BLAZE 'EOAB1' - leaves very glossy, dark green, improved orange to red fall colors. Low seed production rate, therefore less chance of invasive behavior as some species seedlings and cultivars exhibit with high samara counts. Proven more heat tolerant in the southern US. Selected by Rusty Allen, Eastside Ornamentals, Athens, Georgia, US c. 2012. Literature: Dirr, M.A. 2012. In praise of noble trees. web artricle, plantintroductions.com, accessed 5.8.2015

ACER017 - Acer miyabei 'Butterball' - fall color reliably yellow, showy, if given enough sun. See <a href="http://www.montgomeryparks.org/activities/things">http://www.montgomeryparks.org/activities/things</a> to do/fall/documents/shf presentation.pdf

ACER018 - Acer circinatum THREE CHEERS™ - 10-15 ft. tall x 6-8 ft. wide, twice as tall as wide in some cases, flame-shaped or ovoid, not a weak wild form but having uniform growth, an extrect shrub to small tree. Leaves of typical dimensions yet darker green than most. heritageseedlings.com, accessed 5.6.2015, their own selection.

ACER019 - <u>Acer palmatum 'Kinky Krinkle'</u> - 8 ft. tall x 4 ft. wide (10 years), upright. Leaves bright green, lime at first, distinctly and thinnly marked dark red to reddish-purple (1-5% surface), margin irregularly serrate to serrulate, crinkled look, 3-5-lobed to 75% deep but marginal crinkling is finer and more shallow, golden fall colors. Selected by Buchholz Nursery, accessed 5.19.2015.

ACER020 - <u>Acer palmatum 'Peve Dave'</u> - leaves very deeply lobed to 90% or more, lobes very narrow elliptic-linear, intermediate between species and Linearilobum Group, favoring the later, dusky pinkish-red, midribs and secondary veins more clearly pink to orangish-pink, later more reddish-purple with maturity, orange ot red shades in fall, can very fiery orange in the right conditions.

ACER021 - Acer platanoides 'Nowush' - semi-dwarf, densely compact and subglobose (from witches broom) at first, later more erect, narrowly ovoid to narrowly pyramidal, can be trained more columnar, numerous erect columns of foliage, not an odd bean-pole as some mutants, being well-branched with many laterals, appears to be a viable small tree for many applications in the landscape. Leaves smaller, reduced in all parts, slightly and elegantly curled, very asymmetrical, often more deeply lobed than species (to 50-75% at times), lovely for the semi-incised look with many strong lobe and sub-lobe acuminate to acuminate-cuspidate apcies, not deformed as some species mutants, terminal lobe usually large and dominating, fall color often a rich, showy gold.

ACER022 - Acer rubrum 'Jinse Qiutian' - leaves 5-lobed, distinctly light golden-brown in fall, photo appears to be more dark golden, 30 days of color. Published in Acta Horticulturae Sinica 42(2): 403-404 (2015)

ACER023 - <u>Acer rubrum 'Yanhong'</u> - leaves 5-lobed, very bright red in late October, best in early November, with 30-35 days of autumnal color. Acta Hort. Sinica 41(6): 1281-1282 (2014)

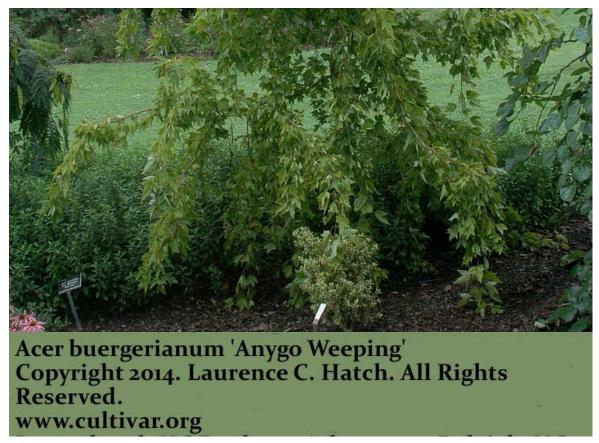
ACER024 - <u>Acer rubrum 'Jinmaihong'</u> - leaves 5-lobed, light red with golden-brown veins, beginning in October, best in early November, 30-35 days of autumnal color. Acta Hort. Sinica 40(12): 2549-2550 (2013)



ACER011 - Acer campestre JADE PATINA™, photo courtesy of and copyright owned by www.baileynurseries.com, is a distinct improvement on the old, rampant, and ratty species. This one has a clearly incurving habit, erect-globose to ovoid in time, and a wonderful dark incised blade that reminds some of Acer griseum. The fine folks at Bailey's nursery, being in a climate where these super hardy maples are a real necessity, have a long record of improving tough Acer species. Above image not part of OROC Data Sharing.



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ACER012 - Acer buergerianum 'Angyo Weeping' may prove to the best weeping maples outside Acer palmatum Dissectum Group. It actually has some grace and is not semi-pendulous like so many so-called weeping, more like slightly cascading, cultivars promoted over the last two centuries. Now that the species has been shown to be surprisingly tough, hardy, and pretty in the North American mainstream landscape, suitable now for even corporate and mall plantings, this type of cultivar might get a shot at fame. Click image please. Image above not part of OROC Data Sharing. Spelling on the image above is incorrect.

ACHI001 - Achillea DESERT EVE™ (Spring Hill Nursery, nursery website)

ACHI002 - Achillea F2 FLOWERBURST™ Series(Takii Seeds)

ACHI003 - Achillea millefolium SONG SIREN™ LAYLA - 51-56cm tall x 30-36cm wide, upright, sturdy, compact. Flowers rays reddish-pink to medium pink, pale cream to white, non-fading. Darwinperennials.com, accessed 5.22.2015, their own selection.

ACHI004 - Achillea millefolium SONG SIREN™ LAURA - 51-56cm tall x 30-36cm wide, upright, sturdy, compact. Flowers rays rich ruby red to cherry, big central white disk, contrasting much, non-fading. Darwinperennials.com, accessed 5.22.2015, their own selection.

ACHI005 - Achillea millefolium SONG SIREN™ ANGIE - 51-56cm tall x 30-36cm wide, upright, sturdy, compact. Flowers rays clean medium pink, pale pink disc, limited contrast,, non-fading. Darwinperennials.com, accessed 5.22.2015, their own selection, new 2015.

ACHI006 - Achillea millefolium SONG SIREN™ LITTLE SUSIE - 51-56cm tall x 30-36cm wide, upright, sturdy, compact. Flowers rays medium to light pink, becoming all light pink, disc even paler but little contrast, non-fading. Darwinperennials.com, accessed 5.22.2015, their own selection.

ACHI007 - Achillea millefolium SONG SIREN™ PRETTY WOMAN - 51-56cm tall x 30-36cm wide, upright, sturdy, compact. Flowers rays orangisdh-red to scarlet, disk small,er

off white, not contrasting nearly as much as LAURA. non-fading. Darwinperennials.com, accessed 5.22.2015, their own selection.

ACOR001 - Acorus 'Golden Pheasant' (Perennial Resource)

ADIA001 - Adiantum capillus-veneris 'Alabama Lace' (USDA 7-10)

<u>AEON001 = Aeonium 'Mardi Gras' (Huntington Botanical Gardens)</u> - simply the most colorful clone in the genus if not among all rosetted succulents. A "super wow" patent succulent.

Hatch's Cultivars of Woody Of Plants is our standard for the existing 90+ cultivars AESC001 - Aesculus pavia 'Fishtaill' (Mark Weathington, Raulston Arboretum)

AESC002 - Aesculus turbinatra 'Marble Chip' (Broken Arrow Nursery) - variegated

AESC003 - Aesculus hippocastanum 'Lunar Patches' (Variegated Foliage)

AGAS001 Agastache GRAPE NECTAR™ (Skagit Gardens)

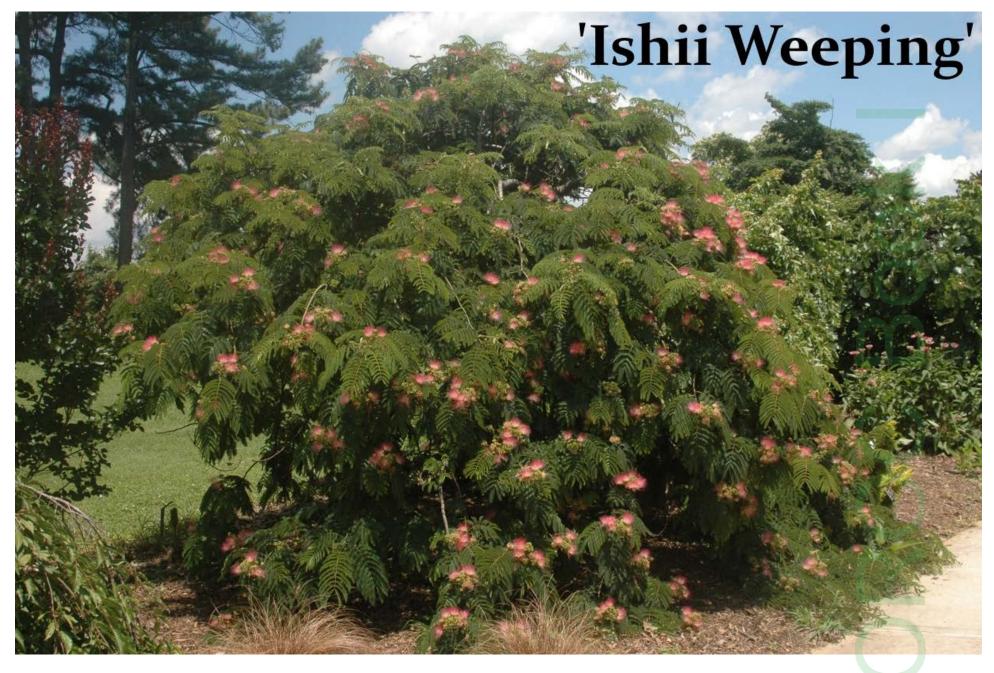
AGAS002 Agastache 'Rosie Posie' - 18-22 in. tall, compact, subglobose. Flower corolla bright, hot pink, calyx magenta-purple. Walters Gardens introduction 2015. Waltersgardens.com, accessed 4.10.2015

AGAS003 Agastache 'Peachy Keen' - 20-24 in. tall, compact, subglobose. Flower corolla "apricot peach", calyx purplish-pink. Walters Gardens introduction 2015. Waltersgardens.com, accessed 4.10.2015

AGAV001 Agave 'Straight and Narrow' (A. bracteosa x A. stricta)(Plant Delights)

AGAV002 Agave x pumila 'Clusterfest' (Plant Delights)

AJUG001 - Ajuga reptens 'Black Fox' - 5cm tall, 15cm tall in flower. Leaves very dark blackish-green, not having blackish-purple as BLACK SCALLOP, margins distinctly undulate, crenate to crenate-dentate. Flower corolla blue. Selected by Jan Spruyt, <u>vasteplant.be</u>, accessed 5.16.2015, under their JS® trademark.



ALBI003 - Alibizia julibrissin 'Ishii Weeping' ('Ishii Pendula). The name was changed from 'Ishii Pendula' as it appeared in the US trade and published as such in Hatch's Cultivars of Woody Plants in 2008.

ALBI001 Albizia j. MERLOT MAJIK™ (Heritage Seedlings, new cultivar)

ALBI002 Albizia j. CHOCOLATE FOUNTAIN™ 'NCAJ1' (Dr. Tom Ranney, NC State University)

ALCE001 - Alcea rosea SPRING CELEBRITIES™ in 9 colors, APRICOT being new in 2015 (Takii Seeds)

ALCE002 - Alcea ficifolia 'Las Vegas' (Walters Gardens) - at long last, a lovely lobed ficifolia type leaf with simple, old school single flowers.

<u>ALST001 - Alstroemeria 'Tangerine Tango'</u> (Cornell University)

<u>ALST002 - Alstroemeria "Mauve Majesty"</u> (Cornell University)

<u>ALTE001 - Alternanthera SOMMELIER™ Series</u> (HortCouture)

AMMO001 - <u>Ammophila arenaria 'Belgian Coast'</u> - 80cm tall, becoming 90cm tall in flower, taller than some forms. Leaves wider than species typical, greyish-green. Selected by Jan Spruyt, introduced 2014.

AMSO001 - Amsonia tabernaemontana 'Stella Azul' - 80-100cm tall. Leaves green. Flower corolla pale blue. Selected by Jan Spruyt, <u>vasteplant.be</u>, accessed 5.16.2015, under their JS® trademark.

ARAL001 - Aralia cordata 'Gotemba' - 5 ft. tall x wide. Leaves bright yellow to charteuse-yellow. Fruits dark purplish-black, typical, but contrasting much with the foliage. Selected by Dan Hinkley, marked in the US by Monrovia. This clone is thought to be different from the more widely sold (May 2015) 'Sun King' which is known to be 2-3 ft. tall and imported by Barry Yinger from Japan.

ARDI001 - <u>Ardisia crenata RED HOT EMBERS™</u> 'sPG-3-001' - 2-3 ft. tall x 2 ft. tall, slow but very large for the species in time. Leaves effectively very dark red, margins more of a dark glowing pink overlaid in red on close inspection, new growth more hot pink, blades folded and boat-shaped, revealing a bright pink underside at first, fairly rugose. Flowers pink-tinged. selected by Southern Plant Group.

ARIS001 Arisaema 'Crossing Over' (A. heterophyllum x A. fargesii)(Plant Delights, new 2015)

ARIST001 - Aristolochia macrophylla 'Chimney Tops' (Plant Delights Nursery)

ARON001 – Aronia arbutifolia 'Hannah Coulter' – habit more compact. Fruit very abundant compared to species typical. Leaves bright orangish-red in fall. Proven more heat and humidity tolerant. Found by Norman Bertels in Jackson County, North Carolina, named for his granddaughter. Camforest.com, accessed 4.23.2015

ARUN001 - Aruncus aethusifolius 'Charakter' - full, dense. Stems red. Flowers white. Selected by Zillmer, intro. 2014, www.perennial-youngplants.com, accessed 6.7.2015

ARUN002 - Aruncus aethusifolius 'Elegance' - flowers well above foliage, often hanging over it. Selected by Zillmer, intro. 2014, www.perennial-youngplants.com, accessed 6.7.2015

ARUN003 - Aruncus aethusifolius 'Filigran' - flower panicl;es more slim, later bloom start. Leaves with showy fall colors. Selected by Zillmer, intro. 2014, www.perennial-youngplants.com, accessed 6.7.2015

ARUN004 - Aruncus aethusifolius 'Opulenz' - leaves a brighter, "fresh green". Flowers white, earlier in season than typical. Selected by Zillmer, intro. 2014, www.perennial-youngplants.com, accessed 6.7.2015

ARUN005 - Aruncus aethusifolius 'Porzellan' - compact hab it.Leaves bright, fresh green, Flower off-white. Selected by Zillmer, intro. 2014, www.perennial-youngplants.com, accessed 6.7.2015

PENDING - Aruncus aethusifolius 'Bronze' - stems bronze to red, showy. Name violates the ICNCP "simple adjective" or color name guidelines. Selected by Zillmer, intro. 2014, www.perennial-youngplants.com, accessed 6.7.2015

ARUN001 - Arundo donax 'Peppermint Stick' (Plant Delights)

ASAR001 Asarum debile 'Coveralls' (Plant Delights)

ASAR002 Asarum forbesii 'Mercury' (Plant Delights)

ASAR002 Asarum nobilissimum 'King Kong' (Plant Delights, new 2015)

ASPA001 - Asparagus sprengeri 'Graham's Cracker' (Plant Delights, new 2015) - 15 in. tall x wide, denser, upright. Leaves golden in fall. USDA 7a hardiness, hardy for many years in originator's Greensboro, North Carolina garden. Selected by Graham Ray, Greensboro, NC.

<u>ASTI001 - Astilbe 'Chocolate Shogun'</u> - 14-24 in. tall. Flowers light pink with darker pink base tints. Foliage distinctly textured (sunken veins), rich purplish-brown, brownish-maroon, to bronzish-purple, petioles more dark purplish-red to violet-red.

ASTI002 - Astilbe chinensis 'Mighty Red Qin' (Plant Delights)

ASTI003 - <u>Astilbe 'New Wave'</u> - 50-60 cm tall x wide, quick-multiplication of clump. Flower and inflorescence uniformly light pink throughout, a very consistant color without mixed pink tones, spikes erect, denser than 'Europa', more uniform pink coloration than 'Peach Blossom', less medium pink shades in it than 'Elizabeth Bloom'. Leaves glopssy dark green. US Patent #25383 on March 24, 2015 to Henricus Verduin, Netherlands from open-pollinated 'Europa', selected 2006.

ASTI004 - Astilbe 'Honky Tonk' - Flowering stems very numerous, sturdy, upright, suitable as cut flower, stronger plant than 'Rheindland' and a richer rose-pink, richer, darker pink than 'Touch of Pink', rich but clear shade of pink. Leaves medium green. US Plant Patent #25382 on March 24, 2015 to Henricus Verduin, Netherlands. as spontaneous seedling 2005.

<u>ATHY001 - Athyrium niponicum 'Joy Ride'</u> - 20 in. tall x 36 in. wide, vigorous. Fronds distinctly incised, apically crested, many of these segments highly ramified (not a simple, small apical crest), one of the more elaborately crested fern clones in any genus, a petticoat look in fact, glaucous, bluish-green, familiar silvery centers. Plantdelights.com, accessed 6.7.2015, their own selection, introduced 2015.

ATHY002 - Athyrium niponicum 'Thrill Seeker' - 20 in. tall x 30 in. wide. Fronds bluish-green, highly tinged silver, not just at the central zone, often quite silver in the apical half, more green at the base, older fronds more olive green, contrasting, long apical crests, more divergent and flat than 'Joy Ride' and less 3-dimensional than it. Hans Hansen introduction 2015, distinct from 'Joy Ride' in both color distribution and crest morohology.

Aucuba - our standard for 159 existing cultivars is Hatch's Cultivars of Woody Plants AUCU001 - Aucuba japonica 'Subaru' (Hawksridge Farms)

AUCU002 – Aucuba japonica 'Overlook' – leaves larger, very glossy, margined cream. Cistus.com, accessed 4.22.2015, their own selection as sport near Overlook, Oregon

AUCU003 – Aucuba japonica 'Merced'- 4 ft. tall x 3 ft. wide. Leaves mostly gold, slight green speckling. Cistus.com, accessed 4.22.2015, their own selection

AUCU004 – Aucuba japonica 'Lisa White' – Plant compact. Leaves 4-5 in. long, narrow, speckled yellow. Fruit "very pale", female clone. Cistus.com, accessed 4.22.2015, named for Lisa White via Ozzie Johnson

AUCU005 – Aucuba japonica 'Clear Picture' – 4 ft. tall x 3 ft. wide, dense, subglobose to erect. Leaves centrally marked gold to 80-95% surface, margins dark green with some gold specking. Cistus.com, accessed 4.22.2015.

AUCU006 – Aucuba japonica 'Alabai' – leaves dark green, spotted creamy-yellow in a swirled pattern. Cistus.com, accessed 4.22.2015, their own selection

AUCU007 - Aucuba japonica var. borealis 'Bored Female' - 4 ft. tall x wide. Leaves very glossy, blackish-green. USDA 6b-7, more hardy as the variety. Female clone. Plantdelights.com, accessed 4.22.2015, their own selection

AUCU008 - <u>Aucuba japonica 'Golden Girl'</u> - 1m tall x wide, very compact, shorter internodes. leaves heavily mottled and spotted yellow, chimera 25-60% surface, variable, some young plants in spring afre said to be mostly gold, 80-90% surface, still very sharp in the blade, apex very long acute to acuminate. Fruit red, a female clone. Peter Moore cross of 'Nana Rotundifolia' x 'Crotonifolia' in 1993, offered exclusively in the UK by New Place Nurseries, npnurseries.co.uk, Bredbypetermoore.co.uk, accessed 5.29.2015.

BACC001 - Baccharis halimifolia 'Baccador' (Minier Nurseries) - a unique gold-leaved clone

BAPT001 - Baptisia 'Vanilla Cream' (Wayside Gardens)

BAPT002 - Baptisia alba var. macrophylla 'Pearl River' (Rare Find Nursery)

BAPT003 - Baptisia 'Blonde Bombshell' (Plant Delights)

<u>BAPT004 - Baptisia</u> minor 'Melissa Blue' - 18-24 in. tall, dense as the species. Flowers bluish-lavender, numerous. Fruit with showy pack bods in summer. Origin: Plant Delights, trailed as A1T-002 from seed collected in Melissa, Texas. A seed strain and not a clone.

BAPT005 - Baptisia 'Blueberry Sundae' (image, Government of Canada)

BAPT006 - Baptisia 'Dutch Chocolate' (image, Government of Canada)

BAPT007 - Baptisia minor var. minor 'Blue Bonnet' (Plant Delights, new for 2015)

BAPT008 - Baptisia 'Pink Truffles' - 30-36 in. tall, compact, subglobose. Leaved medium green. Flowers mostly light pink, also tinged violet, keel yellow, overall, paler lavender-pink with age. Walters Gardens 2015. Proven Winners 2015-2016. Waltersgerdens.com. accessed 4.10.2015

BAPT009 - Baptisia 'Blue Towers'- 40-54 in. tall, inflor. 20 in. tall, upright, tower-like, sturdy narrowly vase-shaped, free of excessive basal foliage so as to permit companion plant around it. Leaves glaucous, bluish-green. Flowers periwinkle blue to pale lavender-blue to bluish-purple. Origin: Plant Delights Nursery, hybrid of B. australis x B. alba hybrid, tested as PDN2004-157. Award: 2014 Green Thumb Winner, Direct Gardening Assoc. Plantsdelights.com, accessed 4.10.2015

BAPT010 - Baptisia 'Cinnamon Toast' - 36 in. tall x 30 in. wide. Flowers "cinnamon-plum over buttery yellow" . Introduction: Songsparrow.com, accessed 4.10.2015, their exclusive introduction

BAPT011 - Baptisia 'Brownie Points' - 36-40 in. tall. Flower infl. to 10 in. long, corolla very dark gold to caramel tones, tinged very dark golden-brown accented with shades of true brown and butterscotch, not fading to yellow, blooms late for the genus. Selected by Hans Hansen, Walters Gardens, intro. 2015

BAPT012 - Baptisia DECADENCE® 'Sparkling Sapphires' 30-36 in. tall in. tall. Flower corolla very rich, dark violet-blue, far darker than B. australis as typical, greener, near lime keel adds slight color at close range. Selected by Hans Hansen, Walters Gardens, intro. 2015

BAPT013 - Baptisia 'Grape Taffy' - 24-30 in. tall. Flower corolla a true grape candy or grape soda purple (reddish-purple to violet-purple), pale greenish-yellow keel adds contrast, especially in young flowers. Selected by Hans Hansen, Walters Gardens, intro. 2015

PENDING - Baptisia 'B Minor' (Song Sparrow), registration pending as this may be a rename or confusing cultivarization of the the species Baptsia minor var. minor

BERB001 - Berberis thunbergii SUNJOY® TANGELO

BERB002 - Berberis thunbergii 'Lutin Rouge' (Plantarium.nl)

BERB003 - Berberis thunbergii SUNJOY® CITRUS 'Koren' - 2-3 ft. tall x 2-4 ft. wide, compact, subglobose, improved form over older 'Aurea'. Leaves bright yellow, subscorch resistant. US patent #24818. Springmeadownursery.com, accessed 4.30.2015

BERB004 - Berberis thunbergii SUNJOY® MINI SAFFRON 'Kasia' - 1.5-2.0 ft. tall x 2-4 ft. wide, dwarf, dense, mounded, smaller than CITRON. Leaves bright yellow, new

growth tinged orange, subscorch resistant, fall color adds orange to red shades. US patent #24817. Springmeadownursery.com, accessed 4.30.2015

BETU001 - Betula albosinensis BLASON (Minier Nurseries) - a curious orangish-red bark over most of the trunk, frosted too.

BETU002 - Betula costata CINNAMON CURLS™ (North Dakota State University)

BETU003 - Betula utilis 'Jim Russell' (Arboretum Wespelaar, their own selection)

BETU004 - Betula PARKLAND PILLAR™ 'Jefpark' - 40 ft tall x 6-7 ft. wide, vigorous, columnar, more narrow, erect, and dense than DAKOTA PINNACLE®. Leaves dark green, fall color not notably showy. Found at Parkland Nursery, Alberta, introduced by Jeffries Nurseries c. 2014.

BOEH001- Boehmeria nipononivea 'Glow Light' (Plant Delights) - 36 in. tall 5-6 ft. wide, vigorous. Leaves light yellow to medium, glowing yellow (if strong sun), older leaves a very pale green to weak lime. Introduced by Barry Yinger, Asiatica Nurseries, now closed, and since that time marketed by by Plant Delights.

BOLT001 - Boltonia decurrens 'Warrior's Blush' - 80cm tall in leaf, 150cm tall in flower. Flower rays pleasant light pink, disc medium yellow to neare gold, large, some-shaped. Selected by Jan Spruyt, vasteplant.be, accessed 5.16.2015, under their JS® trademark.

BUDD001 - Buddleia INSPIRED™ WHITE

BUDD002 - Buddleia 'Painted Lady'

BUDD003 - Buddleia 'Asian Moon' (Monrovia)

BUDD004 - Buddleia davidii GROOVY GRAPE (Bailey Nurseries)

REGISTRATION PENDING - Buddleia 'Crown Jewels', 'Glass Slippers', 'Dark Dynasty', 'Jousting Jester', etc. (Walters Gardens)

BUDD005 - Buddleia 'Pink Micro Chip' (Proven Winners, Dr. Dennis Werner, North Carolina State University)

BUDD006 - Buddleia 'Pink Pagoda' - habit upright-spreading to mounded. Flowers pink, in narrowly conical panicles, "continuously flowering". Seedless. US Patent #23214 to Peter Moore, England as cross of B. weyeriana 'Sungold' x B. davidii 'Pink Delight'.

BUDD007 - Buddleia 'Miss Violet' - 4-5 ft. tall x wide, compact. Flowers dark purplish-violet. Bred by Dr. Dennis Werner, North Carolina State University. Springmeadownursery,com, accessed 4.30.2015.

BUDD008 - Buddleia davidii MERRY MAGIC® ORCHID 'SMBDPB' - 4-5 ft. tallx wide, more compact. Flower panicles very narrow but dfensely flowered, rich purple to violet, highly floriferous. Springmeadownursery.com, accessed 4.30.2015.

BUDD009 - Buddleia davidii GULLIVER - 1.75m tall. Flower spikes to 30cm long, wide, thick, fully flowered, corolla lilac with small orange eye. Cold hardy to -18 deg. C. Eur. PBR to East Malling Research, UK.

BUDD010 - Buddleia HUMDINGER™ 'Magenta Munchkin' - 28-36 in. tall, dwarf, compact, neat. Flower panicles 7-8 in. long, "fuchsia-red" (photos appear deep violet-fuchsia to violet-lavender), small orange eye, blooms before acfew weeks before MONARCH Series cultivars. Walters Gardens, intro. 2015.

BUDD011 - Buddleia HUMDINGER™ 'Magenta Munchkin' - 28-36 in. tall, dwarf, compact, neat. Flower panicles 7-8 in. long, "fuchsia-red" (photos appear deep violet-fuchsia to violet-lavender), small orange eye, blooms before acfew weeks before MONARCH Series cultivars. Walters Gardens, intro. 2015.

BUDD012 - Buddleia HUMDINGER™ 'Orchid Annie'

BUDD013 - Buddleia HUMDINGER™ 'Little Nugget'

BUDD014 - Buddleia HUMDINGER™ 'Lavender Cupcake'

BUDD015 - Buddleia HUMDINGER™ 'Little Angel'

BUXU001 - Buxus microphylla var. japonica SPRINTER™

BUXU002 - Buxus microphylla 'Eseles' (image, Government of Canada, PBR)

BUXU003 - Buxus sempervirens 'Skywalker' (Concept Plants)

BUXU004 – Buxus sempervirens 'Jack Rudolph' – 6 ft. X 4 ft. wide In many years, arborescent, conical, slightly cascading branches. Ritas Rare Plants, Tennessee from her father's boxwood breeding program of 1940's-1050's. Camforest.com, accessed 4.23.2015

BUXU005 – Buxus sempervirens 'Ruth Rudolph' – 5 ft. tall x wide in many years, weeping. Rita's Rare Plants, Tennessee, from her father's boxwood breeding program. Camforest.com, accessed 4.23.2015

BUXU006 - Buxus sempervirens 'Skywalker' (US# 22977) - From Mark Ellerbrook of Beaverton, Oregon, is the vigorous clone (growth up to 30 in. a year for up to 6 seasons) that is "very columnar...with a low amount of lateral branching", keeping green color much of the year, and resistant to common boxwood root diseases. Dimensions at six years are 1.8 meters x 30-38 cm.

BUXU007 - Buxus microphylla var., koreana EMERALD KNOLL® 'RLH-B1' - 1.5-2.0 ft. tall x 3-4 ft. wide, low, mounding-spreading, patent says "outwardly spreading to decumbent, billowy and mounding", vigorous, freely branching, flexible lateral limbs resist cracking and splits, very fine-textured, compact, far less tufted and congested compared to 'Morris Dwarf' and less rigid than it.I Leaves rich emerald green all year, not bronzing in winter or cold weather. US Patent #24443 on May 13, 2014 to Robert and Lisa Head, Seneca, South Carolina USA as sport of 'Kingsville' in 1991.

BUXU008 - <u>Buxus microphylla 'Little Missy'</u> - 16 in. tall x 30-40 in. wide, densely mounded to flat-subglobose, 2-3 in. growth a year. Leaves dark green, glossy, all year, not bronzing, blade smaller than species typical clones (1.6cm long x 1.0cm wide).. USDA 5 hardiness. <u>US Plant Patent #24703</u> on July 29, 2014 to Norman H. Cole III as chance seedling, assigned to Cp Delaware Inc.

BUX009 - Buxus sempervirens 'Thomas Jefferson' - 5 ft. tall x 2 ft. wide, or 6 ft. tall x 3 ft. wide (12 years), 12 ft. tall x 6 ft. wide (30 years), narrowly upright-ovoid to ellipsoidal to narrowlly pyramidal, not always columnar, 45 deg. branch angle (wider than 'Dee Runk'), 3-6 in. growth a year, resistant, strong limbs resist snow and ice damage. Leaves glossy, dark green all year, not bronzing. <u>US Plant Patent #23869</u> on Sept. 3, 2013 to Thomas M. Patrick, Jr., chance seedling 1964, assigned to Saunders Bros. Inc., named for the US President as it was discovered in Charlottesville, Virginia, his home. An attempt to trademark this name or 'Mr. Jefferson' failed and is now marked as "CANCELLED - SECTION 8", which generally implies the name was not is use after 6 years or verified to be so.

CALA001 - Caladium ARTFUL Series (Proven Winners)



CALA002 - Caladium 'Tie-Dyed Tree Frog'.

CALA003 - Caladium 'Bombshell' - leaves intense red (45-50%) of cen ter, dark bluish-green margins, transitional zones finely spotted pink (5%), secondary veins red to 70% of their length. Classiccaladiums.com, accessed 4.25.2015, Bob Hartman hybrid

CALA004 - Caladium 'Lemon Blush' - leaves pale chartreuse to creamy-green, pinkish-red center to 65% surface, 3-5 secondary veins this same pinkish-red to most of their length. Classiccaladiums.com, accessed 4.25.2015,

CALA005 - Caladium 'Burning Heart' - leaves dusky dark red, bronze overlay, subtle pinker to orange spots, very unique.. Classiccaladiums.com, accessed 4.25.2015.

CALA006 - Caladium 'White Pearl' - 12-18 in. tall. Leaves lance-type, 90-95% white, dark jade green margin. Classiccaladiums.com, accessed 4.25.2015. Bob Hartman hybrid.

CALA007 - Caladium 'Rio Red' - leaves 85-90% red center, medium olive-green margin, central zone also faintly spotted in the same green tones and some paler shades too, most distinct for intense undulations of the blade and a very sharp apex while not being a lance-type cultivar.. Classiccaladiums.com, accessed 4.25.2015, Bob Hartman hybrid, intro 2015.

CALA008 - Caladium 'Tapestry' - Caladiumsonline.com, accessed 4.30.2015, their exclusive 2014.

CALA009 - Caladium 'Frog in a Blender' - Caladiumsonline.com, accessed 4.30.2015, their exclusive 2014.

CALA010 - Caladium 'Moonlight' - Caladiumsonline.com, accessed 4.30.2015, their exclusive 2014.

CALA011 - Caladium 'Cherry Tart' - Caladiumsonline.com, accessed 4.30.2015, their exclusive 2014.

CALA012 - Caladium 'Puppy Love' - <u>US Plant Patent #25424</u>

CALA013 - Caladium 'Hearts Delight - <u>US Plant Patent #23992</u>

CALA014 - Caladium 'Celebration' - US Plant Patent #23993

CALCOO1 - Calceolaria CALYNOPSIS Series (Selecta)



CALL001 - Callicarpa japonica WHITE SPRITZER™ is one of the best variegated clones in the genus and the violet-pink new tips make it quite the glorious, tricolored creation. It has great vigor unlike a speckled sport of this same species I found in the 80's which never proved market worthy. This is truly one of the finest variegated, deciduous shrubs of any genus and makes a nicely fine-textured, compact pyramidal piece; never wild nor too crazy if given enough light. Click image to enlarge. Above image not part of OROC Data Sharing.



CALL002 - Callicarpa kochiana 'Yamaguchi Variegated' - leaves large, 4-8 inches long, 1.5-2.0 inches wide, elliptic, boldly sectoredl and marked in clean white to cream, 25-45% surface in strong plants, other sectors, spots, and markings in lime or a paler green than the dark green base color, margins very finely serrulate with 20-32 teeth per side Kniwn from a specimen at the JC Raulstron Arboretum, also offered by nurcar.com, accessed April 2013.

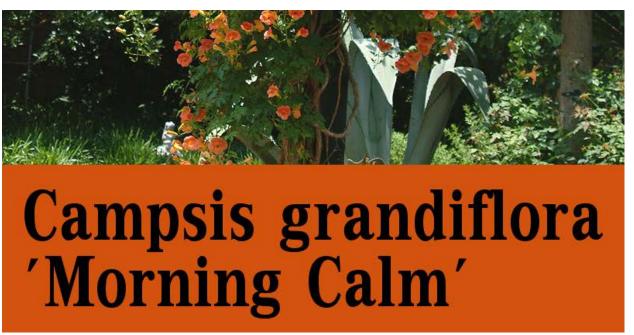
CALT001 - Caltha palustris 'Girl Eyes' - 30cm tall, becoming 40cm in flower, more compact, neat than species typical. Flower tepals yellow. Selected by Jan Spruyt, vasteplant.be, accessed 5.16.2015, under their JS® trademark.

CALY001 - Calycanthus floridus 'Van der Geiseen's Choice' - Flowers of exceptional fragrance. Selected by Maarten van der of Geissen of Semmes, Alabama USA, Nurcar.com, accessed April 2013.

CALY002 - Calycanthus floridus 'Coker Cottage' - plants 10 ft. tall x wide, vigorous, strong, durable in USDA 7b (Chapel Hill, North Carolina). Flowers red, small but very numerous. Leaves a good yellow in fall. Originated from a notable tree at the Coker Arboretum, University of North Carolina, Chapel Hill, North Carolina. That same old arboretum on campus also holds the original tree of Liquidambar styraciflua 'Rotundiloba', a popular and unique tree that is fruitless with curiously rounded lobes, prized over the world.

CAMP001 - Campanula (glomerata?) GENTI BLUE® (Wayside Gardens)





CAMPS001 (HISTORICAL REGISTRATION) - Campsis grandiflora 'Morning Calm', JC Raulston's amazing selection that remains superior to most C. radicans and hybrid selections for corolla coloration, vigor, and a huge 1.5 to 2.0 inch wide trumpet face. If this looks like an impossible tropical flowering vine - it should not - for it does well in USDA 6-10. The huge trumpet is melon at times, in other portions of the day a richer orange, orange juice to Nasturtium, other times a somber, dark vermillion-orange, a delicately veined trroat of gold and darker shades, and very often a blend of all these curious, prismatic pigmentations; showing reflective crystals in the tissue and odd tones from the very opening of each flower. Images above and below not part of OROC Data Sharing.



CAMPS002- Campsis x tagliabuana ORANGEADE® 'Tracamp' from Sapho.fr has the first boldly bicolored, chimera-style flowers in this genus, contrasting rosy-gold with rich magenta pink at every toss of a shadow and sunbeam. Frankly, I thought we'd see gold veined red flowers or red-veined gold flowers before a chimeral bicolor beauty like this one. Click image to enlarge.

CAMPS003 - Campsis radicans ATOMIC RED™

CAMPS004 - Campsis 'Chastity' (Dr. Tom Ranney, North Carolina State University, triploid)

<u>CAMPS005 - Campsis radicans 'PRN Redbird' (Pleasant Run Nursery, their own selection)</u>

CAMPS006 - Campsis SUMMER JAZZ FIRE (Plantarium.nl)

CANN001 - Canna 'Fire Dragon' (Plant Haven)

CANN002 - Canna 'Chocolate Sunrise' (HortCoutre

CAREOU1 - Carex 'Mad for Mocha' (Hort Couture) - 8-10 in. tall. Leaves tan to brown shades.

<u>CARE002 - Carex siderostica 'Snow Cap' (Wayside Gardens)</u>. Leaves much as 'Banana Boat' but central zone (80-95% surface) is white to cream, slightly striped but often a uniform chimera, much whiter tones than 'Variegata'. Walters Gardens, intro. 2013.

CARE003 - Carex laxiculmis BUNNY BLUE™ 'Hobb' (Plant Delights) - 8-12 in. tall x 12-16 in. wide, neat, clumping. Leaves rich silvery-blue.

CARP001 - Carpinus betulus 'Stegemann's Primus' (Minier Nurseries) - conical, vigorous, reguarly branched. Selected by J. Stegemann, Eur. CPVO to him 2005.

<u>CARP002 - Carpinus betulus ROCKHAMPTON RED 'Lochglow' (Planteria.eu)</u> - unfirom crown. Leaves with reliably showy, colorful orangish-red to red call colors. Eur. CPVO to Geoff Locke 2014. Planteria.eu winner. See <a href="http://www.planteria.eu/news/241/rockhampton-red-wins-for-batouwe">http://www.planteria.eu/news/241/rockhampton-red-wins-for-batouwe</a>

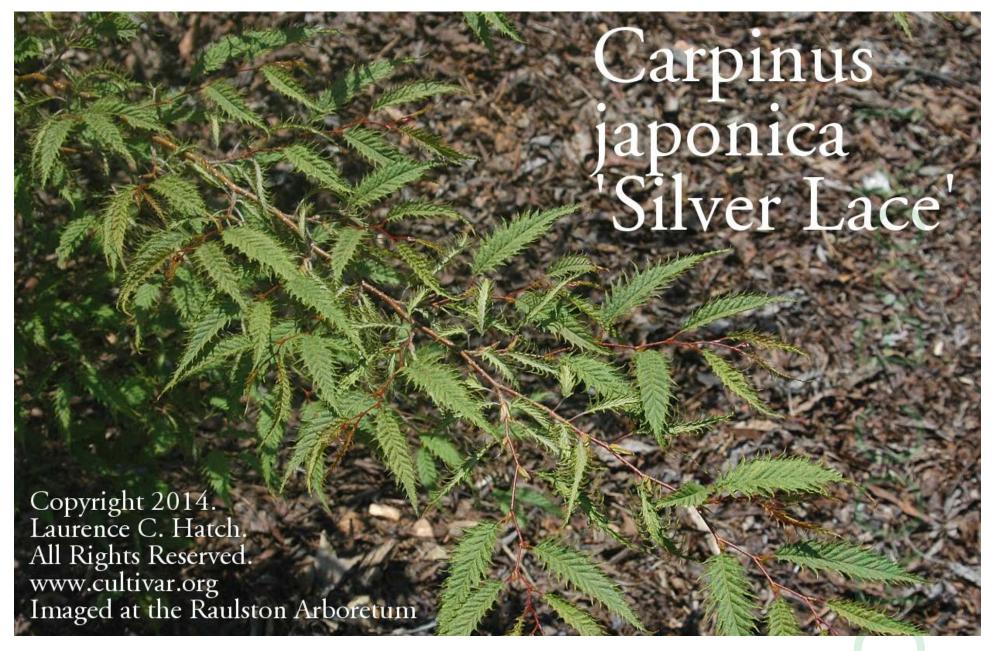
CARP005 - Carpinus caroliniana BALL O'FIRE™ 'J.N. Globe' - 15-20 ft. tall x wide, compact, globose. Leaves reliably showy, orange to red in fall, some yellow for contrast Selected from superior tree in wild, Waukesha, Wisconsin, USA by johnsonnursery.com.

CARP006 - Carpinus caroliniana FIRESPIRE™ 'J.N. Upright' - 20 ft. tall x 10 ft. wide, distinct erect. Leaves boldly coral-red to orangish-red in fall, interior canopy leaves often a dark burgundy. Johnsonnursery.com, accessed 5.2.2015.

CARP007 - Carpinus caroliniana NATIVE FLAME® 'JFS-KW6' - 30 ft. tall x 20 ft. wide, upright, ovoid. Leaves dark green in summer, high quality texture, reliably orange to red shades, very showy in fall. jfschmidt.com, accessed 5.2.2015

CARP008 - Carpinus betulus ORANGE RETZ® - leaves very bright orange in fall. Eur CPVO to Jean Blondeau 2014.

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CARP003 - Carpinus japonica 'Silver Lace' is a stunning entity among all cut-leaved trees, a fine recent introduction, quite a feathery to almost pin-like or ciliate sort of margin, bearing a pale silvery-green hue in the sun. The spiky, narrow blades carry a special, odd rugosity, the sort normally found only in herbaceous plants, where the long, convex bubble between the secondary veins turns into the thin, sharp tooth, making the lateral veins sunken, reflecting yet more white or pale green light. Anyone who knows, collects, and studies our laciniate trees and shrubs will know this is a very unique, useful release, cuter than cute, and prettier than your best girl in silver lace. Buchholz Nursery has it for one.



CARP004 - Carpinus caroliniana 'Stowe Cascade', a semi-weeping, elegantly drooping at least variant on that other species that rarely gets selected for cultivars. This beauty

is shown at the JC Raulston Arboretum and originated about 4 hours to the southwest at the Daniel Stowe Botanic Garden in Charlotte, NC. Above images not pafrt of OROC Data Sharing.

<u>CATA001 - Catalpa speciosa HEARTLAND® 'Hiawatha 2' (J.F. Schmidt)</u> - 50 ft. tall x 25 ft. wide, "upright narrow oval", more narrow and more uniformly branched than species typical. Leave darker green than species typical. jfschmidt.com, introduced 2015, accessed 5.31.2015.

CENT001 - Centaurea montana 'Lavender Mist' - 16-18 in. tall, shorter, "better branching". Flower with pale lavender disk, inner rays, outer long rays near white, longer bloom period than species, up to 50% more flowers. Darwinperennials.com, accessed 4.11.2015.

CEPH001 - Cephalotaxus harringtonia 'Gold Dragon' (Hawksridge Farms) - 2-3- ft. tall x 4-5 ft. wide. Leaves golden-yellow in new growth.

CERCID001 - Cercidiphyllum japonicum CLAIM JUMPER™ (Broken Arrow Nursery) - new leaves rose pink, becoming yellow

CERCID002 - <u>Cercidiphyllum japonicum HANNA'S HEART® 'Biringer'</u> - Habit erect, compact. Leaves darker green, rich yellow in fall, leaves held longer due to increased cold resistance. Cold hardiness greater. www.biringernursery.com, accessed 4.19.2015

CERC001 - C. canadensis 'Pink Pom Poms' (Dr. Dennis Werner, North Carolina State University, new cultivar, double flowers)

CERC002 - C. canadensis 'Vanilla Twist'- weeping with white flowers, a new combination.

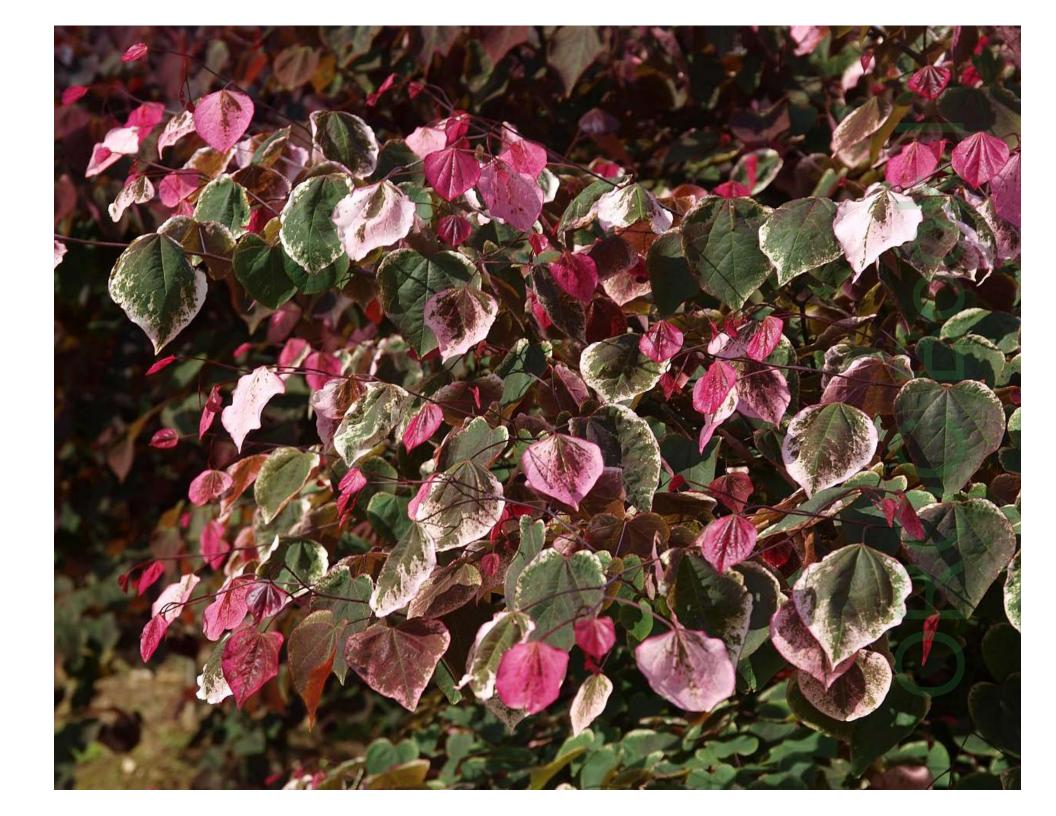
CERC003 - Cercis canadensis RED FORCE® 'Minrouge3' (Minier) - leaves bright purtplish-red, not purple as 'Forest Pansy'

CERC005 Cercis canadensis LUCIOUS LAVENDER™

CERC006 Cercis canadensis RADIANT LIPSTICK™



Cercis canadensis THE RISING SUN® in the much expanded new section of the Raulston Arboretum, a clone with a virtual sunrise (or sunset) of yellow, pink, orange, salmon, lime, coral, and chartreuse tones.



<u>CERC004</u> - Cercis canadensis CAROLINA SWEETHEART™ 'NCCC1'. This outstanding cross of purple and variegated leaf genetics in redbud by Dr. Tom Ranney produced spectacular glowing pink hearts of new foliage. It is amongst the most colorful and pretty variegated trees on the planet, rivaling Japanese maples and sycamore-maple cultivars for flash and a designer aura of new tips. Image courtesy of and copyright owned by Tom Ranney. Images are not part of OROC Data Sharing.

CERC007 - Cercis canadensis 'Alley Cat' - leaves heavily white-streaked and white-spotted, chimera about 35-50% blade surface, new growth slightly tinged copper to pink, more sun scorach resistant in warm climates, variegation very stable. Selected by Harold Neubaruer, Hidden Hollow Nursery, hiddenhollownursery.com, accessed April 2014, as a superior clone to 'Floating Clouds' and 'Silver Cloud' for sun tolerance and refined summer coloration/.

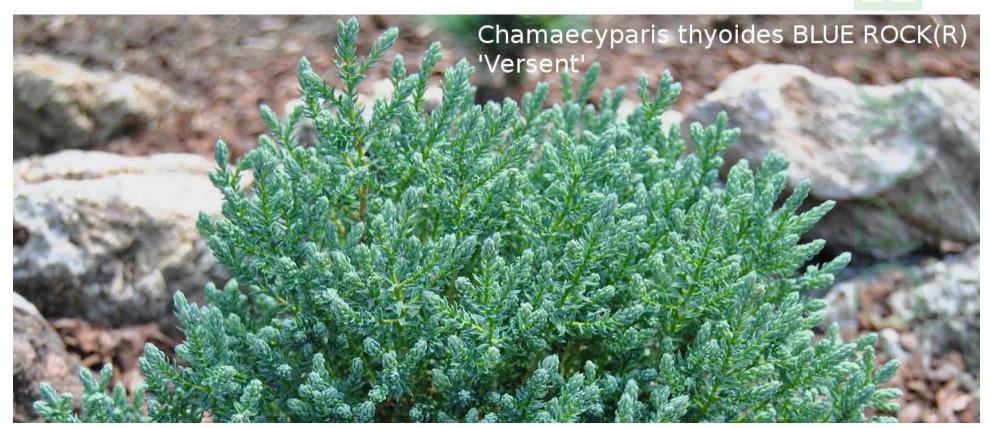
CHAE001 - Chaenomeles DOUBLE TAKE™ Series (Proven Winners)

CHAE002 - Chaenomeles speciosa RED PREMIER™ 'Greredpre' - 3-4 ft. tall x 3 ft. wide, compact. Flowers very dark red., double but less so than DOUBLE TAKE Series, cupped, stamens gold and showy. Greenleafnursery.com, accessed 5.4.2015

CHAM001 - Chamaecyparis obtusa 'Cooper's Gem' (RHS, Nomenclatural Standard, JSTOR)

CHAM002 - Chamaecyparis obtusa 'Sunny Swirl' (Iseli Nursery)

CHAM003 - Chamaecyparis obtusa NIGHT LIGHT™ (Star Roses) - I really had to get a grip when the patent application compared this globose, golden, plumose gem to "Grippsii" instead of the obvious 'Elmwood Gold', sport or seedling too of 'Crippsii'. I'm glad the US patent inspectors don't do road tests of cars because we'd be having a Lambo Aventador racing a Ford Fusion. They seem to have no clue what are legit comparisons (originators also spinning the match up to their end when the clone may or may not be unique at all) and miss the one, two, or three obvious benchmarks already in gardens and the trade too. The big Cripp's false-cypress is pretty and durable from USDA 5 to 8, handling Raleigh, NC with as much ease as Rochester NY. If this is half as good as the tales from the Cripps in gardens, it should be splendid indeed.





CHAM004 - This Chamaecyparis thyoides BLUE ROCK<sup>®</sup> 'Versent' is as good as the dwarf Chamies of the Squarrosa Group and probably more cold hardy and less browning with age. We will see but this baby looks like a winner and glows with such lovely sapphire tones. This image is not part of OROC Data Sharing.

CHAM005 - Chamaecyparis obtusa 'Butter Ball' - habit dwarf, subglobose, fern-like in texture but more elegant than similar older clones. Leaves lemon-yellow, inner foliage lime to dark green, given some contrast. Iselinursery.com, accessed October 2013.

CHAM006 - Chamaecyparis pisifera (Filifera Group) 'Angel Hair' - habit dwarf, filfiorm texture as the Filifera Group, slower and thinner than classic clones of the group. Found in New York by Mike and Ken Yaeger, Hickory Hollow Nursery. Iselinursery.com, accessed October 2013.

CHAMAER001 - Chamaerops humilis 'Vulcano' (Palmcentre.co.uk)

CHAMAED001 - Chamaedaphne 'Dew Drop' (Rare Find Nursery) - 1.5 ft. tall x 3 ft. wide at first, potentially 2-3 ft. tall x wide, very dense.

CHEL001 - Chelone Iyonii TINY TORTUGA 'Armtipp02' - 11-15 in tall x 10 in. wide, very compact, slow. Leaves very dark green. Flower corolla rich medium violet-pink, labia darker at apex. Bred by Gerard Lentjes from 'Hot Lips'

CHIO001 - Chionanthus virginicus 'Black Stem' (Buchholz)

CHIO002 - Chionanthus retusus 'Arnold's Pride' (11/5)

ht: 30 ft. tall x 30 ft. wide (original tree)

fq: very floriferous frq: self-fertile

or: Arnold Arboretum from the famous, very notable example planted 1901, raised from seed

or: collected at Emperor's Imperial Bot. Gard.

CHIO003 - Chionanthus retusus 'China Snow' (11/5)

ht: 10-18 ft. tall and wide, 10 x 10 ft. as young trees

lc: glossy dark green

fq: floriferous

or: Don Shadow selected from notable tree in old Sanford Arboretum, Knoxville, TN USA.

or: Nurseries Caroliniana (online catalog, accessed 11.24.2012) says it is from an old tree

or: at the Arnold Arboretum.

CHIO004 - Chionanthus retusus 'Ivory Tower' (3/7)

ht: 15 ft. tall x 3 ft. wide

ha: strictly upright, columnar

II: 4.0 in.

lc: very glossy green

infl: 2-4 in. panciles

so: www.hawksridgefarms.com (online catalog 2007)

CHIO005 - Chionanthus retusus 'Yadkin Creeper' (11/8)

or: presumed to be www.yadkinvalleynursery.com, not listed on website on 11.9.2008

lsp: Raulston Arb #030704 rec. 4/18/2003, 47 " tall in 2005

CHIO006 - Chionanthus virginicus 'Emerald Knight' (5/4)

Ic: darker green by one report

so: www.highlandcreeknursery.com (online catalog 2003)

CHIO007 - Chionanthus virginicus 'Groenendaal' (12/6)

ns, id: a clone listed in Europe, a seedling from Groenendaal Arboretum

CHIO008 - Chionanthus virginicus 'Floyd'

ha: denser, more upright than species typical

ft: 99% or more male flowers only

frq: virtually no fruit set, only the occasional one has been observed on larger trees

or: Sonnemann Experimental Station Garden, Vandalia IL USA c. 1945 as chance seedling

in, ns: named and introduced by Dr. J.C. McDaniel in honor of Floyd Sonnemann 1970. US trade about 1972-3

li: McDaniel, J.C. 1969. Proc. Int. Plant Prop. Soc. 19: 377-378.

CHIO009 - Chionanthus virginicus 'Pat's Variegated' (5/4)

Ic: irregularly margined, mottled and sectored light yellow, some

Ic: leaves all yellow or all green, very colorful to date

fg: seems to flower well for a variegate.

lsp: Juniper Level Botanic Garden, Raleigh, NC, first observed by me in May 2004.

Chionanthus virginicus [pink flowered]

fc: light pink

or: Dirr in his 1998 Manual relates that "a lady approached me and

or: mentioned she knew of red- and pink-flowered forms. Needless

or: to relate, I had abnormal heart paplitations. Arrangements were made

or: to propagate the forms...to this day I await the first scion."

or: Nicholson's Arnoldia article 50(4): 24-31 (1990) mentions a pink form found

or: in Virginia and perhaps other states.

CHIO010 - Chionanthus virginicus 'Spring Fleecing' (11/6)

ht: 12-20 ft. tall

ha: small tree, "superior form"

lc: glossy dark green

sex: male

fq: more floriferous ff: nicely scented

so: www.nicholsgardens.com (online catalog 2006)

CLAD011 Cladrastis kentukea 'White Rain' (Wayside Garden) - a new weeping clone - by the way there is no "c" in kentukea. It's a Latin thing and folks should know better.

CLEM001 - Clematis recta 'Midnight Masquerade' (Edelweiss Perennials), their own introduction

CLEM002 - Clematis SERIOUS BLACK™ (Walters Gardens)

CLET001 - Clethra alnifolia 'Batsto Blush' (Rare Find Nursery)

CLET002 - Clethra alnifolia EINSTEIN™ (Star Roses/Conard-Pyle) - twisted 12 inch spikes are twisted, unkempt like the famous genius!

CLET003 - Clethra alnifolia 'Firefly' (Rare Find Nursery)

CLET004 - Clethra alnifolia 'Goldsprenkle' - leaves flecked gold. Sport of 'Creel's Calico'. Rarefindnursery.com, accessed Feb. 2013.

CLET005 - Clethra alnifolia 'Wild Thing' - 2 ft. tall, compact, wider than tall. Leaves a good dark green. Rarefindnursery.com., accessed Feb. 2013, found in their woods near the nursery.

CORE001 - Coreopsis 'Mercury Rising' (Burpee)

CORE002 - Coreopsis palmata 'Indian Summer'

CORE003 - Coreopsis tripteris 'Handy Size'

CORE004 - Coreopsis tripteris 'Mostenveld'

The following registrations are pending

Coreopsis 'Bengal Tiger'

Coreopsis 'Buttermilk'

Coreopsis 'Desert Coral'

Coreopsis 'Firefly'

Coreopsis 'Imperial Sun'

Coreopsis 'Lightning Bug'

Coreopsis 'Pink Sapphire'

Coreopsis 'Summer Punch'

Coreopsis LI'L BANG™ 'Daybreak'

Coreopsis LI'L BANG™ 'Enchanted Eve'

Coreopsis LI'L BANG™ 'Red Elf'

Coreopsis LI'L BANG™ 'Starlight'

3, found in their woods r

CORN001 - Cornus controversa GARDEN DANCE™ (Wayside Gardens)

CORN002 - Cornus sericea ERIKA THE BLONDE™ (Song Sparrow Nursery, a Klehm original introduction)

CORN003 - Cornus kousa 'Empire', 'Pams Mountain Bouquet', and 'Red Steeple' (HortScience) - paid access

CORN004 - Cornus LITTLE RUBY™ (C. kousa 'Miss Satomi' x C. hongkongensis 'Summer Passion') - Dr. Ranney's new breakthrough, the first semi-evergreen to evergreen, pink-bracted dogwood.

CORN005 - Cornus kousa MANDARIN JEWEL (Brotzman's Nursery) - orange fruit

CORN006 - Cornus mas CLYDESDALE™ (Songsparrow Nursery, a Klehm original)

CORT001 - Cortaderia selloana 'Blue Bayou' (Hoffman Nurseries) - foliage distinctly blue to bluish-green.

CORT002 - Cortaderia pilosa var. minima 'Plume Delight' (Plant Delights) - 42 in. tall in leaf, 72 in. in flower. Flowers up to a month before C. selloana (Raleigh, North Carolina). Leave bluish-green. Hardy to USDA 7b. Selected by Eric Hammond and Dan Hinkley (ECH00067) from near Conquillo, Chile.

CORT003 - Cortaderia selloana 'Candy Floss' - see Hanburyana July 2013

CORT004 - Cortaderia selloana MINIGOLDEN™ 'Vercor5' - dwarf, shorter. Leaves margined yellow to gold. Bred by Bert Verhoef. See bertverhoef.com, accessed 5.30.2015.

CORT005 - Cortaderia selloana MINIPAMPAS™ 'Vercor3' - 50-100cm tall, a shorter clone. Leaves green, typical. Bred by Bert Verhoef. See bertverhoef.com, accessed 5.30.2015.

CORT006 - Cortaderia selloana MINISILVER™ 'Vercor6' - dwarf, shorter. Leaves margined white to silver. Bred by Bert Verhoef. See bertverhoef.com, accessed 5.30.2015.

CORT007 - Cortaderia selloana 'Scarlet Wonder' - 2.5m tall. Leaves green. Flower inflor. to 90cm long, rich crimson to dark violet-red to purplish-red, the darkest red shade yet known (June 2015), fairly pendulous and cascading. The claim for trademark status of this name is invalid since the US Plant Patent app fixes this garden taxon in the cultivar rank as annotated by the applicant. <u>US Plant Patent #19015</u> on July 15, 2008 to Johan Troelstra as sport of unnamed clone, Netherlands 2002, assigned to Compass Plants BV

CORY001 Corydalis BLUE LINE® 'Couriblue' (Minier Nurseries) - 30-50cm tall x 50-80cm wide, very large for the genus, more vigorous than either parent. Flower stems reddish, showy, tepals light-medium blue, very long bloom period "nearly non-stop from spring to autumn", blooms to 35mm wide, regularly spaced but thickly clustered, sweet honey scent. Leaves light green, lobed. Cross of C. flexuosa x C. elata by Jacques Couturieux, Eur PBR 2012-0594.

CORYLO001 - Corylopsis spicata 'Golden Spring' (Mark Weathington, JC Raulston Arboretum)



<u>COSM001</u> - Cosmos bipinnatus 'Cupcake White' is a fun and useful breakthrough in this genus. These are not fused, tubular rays but a fusion of all rays! I've always loved the cosmos whether in the white to red range of this species or the yellow to orange of C. sulphureus. The are as solid as any perennial for daisy style form and color - and this species fine foliage is a rich benefit. Cupcake Series from Thompson & Morgan, a genuine game-changer has fused, cupped petals with lots of texture, ridges, and therefore shadows - all with a perfect gold button center. It is almost Cosmos-becomes-Papaver. Wow and super wow. Image courtesy of www.fleuroselect.com.

COTI001 - Cotinus 'Candy Floss' ('Grace' x 'Daydream') - 3-4m tall x wide. Flowers in large inlfor., appearing medium, airy pink overall, darker in shade. Leaves red, orange, and gold shades in fall, showy. Hillier Nurseries, their own hybrid intro. fall 2014.

COTO002 - Cotoneaster dammeri 'Lemon Funky' - Stems greyish-purple, parent plant greyish-green. Leaves with new growth yellow, becoming yellowish-green, Originated by Hans Jurgen Mueller as sport found in Kornwestheim, Germany in 2008 from unnamed cultivar, US Patent #23746 on 7.16.2013.

CROC001 - <u>Crocosmia NOVA™ DRAGONFIRE</u> - 26 in. tall x 30 in. wide, upright-arching, not flopping as older reds, multiplying well. Flower corolla dark red to scarlet, contrasting gold stamens, often blooming the first year as young plants. Terranovanurseries.com, accessed 5.25.2015, intro. 2015.

Previously known 201 Cryptomeria cultivars based on Hatch's Cultivars of Woody Plants CRYP001 - Cryptomeria japonica DRAGON WARRIOR™ (Hawksridge Farms)

CRYP002 - Cryptomeria japonica 'Little Kean'

CUPH001 - Cuphea VERMILLIONAIRE™ (Proven Winners)

CUPR001 - Cupressus macnabiana 'Lilah' (RHS, Nomenclatural Standard, JSTOR)

CUPR002 - x Cupressocyparis leylandii 'Weeping Leyland' - cascading habit, upright, vigorous. Camforest.com, accessed 4.23.2015

DAPH001 - Daphne x houtteana 'February Plum' (Monrovia)

DAPH002 - Daphne odora 'Maejima' (Wayside Gardens)



DAPNI001 - Daphniphyllum teijsmannii 'Mountain Dove', a ghostly marginated and sectored sport with contrasy violet-red petioles. Click image to enlarge. Image above is not part of OROC Data Sharing and must not be used.

## DAVIDIA - THIS CONTENT SPANS THE ENTIRE RANGE OF HATCH'S CULTIVARS OF WOODY PLANTS

DAVI001 – Davidia involucrata 'Aya Nishiki' (5/6)

lc: wide creamy-white margins becoming mottled bluish-green,

Ic: white, and green. On the Buchholz website the margins are rich yellow.

or, pat: Akira Shibamichi, Japan, as seedling, US Patent applied for 5/11/2006

so, ph: <a href="http://www.buchholznursery.com/plant\_page.html?id=26c354">http://www.buchholznursery.com/plant\_page.html?id=26c354</a>

DAVI002 - Davidia involucrata 'China Compact' (2/10)

ha: smaller, more compact

**SO, in:** <a href="http://www.buchholznursery.com">http://www.buchholznursery.com</a> (online catalog Feb. 14, 2010)

REGISTRATION PENDING NEW NAME - Davidia involucrata 'Columnaris' invalid post-1959 Latin name (6/7)

ha: upright

ns: requires a new, valid vernacular name if proven of interest.

so: <a href="https://www.bloomrive.com">www.bloomrive.com</a> (online catalog 2007)

DAVI003 – Davidia involucrata 'Crimson Spring' (6/7)

lc: burgundy-red new growth, later more bronze-red, then more green

so: <a href="https://www.bigdipperfarm.com">www.bigdipperfarm.com</a> (online catalog 2007)

so: www.greergardens.com (online catalog 2007)

DAVI012 - Davidia involucrata 'Iseli Fastigiate' (10/2013)

ha: narrowly erect.

or: Iseli Nursery, Oregon, introduced 2013, from a distinct narrow seedling

DAVI004 - Davidia involucrata 'Kylees Columnar' (2/10)

ht: 10 ft. tall x 2 ft. wide (10 years)

ha: columnar, pillar-like

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**SO, in:** <a href="http://www.buchholznursery.com">http://www.buchholznursery.com</a> (online catalog Feb. 14, 2010)

DAVI005 - Davidia involucrata 'Platt's Variegated' (2/5)

Ic: variably mottled and sectored white

or: Platt Garden, Portland OR USA as seedling

so: Collectors Nursery (online catalog 2005)

DAVI006 - Davidia involucrata 'Purpleleaf' (5/6) provisional name

Ic: dark burgundy to purple new growth (RHS 79A,B becoming 79B with 136C)

or, pat: Akira Shibamichi, Japan, as seedling, US Patent applied for 5/11/2006

ns: simple descriptive cultivar names such as "purpleleaf" are not allowed under

ns: the modern code. This clone needs a new name.

DAVI007 - Davidia involucrata 'Shibamachi Variegated' (2/10)

Ic: broadly margined yellow (to 35%0, red tinged edge in fall

SO, in: <a href="http://www.buchholznursery.com">http://www.buchholznursery.com</a> (online catalog Feb. 14, 2010)

DAVI008 - Davidia involucrata 'Sonoma' ('Sonoma Clone')

ht: 30-40 ft. tall x 25-30 ft. wide (as species?)

fq: more floriferous than species typical

fd: white bracts to 10 in. long - some species variants are 8 in. at the most

ns: probably belongs to var. vilmoriniana which is more common in gardens.

or: Sonoma Hort. Nursery before 1984

DAVI009 - Davidia involucrata 'Sumako' (2/10)

SO, in: <a href="http://www.buchholznursery.com">http://www.buchholznursery.com</a> (online catalog Feb. 14, 2010, name only, not described)

DAVI010 - Davidia involucrata 'Variegata' post-1959 illegit. name(2/10)

lc: mottled and sectored (20-50%) in bright golden-yellow

SO, in: <a href="http://www.buchholznursery.com">http://www.buchholznursery.com</a> (online catalog Feb. 14, 2010)

DAVI011 - Davidia involucrata 'White Dust' (2/10)

Ic: subtley spotted white and pale green (30-60%), no bold sectors

lc: or zones

SO, in: <a href="http://www.buchholznursery.com">http://www.buchholznursery.com</a> (online catalog Feb. 14, 2010)

<u>DENT001 - Dentaria diphylla 'Bama Jama' (Plant Deligts) -</u> 6 in. tall x 12 in. wide at first, potentially to 36in.w ide in 5 years. Leaves dark green, slightly silver veined, very dark opurple below. Plantdelilghts.com, accessed 5.7.2015, their own discovery in Calhous County, Alabama, thriving in a seasonally flooded lowland, handling wet conditions very well.

DENT002 - Dentaria diphylla 'American Sweetheart' - 6 in. tall.. Leaves matt olive green, no shine, silvery or paler whitish veins, dark opurple below, the most colorful clone known to Plant Delights (May 2015). Plantdelights.cm, accessed 5.7.2015.

DEUT001 Deutzia hookeriana 'Carolyn Hardy' (RHS, Nomenclatural Standard, JSTOR)

DICE002 - Dicentra 'Fire Island' (Walters Gardens, available 2015)

DICE003 - Dicentra 'Sulphur Hearts' (PlantariUM)





DICE001 - Dicentra spectabilis 'Valentine', probably the first true red in the big species format, certainly much improved with the contrast of the white tissues and burgundy new leaves. Click image to enlarge.

DIGI001 Digitalis x hybrida FOXLIGHT™ PLUM GOLD - 22-24 in. tall. Flower corolla violet-plum, throat more gold with dark spots. USDA 7-10. Darwinperennials.com, accessed 4.11.2015

DIGI002 Digitalis x hybrida FOXLIGHT™ RUBY GLOW - 22-24 in. tall. Flower corolla dusky violet-red, dark ruby red at base on exterior, dark apricot-gold center, few dark spots. USDA 7-10. Darwinperennials.com, accessed 4.11.2015

DIGI003 Digitalis x hybrida FOXLIGHT™ ROSE IVORY - 22-24 in. tall. Flower corolla very wide, open, flaring, rich rose-pink on interior, interior almost entirely pale ivory to like orange, heavily dark-spotted. USDA 7-10. Darwinperennials.com, accessed 4.11.2015

<u>DIOS001- Diospyros virginiana MAGIC FOUNTAIN™ 'JN5' (Pleasant Run Nursery)</u> - 10-12 ft. tall 5-10 ft. wide, distinctly weeping, inverted or columnar type weeper as young plants, apparently wider with age. Fruits present, female clone, maturing to yellow, edible after frost. Leaves red to yellow in fall, potentially semi-showy. Selected by Ray Jackson, Tennessee, USA.

DIOS002 - Diospyros kaki 'Shibamichi Weeping' - moderately to broadly weeping, a classic weeping, upper branches hooked and arching much as Fagus sylvatica 'Pendula', Fruit medium orange, a female clone. Selected by Akira Shibamichi, Japan, reported in the US c. 2014. It s readily distinct from MAGIC FOIUNTAIN of another species by it's wider, more open form, and much larger, more orange, fruit. Web: <a href="https://jcraulstonarboretum.wordpress.com/">https://jcraulstonarboretum.wordpress.com/</a>

DRAC001 - Dracaena steudneri 'Cintho Lemon' - as 'Jelle' and species but leaves centrally marked yellow to yellowishs-green, dark green edges, leaves 28cm long x 5.5 cm wide. <u>US Plant Patent #25556</u> on May 12, 2015 to Jan B. Campo, sport of 'Jelle'

DRAC002 - Dracaena reflexa 'KKDR201203' - <u>US Plant Plant #24683</u>. Trade name not established as of May, 23, 2015.

<u>DRYO001 - Dryopteris labordei 'Golden Mist' (Plant Delights)</u> - a strangely pretty ferm with glossy, golden new foliage.

ELAE001 - Elaeagnus x ebbingei OLIVE MARTINI™ 'Viveleg' (Star Roses and Plants) - 10-15 ft. tall x wide, apparently typical species vigor, upright, dense, more upright and stronger in trials than 'Gilt Edge'. Leaves very dark olive green (base color darker than 'Gilt Edge'), margined light yellow at 10-20% surface, more stable chimera than 'Gilt Edge'. Leaves very dark olive green (base color darker than 'Gilt Edge'), margined light yellow at 10-20% surface, more stable chimera than 'Gilt Edge'. Leaves very dark olive green (base color darker than 'Gilt Edge'), margined light yellow at 10-20% surface, more stable chimera than 'Gilt Edge'. Leaves very dark olive green (base color darker than 'Gilt Edge'), margined light yellow at 10-20% surface, more stable chimera than 'Gilt Edge'. Leaves very dark olive green (base color darker than 'Gilt Edge'), margined light yellow at 10-20% surface, more stable chimera than 'Gilt Edge'.

ENGE001 - Engelmannia peristenia 'Bergheim' - 24 in. tall. Flower rays yellow (as species), floriferous. Plantdelights.com, accessed 4.22.2015

ENKI001 - Enkianthus campanulatus 'Lipstick' (Rare Find Nursery) - flower corolla white, about 20-25% surface at the apex bright hot pink, not bluished but strongly marked, contrasting much. Rare Find Nursery selection.

ENKl002 - Enkianthus campanulatus 'Bruce Briggs' - flower corolla nearly 100% bright pinkish-red red, only the small green calyx giving contrast. Selected Weston Nurseries, Mass., USA by Chris Rogers, Propagator, 1980's, only recently in the the US trade under this name, c. 2015, sometimes called "Weston red seedling" or similar before. Westonnurseries.com, accessed 5.5.2015 does not mention it but shows 'Red Velvet' which we believe to have slightly pink tips over a mostly red corolla and not the same clone. Said to be named for the founder of Briggs Nursery, Washington, USA who list it.

Hatch Perennials with 155 existing cultivars is our standard reference for Epimedium EPIM001 - Epimedium sempervirens 'Cherry Hearts'

EPIM002 - Epimedium acuminatum 'Ruby Shan' (Plant Delights)

<u>EQUI001 - Equisteum giganteum 'El Tabacal' (Plant Delights)</u> - 120 in. tall, very massive form, quite highly branched and frankly prehistoric with numerous recurving branch whorls. USDA 8b, handling 15 deg. F. in ground when Tony Avent found other clones and accession less hardy. Plantdelights.com, accessed 5.7.2015, obtained from Chad Husby in Argentina near El Tabacal, Salta Prov.

EUCA001 - Eucalyptus gunnii FRANCE BLEU® (Sapho.fr) - one of the frosty blue clones ever.

EUCA002 - Eucalyptus gunnii AZURA® 'Cagire' - 4m (10 years) where cold hardy, habit neater ,more compact, branching more ornamental, and yet more vigorous than random seedlings. Leaves rich azure blue, appearing quite silvery-glaucous in bright light, darker in shade. More cold hardy in French trials, proven one of the most cold tolerant clones in this species, handling up to -18 to -20 Deg. C. in France. It survived when other seedlings died. Roots in high percentagres, even from coppaced shoots. Eur PBR to Afocel, France.It should be regarded as one of the most cold hardy and proven ornamental clones in the genus today (May 2015).

<u>EUON001 - Euonymus fortunei DAN'S DELIGHT 'Dandel'</u> - 40cm tall x 60cm wide, compact, dense. Leaves very dark green, margined white to 50-90% or surface, on older mature leaves this white is very clean, bright, not creamy nor muddled in gray tones, one of the most white intense clones reported (May 2015), new tips a bit more yellow to cream in the chimera. Holds color all year where hardy. Selected by Dan Barnet, England, Eur PBR #2014-0121, intro. 2013

EUON002 - Euonymus alata 'Russell Milstead' (Song Sparrow Nursery, Klehm) - 3-5 ft. tall x wide (5 years), dense, subglobose. Leaves a very intense, bright ruby red in fall. USDA 4 hardiness.

EUON003 - Euonymus fortunei WHITE ALBUM™ 'Alban' - low, dense mound, better form than similar Emerald Gaietiy'. Leafspot resistant. Leaves with very wide white to light cream margins. Springmeadownursery.com, accessed April 2013.

EUPA001 - <u>Eupatorium maculatim 'JS Humble'</u> - 50cm in leaf, 80cm tall in flower, shorter, firmer, stronger stems. Flower infl. larger than species typical, rich purplish-laveder to light purple, dome-shaped (not flat). Jan Spruyt, introduced 2014.

EUPA002 - <u>Eupatorium perfoliatum 'Witte Wolken'</u> - 50cm tall in leaf, 80cm tall in flower, strong stems. Flower heads white. Selected by Jan Spruyt, vasteplant.be, accessed 6.7.2015

EUPA003 - Eupatorium fistulosum 'Early Riser' - 84 in. tall in flower. Flower heads mauve-lavender, well-branched, blooming earlier than much species material (mid to late June, Raleigh, NC). Tony Avent, Plant Delights Nursery, Raleigh, North Carolina found on roadside near NC Highway 42 in Johnston Co., North Carolina. Rooted stock produced stock with the same early flowering trait, Introduced 2011.

EXOC001 - Exochorda racemosa 'Snow Mountain' - 5-6 ft. tall x 5-6 ft. wide, globose. Flowers 3-4cm wide, 5cm deep, very abundant, blooming from the bottom to the top of the plant, giving a more enduring, impressive show. Propagated easily with softwood stem cuttings unlike 'The Bride' which is somewhat difficult. USDA 4 hardy. US Plant Patent #25473 on May 28, 2015 to Herman Geers, Netherlands, a controlled cross 1994, selected in 1997 as the best seedling. Marketed in US by Blooming Easy, PPAF. 'The Pearl' has larger flowers but is much taller.

EXOC002 - Exochorda SNOW DAY® SURPRISE 'Niagara' - 36-48 in. tall x wide, a true dwarf, upright-mounded to loose spreading, yet compact. Flowers 3.3cm wide, inflor. to 5.2cm long, very abundant, mostly in large terminal racemes. Roots well from cuttings. <u>US Plant Patent # 21665</u> to Herman Geers, cross of E. macrantha 'The Bride' and unnamed E. racemosa in 1994 assigned to Spring Meadow Nursery, widely sold by Proven Winners in 2015.

<u>FAGU001 Fagus grandifolia 'White Lightning' (Mark Weathington, HortScience)</u> - paid access to cultivar release. There is also a photo on the JC Raulston Arboretum website of their new, dwarf and weeping cultivar of the native, American beech species: <a href="http://jcra.ncsu.edu/horticulture/our-plants/results-by-name-serial-number.php?serial=120165">http://jcra.ncsu.edu/horticulture/our-plants/results-by-name-serial-number.php?serial=120165</a>

FAGU002 Fagus grandifolia DIAMONDBACK™ (Ferncliff Cemeterv)

FAGU003 - Fagus sylvatica 'Callista' - as 'Dawyckii' but slower, much denser, semi-dwarf, 2m tall in 10 years. Leaves typical green. hgeersnl, accessed 5.26.2015

FAGU004 - <u>Fagus sylvatica 'Eugen'</u> - a semi-dwarf form, often more spreading than typical species, thus may be wider than tall. Leaves with a distinct obtuse, more rounded apex. It is sometimes referred to as 'Fruticosa Eugen' (sophora.pl, accessed 5.31.2015), in connection with a post-1959 Latin cultivar name for shrubby, dwarf forms called 'Fruticosa' (fruticose=shrubby in Latin). Thought to be of Czech origin.

FAGU005 - <u>Fagus sylvatica 'Londal Kribbebuk'</u> - very low contorted-weeper to spreading mound if grafted low, otherwise like a mix of 'Pendula' and 'Tortuosa' if grafted higher, a "cascading carpet" by one account.

FAGU006 - <u>Fagus sylvatica 'Sandrode'</u> - sport of the linear-bladed 'Mercedes', also semi-dwarf, dense, compact, can be upright to ovoid, but blades saw-toothed or boldly dentate, more like true 'Laciniata' than 'Asplendifolia (ie. shallower incisions, symmetrical blade), also more undulate than 'Laciniata'. The name translate to "red sand", possiobly because of the red to yellow fall colors?

FAGU007 - Fagus sylvatica 'Tur' - leaves very large to 11cm long, richly textured (sunken veins), very dark purple, more so than either 'Spaethiana'. Hulsdonk.com, accessed 5.31.2015

FATS001 - Fatsia japonica 'Spilt Milk' - glossy green, margined and splashed cream to white. Cistus.com, accessed 4.22.2015, their own selection

FATS002 – Fatsia polycarpa 'Needham's Lace' – 10 ft. tall or larger. Leaves suffused silver over green, major veins much whiter. Edward Needham selection.

FEST001 - Festuca glauca BEYOND BLUE® (Concept Plants)

FEST002 - Festuca glauca 'Cool as Ice' - 12 in. tall, 18 in flower. Leaves "selected for its lighter green spring emergence giving the plant a slight bi-color look", veyr rich icy blue in summer. More heat tolerant than most clones. Origin: Intrinsic Perennial Garden, website, accessed 4.10.2015

FICU001 - Ficus afganistanica 'Silver Lyre' - 20 ft. tall x 10 ft. where fully cold hardy, very vigorous. Leaves deeplhy lobed, incised, "snowflake-shaped", silvery silvery-green to light silver (much greener in species typical). USDA 7b. Sean Hogan (cistus.com), accessed 4.22.2015.

FORS001 - Forsythia x intermedia MAGICAL® GOLD 'Kolgold' (Monrovia) - 3-5 ft. tall x 3-4 ft. wide. Flowers extra large, floriferous, covering nearly every stem of new and old wood, one of a few that bloom from both. Therefore useful as a long cut flowering spray. Leaves a rich green. Bred by Peter Kolster.

<u>FORS002 - Forsythia x intemedia 'Nimbus' (Minier Nurseries)</u> - compact (more so than parent 'Courtijau'), upright to outwarding spreading, vigorous (more than parent 'Courtijau'), freely branched, dense. Flowers numerous, longer blooming and also earlier than parent 'Courtijau'. *Phytophthora* resistant. <u>US Plant Patent #23838</u> on August 20, 2013 to Patrick Pineau, cross of 'Courtijau' x unknown male clone, 2004, selected 2006, assigned to Pepinieres Minier.



FRAG001 - Fragaria x ananassa 'Toscana' won the Fleuroselect Star award for being a dual purpose or edible ornamental superior to older material. We've had rich pink flowers in the genus before, these being showy on the order of a mounding Potentilla for ornamentality, and in decades past it was claimed those pinkies had fine, luscious fruit. Well....in reality...not so much. The fruits were tiny, hardly sweet or yummy more than one or two bites a spring, and were not going to mass-top any pancakes, cakes, or ice cream any time soon. This is perhaps the first cultivar with all the glorious flower quantity and corolla color but with truly big, abundant, tasty berries. It has "genuine strawberry taste", medium-sized, conical, dark fruit (and that is rather new with showy, non-white flowers) and is also described as "multi-dimensional". It's an F1 cross, flowers 3-4cm wide, and can be mass-produced from seed. That is a breakthrough and we think this one just might have more than one purpose in all our gardens.

GAIL001 - Gaillardia COMMOTION® MOXIE (Monrovia)

GEUM001 Geum 'Sunkissed Lime' (Terra Nova Nurseries).

GEUM002 Geum 'Alabama Slammer' (Intrinsic Perennial Gardens)

GEUM003 Geum 'Banana Daiguiri' (Intrinsic Perennial Gardens)

GEUM004 Geum 'Champagne' (Intrinsic Perennial Gardens)

GEUM005 Geum 'Cosmopolitan' (Intrinsic Perennial Gardens)

GEUM006 Geum 'Dark and Stormy' (Intrinsic Perennial Gardens)

GEUM007 Geum 'Gimlet' (Intrinsic Perennial Gardens)

GEUM008 Geum 'Limoncello' (Intrinsic Perennial Gardens)

GLED001 - Gleditscia triacanthos STREET KEEPER® 'Draves' (streetkeeper.net) - 45 ft. tall x 18-20 ft. wide (50 years), columnar to narrowly ovoid, central leader dominant, stong crotch angles, reminds us of the old 'Elegantissima' but denser, narrower, suitable for larger city streets with half or less than normal spread. Leaves dark green, more textured, yellow in fall. No fruit seen in 50 years. US Plant Patent #21698, Tom Draves, found near Buffalo, New York from a notable tree.

GORD01 - Gordonia lasianthus 'Swampy' - habit more vigorous. More cold hardy, selected from near Aiken, South Carolina, a more northern range than some nursery stock. Selected by Chuck Weeks, former employee with Nurcar.com, accessed April 2013.

GYPS001 - Gypsophila repens 'Red Neck' (Edelweiss Gardens), their own introduction

HALE001 - Halesia carolina CRUSHED VELVET™ 'JFS-PN2Legacy' (J.F. Schmidt) - 20 ft. tall x 15 ft. wide, ovoid, more compact and slightly more narrow, finer textured branching. Leaves rich bluish-green, smaller dimensions, textured, and waxy, hence the trademarked name.

HAMA001 - Hamamelis 'Foxy Lady' - flower tepals vark ruby red to dark violet-red, one of the darkest reds known in the genus (May 2015). Selected by Chris Lane.

<u>HAMA002 - Hamamelis virginiana 'Lemon Lime' (Rare Find Nurseries)</u> - leaves very finely striped, speckled, and thinnly sectored in typical green, lime green, chartreuse and light yellow, about 50% chimera and thus highly colorful.

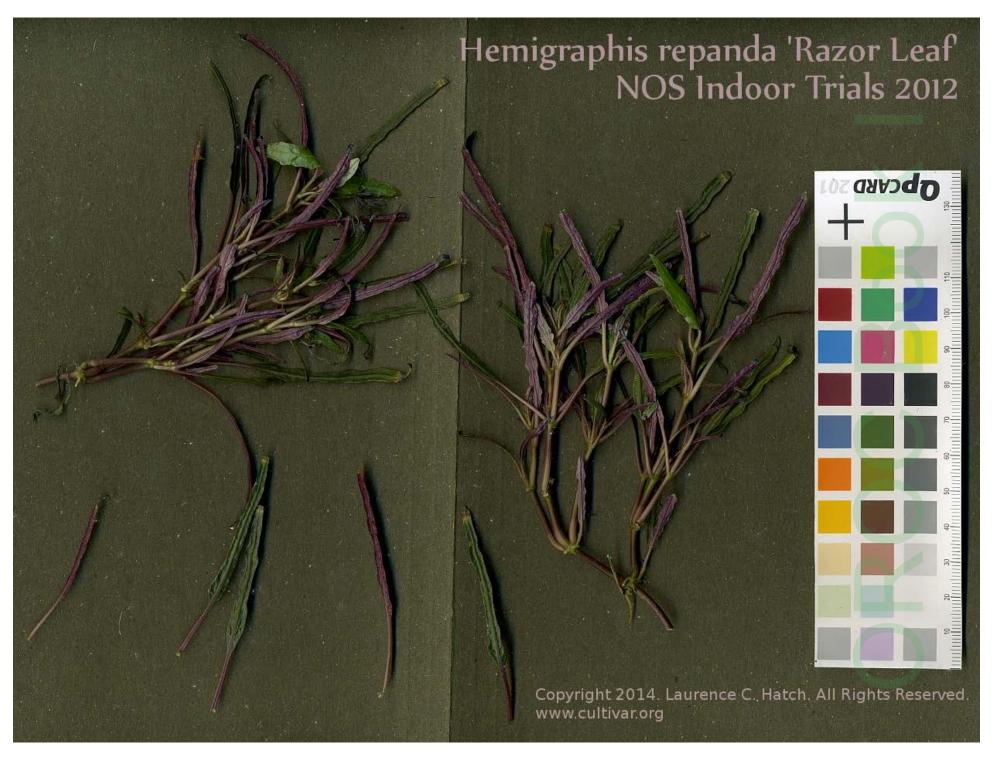
HAMA003 - Hamamelis vernalis ORANGE SUNRISE™ (Song Sparrow Nursery) - 5-6 ft. tall (10 years), flowers abundant, very fragrant, tepals orangish-gopld, calyx a contrasting dark red. Leaves in dark red shades in fall. Roy Klehm selection.

HAMA004 - Hamamelis GRAPE FIZZ™ 'KLMNN' (Song Sparrow Nursery) - 5 ft. tall x wide (10 years). Flower tepals an unusual lavender-purple. Leaves with gold colors in fall. Roy Klehm selection

HELE001 - Helenium autumnale MARIACHI™ Series (Wayside Gardens)

HELE002 - Helenium 'Gay-go-round' (RHS, Nomenclatural Standard)

HELL001 - Helleborus x ballardiae 'Rauston Remembered' (Plant Delights, new for 2015) - 14 in. tall, vigorous, durable. Stems and petioles red, showy. Leaves veined silver to greenish-silver, showy. Flowers larger than typical of the hybrid species, white tinged light pink, very florioferous. Pine Knot Farms from a plant given to the JC Raulston Arboretum in 2002, named now for it's late founder. Jonathan Nyberg, Curator of the Winter Garden at JCRA noticed the foliage remained in good condition after one hard winter when other clones and seedlings had much damage. After permissions, this superior clone was tissue cultured and distributed by Plant Delights and Pine Knot Farms c. 2014.



HEMI001 - Hemigraphis repanda 'Razor Leaf' is a house plant sold all over but under other species' names. Nor is this the basic species which often has a leaf 2-3x wider (at

least outdoors) and even our two year old plants indoors maintained this lovely thin blade with no tendencies to be species typical. We saw it online from a store calling it "razor leaf plant" and after determining that was not an established species common name, decided it would make a suitable clonal name. The luminous violet-lavender leaf backs and the very dark fronts are hard to photograph in any light. We finally got this decent image using a dark green file folder, a flatbed scanner, and a color standardization card to provide context and calibration. Click image. This image is not part of OROC Data Sharing.

## The following all are pending registrations

Heuchera 'Carnival Black Olive'

Heuchera 'Carnival Candy Apple'

Heuchera 'Carnival Coconunt'

Heuchera 'Carnival Coffee Bean'

Hecuhera 'Carnival Fall Festival'

Heuchera 'Carnival Limeade'

Heuchera 'Carnival Peach Parfait'

Heuchera 'Carnival Rose Granita'

Hecuhera 'Carnival Silver Streak'

Heuchera 'Carnival Plum Crazy'

Heuchera 'Carnival Watermelon'

Heuchera 'Bella Notte'

Heuchera 'Black Taffeta'

Heuchera 'Cajun Fire'

Heuchera 'Cherry Cola'

Heuchera 'Creole Nights'

Heuchera 'Delta Dawn'

Heuchera 'Fire Alarm'

Heuchera 'Forever Purple'

Heuchera 'Glitter'

Heuchera 'Little Ruffles'

Heuchera 'Midnight Ruffles'

Heuchera 'Red Lightning'

Heuchera 'Zipper'



HYPE001 - Hypericum calycinum GOLDEN RULE 'NCHCI' - photo courtesy of and copyright owned by Dr. Tom Ranney, NC State University. Please click image to enlarge. Above

image is not part of OROC Data Sharing.

HYPE002 - Hypericum BLUE VELVET™ (Hawksridge Farms)

HYPE003 - Hypericum kalmianum COBALT-N-GOLD™ 'PIIHYP-I' - 2-3 ft. tall x 4-5 ft. wide, compact but not overly dense, somewhat open and natural-looking branch

architecture, mounding, not splaying out or getting rough with age, not producing open or unkempt centers. Bark cinnamon-brown, exfoliating, semi-showy. Leaves silvery-green, effectively bluish-green as the trademarked name implies, fall tones yelow, red, and orange. Flowers bright yellow, small but numerous heads at the apices, bloom period long as in late spring to earyy summer. US Patent #25318 on Feb. 24, 2015 to Joshua Kardos and Dr. Michael Dirr of Georgia, USA, as open pollinated seedling. assigned to plantintroductions.com.

PENDING - Hypericum androsaemum 'Matisse', 'Pollock', and 'Picasso' (Dr. Tom Ranney, North Carolina State University)

HYPE004 - Hypericum kalmianum BLUES FESTIVAL™ 'SMHKBF'- 24-36 in. tall x 24-48 in. wide. Leaves ellliptic, distinctly bluish-green to silvery-blue. Flowers to 1 in. wide, single, very long bloom period.

IBER001 - Iberis (sempervirens x gibraltarica) 'Masterpiece' (Google Patents)

IBER002 - Iberis sempervirens PINK ICE™ (Monrovia Nursery)

IBER003 - Iberis gibraltarica 'Lavish' (Darwin Plants, new 2014)

IBER004 - Iberis sempervirens 'Whiteout' (Kieft Seeds)



BER005 - Iberis ABSOLUTELY AMETHYST® is said to be the first lavender or lilac-toned perennial clone of the genus. Amethyst and lavender it will be...the claimed "purple" is for people with no sense of color. To that I say, I and many other people had this shade from Iberis gibraltarica decades ago and mine was hardy for some years in USDA 4 of upstate, Syracuse, New York of all rigorous places to test perennial hardiness. This is a fine plant, superior to random I.gib's but it is vastly a rewrite of history to call it a first in the lavender perennial class. Best in class...maybe..one of a few today (2014) but definately not first. Now we add in the note that Monrovia, the big powerhouse, among others, says their I. sempervirens PINK ICE™ is the first pink perennial cultivar, a close shade in some lights and very lavender in bud. Isn't it likely that their clone too borrowed a rosy gene or two from I. gibraltarica or less likely the popular but sometime semi-hardy I. umbellata. Also the originator's claim for ABSOLUTELY AMETHYST that it belongs to the non-existant species *Iberis hybrida* should have challenged by the US Patent Office from minute one. Patenting a plant in a species that does not exist might well be grounds for revision or rejection, me thinks. If it's not pure I. gibraltarica (and I suspect it would be a cross to I. semperviren given the head width)...it's a nice find and surely a useful item. The University of Tennessee, an elite horticulture group, rated it 2.0 overall out of 5.0 so it may not be for everyone. Give it a whirl for the pretty, not purple, tones. Just forget the hype and spin and bad data.

IBER006 - Iberis amara 'White Heat' (Darwin Plants)

ILEX001 - Ilex pedunculosa 'Mountain Mist' (Raulston Arboretum, Instagram)

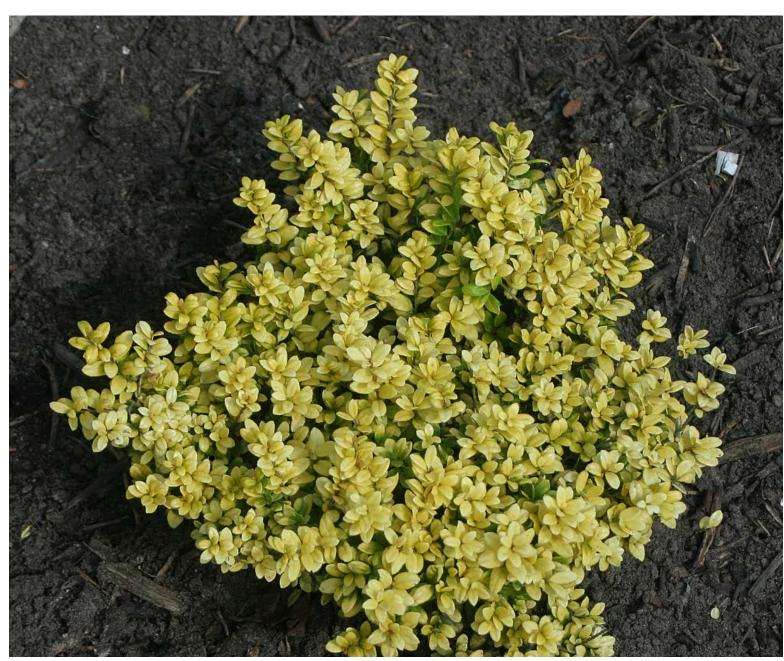
ILEX002 - Ilex 'Elizabeth Coleman' (Camellia Forest)

ILEX003 - Ilex x meserveae SCALLYWAG™ (Monrovia)

ILEX004 - Ilex vomitoria MICRON® (Garden Debut)

ILEX005 - Ilex vomitoria EUREKA GOLD™ (Garden Debut)

ILEX006 - Ilex crenata 'Adorned' (JC Raulston Arboretum)





ILEX007 - Ilex crenata BRASS BUCKLE™ . Photo owned by and courtesy of www.provenwinners.com.

<u>ILEX008 - Ilex opaca 'Winter Sun' (Rare Find Nursery, Holly Ridge Nursery)</u> - we are all used to red and some gold-berried American hollies but here's one of the few that bridge that gap with golden-orange to pale orange fruit colors.

ILEX009 - Ilex vomitoria 'Lances Weeper' - vigorous, penduous. Based on JC Raulston Arboretum, accession #040566 in 2004.

ILEX010 - Ilex verticillata 'Firestorm' - see American Holly Society Registration

ILEX011 - Ilex 'Baltimore Blaze' - see American Holly Society Registration

ILEX012 - Ilex x attenuata 'Blackwater' - 15 ft. tall x 8-10 ft. wide, vigorous, open branched unless heavily pruned, best trained in conical form. Stems purplish at first, later grayish-brown. Seedling of 'East Palatka' but resembling 'Foster No. 1', having more drought and soil saturation tolerance but it. Female clone, fruit heavily. Panhandlegrowers.com, accessed 5.9.2015.

ILEX013 - Ilex cassine 'Dodds Yellow' - 12-15 ft. tall x 8 ft. wide, open, erect. Leaves dark green, toothed. Fruit yellow, showy. Tom Dodd. Panhandlegrowers.com, accessed 5.9.2015.

ILEX014 - Ilex cassine 'Tensaw' - 15-20 ft. tall x 10-15 ft. wide, more heavily branched than some forms, narrowly to moderate pyramidal, crown often rounded with age. Leaves light green, very ovate, darker green with maturity. Panhandlegrowers.com, accessed 5.9.2015.

ILEX015 - Ilex vomitoria 'Miss Allentown' - 10 ft. tall x 4 ft. wide, dense, multi-trunked, narrower, very heavily branched. Leaves smaller, dark green. Fruit small, abundant. female clone. Selected by PGI. Panhandlegrowers.com, accessed 5.9.2015.

ILEX016 - Ilex vomitoria 'South Harbour' - 12-14 ft. tall x wide, very dense, wider as most species form. Leaves dark green, slightly purple in new tips. Selected by PGI from Little Sabine Bay, Pensacola Beach, Florida, USA. Panhandlegrowers.com, accessed 5.9.2015.

ILEX017 - Ilex opaca 'Brotzmans Male' - proven male pollinator. Selected by Brotzman's Nursery, Ohio, USA.

ILEX018 - Ilex x meserveae 'Little Gloss' - 50-150cm tall x 50-100cm wide, slow, dense, shruybby. Leaves bright medium green becoming dark green, very glossy, the name suggesting a little plant with gloss not a low amount of luster. Male clone, no fruit, good pollinator. Bred by K. Hibbers, Kranenburg, Germany.

ILEX019 - Ilex maximowicziana var. kanehirae IMPALA® (Ilex mutchagara hort.) - 1.5-2.5m tall x 0.5-1.0m wide, erect. Stems purplish, semi-showy. Foliage much as Ilex crenata but a sharper apex in general, 2-3 cm long, elliptic, serrulate, light green bnecoming darker. USDA 6. One reference states "it's correct Latin name is faqr too long and a bit complicated to pronounce and spell, hence its modern trade nmae IMPALA holly". Thus one might propose this a mere rename of the species but in the course of rooting this material it invariably becomes a popular clone of the species, and surely not it's sole representation worldwide, and may be regarded as a typical name names. First seen by us at havlis.cz, accessed 5.16.2015.

ILEX020 - <u>llex vomitoria 'Scarlet's Peak'</u> - 20 ft. tall x 3 ft. wide, fastigiate to narrowly columnar, very dense, much narrower than 'Will Flemming', the current and popular evaluation standard for narrow Yaupons, a clone which often splits and sends out odd arms after being injured or flopping in portions in a very ungraceful manner, requiring regular pruning, this new clone with branches also much stronger than this standard. Leaves smaller than species typica (23-25mm long x 9.5-12mm wide), very dark green. Fruit red, sometimes numerous (20-35 per later branch), a female clone, not a male fruitless clone as 'Will Flemming'. USDA 7b-8 hardiness. Said to be replacement for the

conferous Italian cypress by some growers. US Plant Patent #20581 to Daniel Batson as corss of unnamed seedlings, selected 2005, patent assigned to Unique Plants Inc.

ILLI001 - Illicium anisatum 'Allard' - flower tepals white.

<u>ILLI002 - Illicium anisatum PURPLE GLAZE™ (Nurseries Caroliniana)</u> - new growth very glossy, dark purple as if varnished in a dark blackish-purple sheen, later green, still glossy, eventually very typical and less glossy.

ILLI003 - Illicium parviflorum 'Florence' (Plant Dellghts)

ILLI004 - Illicium floridanum MISS SCARLETT® 'JCJC' - Habit denser than species. Leaves more rounded. flower rich pinkish-red (lkight to medium red), more strongly scented that species. James Fleming selection, introduced as a Southern Living Collection before April 2014.

IMPA001 - Impatiens quigchanganica 'Emei Dawn' (Crug Farm)

IMPA002 - Impatiens arguta 'Blue Dream' (Plant Delights)

PENDING - Impatiens RED FOX MAGNUM, PETTICOAT, and SWEETIE Series (Red Fox/Dummen)

IMPA003 - Impatiens omeiana 'Ice Storm' (Cistus Nursery)

IPOM001 - Ipomoea SWEET GEORGIA™ (GreenFuse Botanicals)

<u>IPOM002 - Ipomoea SOUTH OF THE BORDER™ Series</u> (HortCouture)

IPOM003 - Ipomoea 'Sidekick Bronze' (Syngenta, new for 2014)

IRES001 - Iresine herbstii NEON PINK "Herbie53" - 40cm tall x wide, very compact, needing less pruning than common pink-veined clones. Leaves suborbicular, short, apex often botched to bifid, generally obtuse to broadly acute, rich reddish-purple to dark burgundy, heavily veined a glowingt shade of hot pink or neon pink, this is a not like a common red clone with pink veins, the base color being very dark, blackish-purple at times. See <a href="http://www.ozbreed.com.au/emporium-hotties/neon-pink.html">http://www.ozbreed.com.au/emporium-hotties/neon-pink.html</a>

IXOR001 - Ixora 'Siam Snow' (Glasshouse Works)





JASM001 - Jasminum mesnyi 'Sunglo' is absolutely one of the finest vine-like or long-branching shrubs for rich gold color. It is unfortunately not hardy for many of our readers (USDA 6b-7) but would certainly make a killer conservatory shrub if given strong enough light. It is also strong enough to make a summer outdoor treat if overwintered in a northern greenhouse. It's habit is quite different from FIONA SUNRISE™ and these colors tend to be richer in the new tips and more green with maturity of the leaf. Click image please. Above image is not part of OROC Data Sharing.

<u>JUNC001 - Juncus 'Dreadlocks'</u> (HortCouture)

JUNI<u>001 - Juniperus scopulorum SKY HIGH™</u>

JUNI002 - Juniperus virginiana (x horizontalis?) GREY GUARDIAN (Garden Debut)

JUNI003 - Juniperus x media LEMON PFIZZ (Plant Haven)

JUNI004 - Juniperus x media SEA OF GOLD (Monrovia)

JUNI005 - Juniperus x media ETERNAL GOLD™

JUNI006 - Juniperus horizontalis GOLDEN FUTURE™, accessed 4.12.2015

JUNI007 - Juniperus rigida var. conferta 'Osaka Dwarf Blue' - Nurcar.com, accessed January 2013.

JUNI008 - Juniperus x media 'Girard Millenium' - as SAYBROOK GOLD™ but slightly mottled white, a chimeral mutation. Girard Nurseries, sport of their own SAYBROOK GOLD, found 2000, intro, 2014.

JUNI009 - Juniperus squamata 'Green Star' - Girardnuseries.com, 2014

JUNI010 - Juniperus STAR POWER<sup>™</sup> 'J.N. Select Blue' - 6-7 ft. tall when similar J. chinensis 'Ames', 'lowa' and J. virginiana 'Caneartii' were just 4-5 t. tall at the same age, hence very vigorous, narrow upright, narrowly ovoid to narrowly pyramidal, dense, rich silvery blue. Leaves highly-divergent, similar to J. communis and juvenile foliage of J. chinensis, many star-shaped green leaves with star-shaped tips appearing, bright stomatal bands very apparent on the upperside. Michael Yanny, 1998 found as possible cross of J. communis x J. chinensis, introduced johnsonsnursery.com, Wisconsin. The images are not consistant with ordinary juvenile J. chinensis forms and so a cross to J. communis is likely.

Li: http://www.deckersnursery.com/wp-content/uploads/2012/01/JNInc\_StarPowerFlyer.pdf

JUNI011 - Juniperus squamata LITTLE JOANNA® - much as (Meyeri Group) 'Blue Carpet' but even more compact, slower, low-spreading and not tufted nor mounded as 'Blue Star' which is much more vertical and decumbent. Eur. CPVO PBR to Boomkwekerijen Gebr. Visser, Netherland, "active: under procedure' when accessed 5.2.2015. This appears to be best available image of it, given the originator (Visser) has no posts (5.2.2015): <a href="http://www.newplants.nl/typo3temp/pics/0173415259.jpg">http://www.newplants.nl/typo3temp/pics/0173415259.jpg</a>

JUNI012 - Juniperus squamata 'Tropical Blue' - very dense, dwarf, compact-mounded, similar to 'Blue Star' but a more silvery-blue tone, sometimes with aqua notes (hence "tropical"), leaves shorter and sometimes slightly twisted about the stem but only moderatley so, not a contorted clone but with nice subtle, irregular leaf twist. Older plants tend to have outwardly cascading shoots than 'Blue Star' but is not a wide-spreading clone in general.

JUNI013 - Juniperus x media 'Blue Chiffon' - elegantly spreading, some limbs erect, tufted long limbs, reminds us of a larger, arching J. sabina 'Blue Tam' overall. Leaves mostly divergent or adult type, bluish-green to light blue. Bluehorizonnursery.com, their own selection, accessed 6.2.2015.

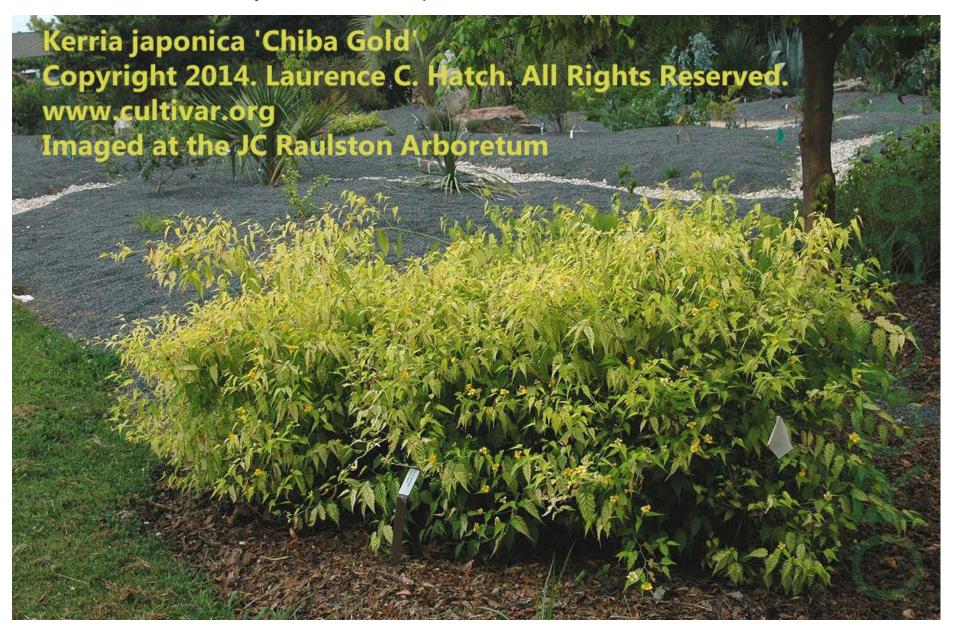
JUNI014 - Juniperus horizontalis 'Copper Harbor' - as 'Bar Harbor' but newer shoots light to medium yellow, older foliage blue and contrasting, due to the parent culitvar's height difference also taller than and less carpet-like than several 'Wiltonii' gold sports and yet shorter than LIMEGLOW™, winter coloration a lovely mix of copper, orange, blue, bronze, and gold tones. bluehorizonnursery.com, their sport, accessed 6.2.2015

JUNI015 - Juniperus procumbens 'Peve Spikkel' - compact, typical of the 'Nana' or slower clones in form. Foliage mass mottled 40% of surface in light yellow to cream, most variegated sections large and covering many secondary branchlets.

PENDING - Juniperus rigida var. conferta 'Golden Wings' - Habit loosely procumbent to low, irregular decumbent, much as species in Western gardens. Leaves medium green, to pale blush-green, in the foliage mass variegated with a scattered chimera in light to medium yellow, 10-25% of branches and foliage mass. It appears identical to 'Sunsplash' from Brookside Gardens and of US and could be either a parallel mutation or rename. The use of this appears from web searches to concentrate mostly with Polish nurseries (may 2015).

KALM002 - Kalmia latifolia 'Mitternacht' (Esveld Nursery)

KALM003 - Kalmia latifolia 'Red Bandit' - Registered with the Kalmia Society



KERR001 - Kerria japonica 'Chiba Gold' gives interest even when this fine, flowering species is not in gold bloom. In fact, it's true gold flowers contrast it bit poorly and awkwardly with the limey-chartreuse and pale lemon tones of the leaves. It is best as a misty blast of pale coloration in an other dark or blue border. It's not among the finest gold-leaved shrubs but it is different, fairly new, and rare. Above image not part of OROC Data Sharing.

KNAU001 - Knautia macedonica 'Thunder and Lightning' (Plant Delights) - 18 in. tall. Leaves broadly margined cream to white, 5-15% surface. Sport found by Marc Laviana, Sunny Border Nurseries, Connecticut, USA. US Patent #21437.

Kniphofia - Whitehouse's checklist cited above is our nonmenaltural standard for registration in this genus

KNIP001 - Kniphofia ROCKETTE® YELLOW - 18-24 in . tall x 18 in. wide. Flower corolla a clean medium to golden-yellow for most of the maturity range, newest flowers faintly tinged red at the base, still effectively a mono-colored clone.

KNIP002 - Kniphofia ROCKETTE® APRICOT - 18-24 in . tall x 18 in. wide. Flower corolla a clean pale melon orange to light orange, progressively becoming more creamy toward the inflor. base, aging to melon-cream with more light orange apices.

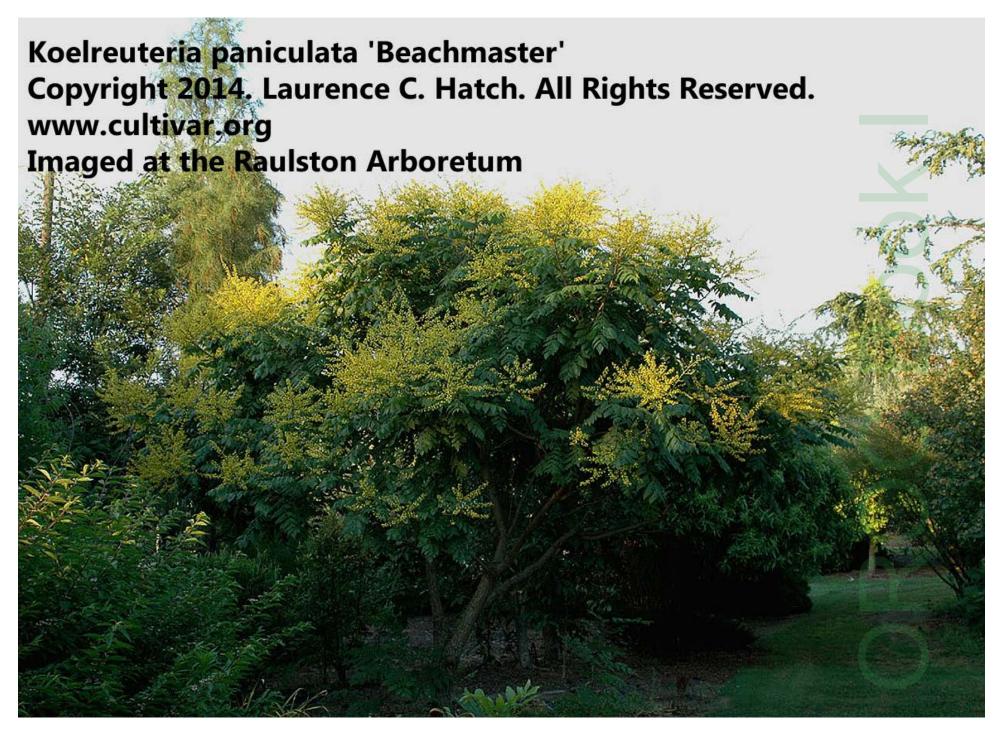
KNIP003 - <u>Kniphofia uvaria 'Echo Mango'</u> - 24-40 in. tall x 24 in. wide. Foliage semi-evergreen, neater than typical of hybrids. Flowers up to 12 infl. per stem, blooming early in season, reblooming later in season with regularity, corolla yellow tinged mango orange, becoming much more yellow, effective monocolored, very old flowers more yellow with a whitish apex. US Patent# 21706 to Richard Saul, Georgia, USA 2011, a cross of 'Apricot Surprise' x 'Candle Light in 2016.

KNIP004 - Kniphofia uvaria 'Echo Rojo' - 24-36 in. tall x 24 in. wide. Foliage semi-evergreen, neater than typical of hybrids. Flowers up to 12 infl. per stem, blooming early in season, reblooming later in season with regularity, corolla deep orange to coral-orange to reddish-orange at the apex, later becoming more orange at the base, fairly monocoplored from a distance, more bicolored up close.. US Patent# 22791 to Richard Saul, Georgia, USA 2012, a cross of 'Firelight' x 'Candle Light' in 2007.

KOEL001 - Koelreuteria paniculata SUMMERBURST™ (J.F. Schmidt)

KOEL002 - Koelreuteria paniculata GOLDEN CANDLE™ (Upshoot) - 35 ft. tall x 4 ft. wide, narrowly columnar. Leacves rich gold in fall





KOEL003- Koelreuteria paniculata 'Beachmaster' (HISTORICAL REGISTRATION)

LAGE002 - Lagerstroemia PRINCESS HOLLY ANN™ 'GA 0701' - 3-4 ft. tall x wide, semi-dwarf, mounding at first. Leaves copper-red at first, later dark green, purplish-red in fall. Flower corolla rich pinkish-red, similar to common watermelon red cultivars overall, described as "cherry red" but all official show a brighter, more pink shade or red. Cold Hardy to USDA 6 or better. Dow Whiting Hybrid.

LAGE003 - Lagerstroemia PRINCESS KYLIE™ 'GA 0803' - 3-4 ft. tall x wide, semi-dwarf, mounding at first. Leaves grayish-green, undulate margins. Flower corolla rich magenta pink, intense and bold but not too harsh.. Cold Hardy to USDA 6 or better . Dow Whiting Hybrid.

LAGE006 - Lagerstroemia PRINCESS LYLA™ 'GA 0804' - 2-3 ft. tall x wide, dwarf, mounding at first. Leaves medium to dark green, gold in fall. Flower corolla light ot medium pink. Cold Hardy to USDA 6 or better . Dow Whiting Hybrid.

LAGE004 - <u>Lagerstroemia PRINCESS ZOEY™ 'GA 0702'</u> - 4-5 ft. tall x 3-4 ft. wide, semi-dwarf, mounding at first. Leaves very dark green, reddish-purple in fall.. Flower corolla very finely crisped-frilled, pink to rich rose-red, bicolored as the whole inflorescence in genera.. Cold Hardy to USDA 6 or better . Dow Whiting Hybrid.

LARI001 - Larix kaempferi 'Stiff Weeper' (Esveld Nursery)

LARI002 - Larix Iaricina 'Emerald Curtain' - dwarf, weeping, usually grafted high to cascade down. Found at the Memorial University Botanical Gardens, Newfoundland. Introduced Iseli Nursery 2014.

LAUR001 - Laurus nobilis EMERALD WAVE® 'Monem' (Monrovia)

LAUR002 - Laurus nobilis LITTLE RAGU™ (Monrovia)

<u>LEUC001 - Leucothoe fontanesiana WHITEWATER</u> (Rare Find Nursery)

LEUC002 - Leucothoe fontanesiana 'Little Flames' (Esveld Nursery) - 50cm tall x 30cm wide, dwarf, compact, suitable as a colorful hedge. Leaves very bright red in new growth, later more medium to pale green. Cold hardy to -20 deg. C. Eur. PBR 20110116 to Boomkwekerij van Opstal, Zundert.

LEUC003 - Leucothoe keiskei BURNING LOVE® 'Opstal50' - 30-40cm tall x 30-60cm wide, low, compact, much smaller and neater than older 'Royal Ruby' with similar new growth colorations. Leaves rich burgundy red to bright medium red in new growth, seemingly longer, more narrower and more acuminate than some specdies variants, blades maturing to rich medium to darek green. Flowers generally not showy. Ron van Opstal, Zundert hybrid, introduced 2013. Eur PBR 20131363.

<u>LIAT001- Liatris sp. 'Georgia Giant' (Plant Delights)</u> - 84 in., tall, very large for this genus. Cold hardy to USDA 7b. Found by Doug Walker in Georgia, USA as an unnamed much like a giant L. spicata. Flowers purplish-lavender. Taxonomic classification awaits.

LIAT002 - Liatris spicata 'Trailblazer' - 24 in. tall x 15-18 in. wide, shorter, compact. Fllower purplish-lavender to lilac. Tetraploid clone, improved over the older 'Kobold'. Leaves often with reddishb tips. Intrinsic Perennials, intro. 2015, their own selection.

<u>LIGU001 - Ligustrum GOLDEN TICKET™ (Spring Meadow Nursery)</u> - a super gold privet that is also seedless and thus never L invasive. Bred by Dr. Tom Ranney, North Carolina State University.

LIGU002 - Ligustrum japonicum 'Harmony Dwarf' (Nurseries Caroliniana)

LIGU003 - Ligustrum (species unknown) 'Sunshine' (JC Raulston Arboretum)

LIGU004 - Ligustrum japonicum 'Hirose' (Esveld Nursery)

LIGU005 - <u>Ligustrum japonicum ARLEQUIN™ 'Briseize'</u> - 2m tall x 1.5m wide, dense, compact. Leaves much longer, narrower, generally not flat, often slight folded up, more long acute than species typical, distinctly margined cream to light yellow (5-10% surface) tips slightly tingd pink to orange, yet not tricolored.

LIGU006 - <u>Ligustrum japonicum COLUMBINE™</u> 'Briquinze' - much as 'Briseize' but new growth tips more pink, margins closer to white, having a simillar narrow, sharp folded blade too. As COLUMBINE is a trademark name is does not fall within the cultivar naming guidelines to avoid using a genus name, common or Latin.

LIND001 - Lindera umbellata 'Togarashi' - leaves bright yellow, subtle green flecks and spots, this overlaid with orange and red tones in fall.. Registration based on specimen at the JC Raulston Arboretum and documented at https://jcraulstonarboretum.wordpress.com/2013/05/24/pic-of-the-day-lindera-umbellata-togarashi/

LIQU001 - Liquidambar styraciflua 'Fame4ever' (Esveld Nursery)

LIQUI002 - Liquidambar styraciflua 'Worby Rose' (Esveld Nursery)

LIQU003 - Liquidambar styraciflua 'Oakville Highlight' - 15m tall x 4m wide, fastigiate. Flemings.co.au, accessed 4.12.2015.

LIQU004 - Liquidambar styraciflua 'Little Richard' - 4m tall, pyramidal, very compact, semi-dwarf to slower. Leaves rich red, sometimes with orange in fall, smaller than species typical, often more narrowly lobed and more coarsely dentate when young. Thought to be of Australian origin.

LIQUI005 - Liquidambar styraciflua 'Summer Storm' - leaves blackish in late summer, remaining so into fall with inner, shaded blades in yellow to red shades

LIQU006 - Liquidambar styraciflua MILESTONE™ - 10-20 ft. tall x 6-8 ft. wide, semi-dwarf, subglose to short ovoid. Fruit absent (fruitless). Warren County Nursery.

LIQU007 - <u>Liquidamabar styraciflua 'Gold Beacon'</u> - Habit slightly slower than species typical. Leaves light green at first, maturing to light yellow to golden-yellow, remaining so all summer, apparently the reverse of 'Shocking Gold' aka 'Shock Gold' which is more yellow becoming green, fall colors red to orange, hence not an anthocyanin deficient sport as many gold trees. Selected by Charles Allen, Green Biz Nursery, Fayetteville, NC USA. heritageseedlings.com, accessed 5.10.2015, asked by originator to market this for him. It is also sold by Forest Farm and Buchholz in 2015.

LIQU008 - Liquidambar styraciflua 'Naree' ('Naree Yellow') - leaves smaller than typical, fewer serrations tnan 'Gold Beacon' on preliminary evaluation, golden-yellow, fall colors orange, gold, and dark red. Australian origin. Forestfarm.com, accessed 5.11.2015. We found one Aussie grower (Kigi Gowers) in 2015 listing 11 year old stock so it must be at least that old.

LIQUI009 - Liquidambar styraciflua 'Savill Torch' - intense, reliable shades of red, orange, and gold in fall compared to other plants nearby. Based on a notable tree at Savill Garden, Windsopr Great Park, UK as seedling c. 1930-40's. It was removed after damage in 2002 but already grafted and now available in the European trade, not yet seen in US cataogs (May 2015).

## Liriodendron chinense 'J.C. Raulston'



LIRI001 - Liriodendron chinense 'J.C. Raulston' - Leaves 10-14 in. long, very massive for this genus, thicker darker green than some seedling, however more of a medium olive-green, midrib and half of secondary veins a paler, usually yellow shade, silvery-gray below, see image above, this image not part of OROC Data Sharing

LIRI002 - Liriodendron tulipifera EMERALD CITY 'JFS-Oz' (PDF data sheet, nursery website, J.F. Schmidt)

LIRI003 - <u>Liriodendron tulipfera 'Edward Gursztyn'</u> - 1.8m tall x wide (parent tree, 15 years), likely 2-3m tal x wide in some decades, slower, compact to semi-dwarf, distinctly globose, very symmetrical crown, marketed as a street or small yard tree. Leaves close to species dimensions, some smaller, but not with thicker, reduced blades as 'Ardis'.

Random seedling at Gursztyn Nursery, Braniewo, Poland.

<u>LITH001 - Lithodora 'Crystal Blue'</u> (Terra Nova Nurseries)

LOBE001 - Lobelia x speciosa 'Vulcan Red' (Walters Gardens)

LOBE002 - Lobelia cardinalis 'Black Truffle' (Plant Delights). 3-4 ft. tall x 24-36 in. wide. Leave very dark "chocolatey purple" to dark purple to even blackish-purple by most reports. Flowers apparently about typical of the species for color, count, and form. Introduced by Peter Haus, West Virginia, USA in 2013, marketedd by Angela Treadwell-Palmer, Plants Noveau.

LOBE003 - Lobelia cardinalis 'Tan Line' - 36 in. tall x 18-24 in. wide, very vigoroous. Leaves chartreuse to yellow, new growth tipped red, bred from a red-leaved plant. Flower corolla rich red, abundant blooms. Intrinsic Perennials, intro 2015, from their images not as gold-leaved as 'Golden Torch'

LOBE004 - <u>Lobelia cardinalis 'New Moon Maroon'</u> - Leaves with new growth rich burgundy red to dark maroon, becoming a mix of olive and red shades as leaves mature, said to be an improvement upon 'Fried Green Tomatoes'. Selected by New Moon Nursery, Brighton, New Jersey, USA, intro. c.. 2014.

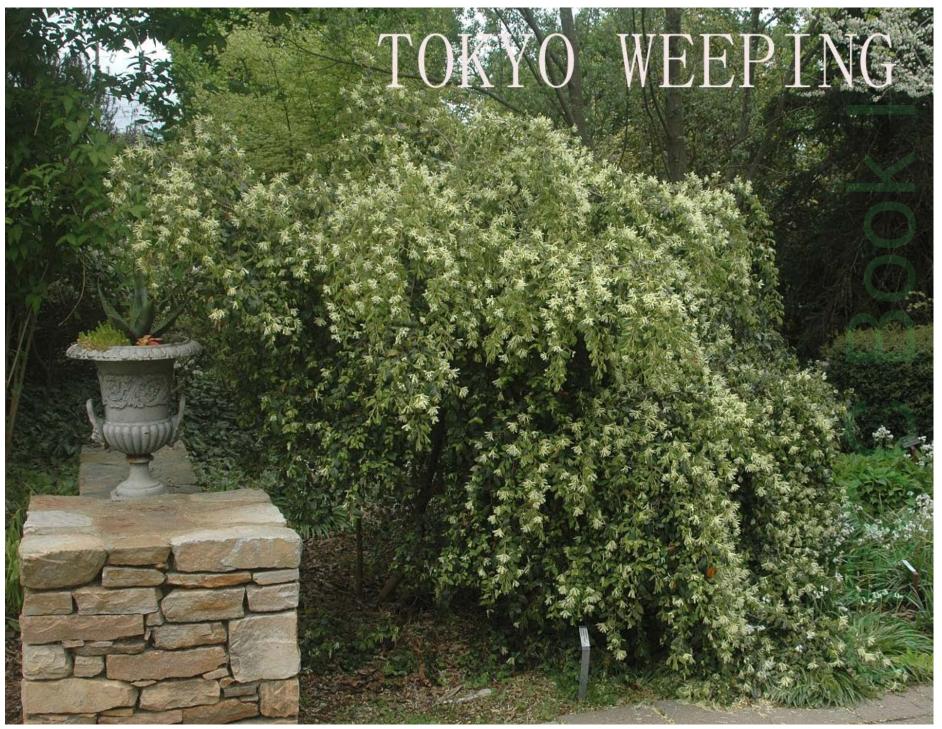
LOBU001 - Lobularia maritima 'Bicolor Pink Stream (Burpee, New for 2015)

LONI001 - Lonicera nitida OPHELIA™ 'Brilliame' - 4 ft. tall x wide, low, compact, mounded to spreading, suitable for mixed borders and even rockeries. Leaves lime green to chartreuse, tinged more gold in stronger light, maturiing to medium green, not a classic golden honeysuckle, not burning in strong sun. <u>US Patent #20761</u> to Andre Briant in 2010 as sport of 'Briloni' 2004.

LONI002 - Lonicera sempervirens RED CHARM™ 'Grerdch' - Leaves "clean green", apparently slightly glaucous as the species. Flower corolla rich coral-red to scarlet-red, stamens very yelow to gold, much exerted and complimenting with contrast of hues. Introduced by Greenleaf Nurseries c. 2014.

LONI003 - Lonicera pileata LITTLE LEMON ZEST - details pending.





LORO001 - Loropetalum chinense var. chinense 'Tokyo Weeping' - 4-5 ft. tall x 4-6 ft., weeping to low-spreading, best raised as a high-grafted lant unless you wish a low, procumbent creeper or mound. Leaves medium green, not generally dark as new cultivars. Flowers creamy-white, fairly typical of species in tone and abundance. Photo above from White Garden, JC Raulston Arboretum 2014. Above image not part or OROC Data Sharing



LORO002 - Loropetalum chinense var. rubrum PURPLE PIXIE®. This is almost certainly the best of the low, very dark purple mounds and spreaders (this November 2014 at least) in terms of long-term density, tiny textured foliage, and persistance of the color into summer. The jury, at least for me, is out on the flowers as they seem to be sporadic and oddly distributed (magenta as with var. rubrum) on the foliage and not strictly necessary for a good display. The foliage and form are so near perfect here, though sufficiently variable plan t to plant not to be dumb, resemblant domes, flowers are just a glowing icing the already lovely cake. Here is a fine example of very useful Asian genetics made much more interesting and creatively lovely by persistant American breeding over these last 30 years or so since var. rubrum came to our shores. Click image above to enlarge. Above image not part of OROC Data Sharing.

LORO003 - Loropetalum chinense var. rubrum 'Plum Glamorous' - shorter, compact. Leaves very dark plum-purple (187B). Fl;ower tepals bright plum-pink (RHS 187D), not

magenta. Plant Growers Australia, intro. 2012, as cross of 'China Pink' x 'Daybreak's Flame' in 2007.

LORI004 - Loropetalum chinense GARNET FIRE™, (Greenleaf Nursery)

LORI005 - Loropetalum chinensse 'Cherry Blast' (Greenleaf Nursery)

LORI006 - Loropetalum chinense 'Burgundy Blast' (Greenleaf Nursery)

LORI007 - Loropetalum chinense 'Jade Confetti' (Greenleaf Nursery)

LYSI001 - Lysimachia clethroides 'Heronswood Gold' (Plant Delights)

MAAK001 - Maackia amurensis MaacNIFICIENT® (J.F. Schmidt) - 30 ft. tall x 22 ft. wide, upright-vase form, decidely more upright than typical (globose to subglobose-spreading), most vigorous clone known to J.F Schmidt in their many years in tree growing and selection. Leaves green with silvery tints (apparently species typical). Cold hardy to USDA 3.

MAGN001 - Magnolia 'Fancy Dude', a gold-margined 'Big Dude' (Rare Fuind Nursery)

MAGN002 - Magnolia 'March Til Frost' (Rare Find Nursery)

MANG003 - Magnolia laevifolia 'Free Spirit' (Cistus Nursery, their 2013 introduction, still very rare)

MAGN004 - Magnolia 'Ginter Spicy White' ((M. tripetala 'Bloomfield' x Magnolia R20-1 (M. sieboldii x M. ashei)). Flowers tepals near white, fairly flat, narrowly obovate to broadly elliptic, rich lemon-mint scent of the spicy variety, Intro. Lewis Ginter Bot. Gard., Richmond, Virginia, USA c. 2012, bred by Bill Smith bef. 2010. To learn more about Bill's Magnolia breeding please view these videos:

MAGN004 - Magnolia grandifolia PURPAN® - very vigorous, said to be fastest clone known in Europe, up to 50cm a year growth once established. Leaves thinnly rusty-tomentose below. Flowers 20-24cm wide, very well scented. While this name is new (about), it is said to be based on a vigorous clone from France known since 1735 in Toulouse, proving cold hardy over decades. The derives from a well-known French college of the same tree where and they feature the cultivar on their school website as Tree of the Year 2013. Their School of Agriculture registered the trademark. We currently believe this clone to more than a historical named stock (forbidden by the ICNCP) from a famous tree of no horticultural merit. It's vigor and large flowers along with cold survival suggest it does have potential garden merit and is not merely a name for a famous tree.

MAHO001 - Mahonia BLACKFOOT (Esveld Nursery)

MAHO002 - Mahonia SIOUX (Esveld Nursery)

MAHO003 - Mahonia 'Soft Touch'

MALU001 - Malus AMERICAN SALUTE™

MALU002 - Malus AMERICAN SPIRIT®

MALU003 - Malus AMERICAN TRIUMPH™

MALU004 - Malus CINDERELLA®



XMAN001 - x Mangave 'Bloodspot', a lovely bigeneric hybrid from Japan, combining the frosty blue order and symmetry of Agave with the curious maroon, slightly dusky red in this form, spots of Manfreda. Click image if you will. Imaged at www.plantdelights.com. and sold there.Above image not part of OROC Data Sharing.

XMAN002 - x Mangave 'Jaguar' - 2 f tall x 3 ft wide. Leaves rich glaucous blue, spotted very dark brownish-purple to blackish-purple if given enough light .Waysidegardens.com, accessed 4.27.2015

MELIA001 - Melia azedarach f. umbraculifera 'Caroline' - as the forma, 10 ft. tall x 8 ft. wide but grafted from superior selection for uniformity. Flemings.co.nz, accessed 4.24.2015

MELIA002 - Melia azedarach 'Lilac Lady' - flowers more abundant. Leaflets distinctly incised to 3-7mm deep, thus irregular serrate to sharp-dentate. Foliage is quite distinct, and more showy than species typical. Flemings.co.nz, accessed 4.24.2015

MELIA00e - Melia azedarach 'Elite' - non-fruiting clone. Metropolitcan Tree Growers, New Zealand bef. 2015

MELI001- Melissa officinalis 'Strawberry Lemonade' aka 'Pink Lemonade' (Well Sweep Nursery, nursery website, download their PDF catalog)

## METAP001 - Metapanax delavayi 'Stout' (Cistus Nursery, their own introduction)

Hatch's Cultivars of Woody Plants is our nomenclature standard for 41 previously known Metasequoia cultivars

METAS001 - Metasequoia glyptostroboides JADE PRINCE™ 'JFS-PN3Legacy'- 70 ft. tall x 25 ft. wide, upright, pyramidal, dense, upright branching is improved, along with a strong central leader. Leaves bright green, very lush and feathery, rusty orange in fall.

META002 - Metasequoia glyptostroboides 'Golden Guusje' ('Kools Gold') - leaves darker yellow than 'Ogon' ('Gold Rush' invalid rename), more sun tolerant than it, and best with full sun for rich gold color. Nelis Kools, Dueme, Netherlands selection. Marketed in the US as 'Kools Gold' which so far is only used in cultivar form. It would be logical to make that name a trademark because a cultivar can have only one cultivar name but it can have other trademarked or marketing names.

MICR001 - <u>Microbiota decussata 'Carnival' ('Boyko's Variegated')</u> - foliage mass mottled yellow to about 30% surface, some sections large, covering many secondary and tertiary shoots, interesting winter coloration, showing a patchwork of yellow and purplish-violet or yellow and bronzish-purple tones, <u>a very unique combination for any conifer genus</u>.

MICR002 - Microbiota decussata 'Clouded Carpet' - foliage mass mottled yellow, 25% surface or so, comparisions to 'Carnival' are not yet known.

MICR003 - <u>Microbiota decussata 'Filip's Pretty Pride'</u> - slowerr, compact, but not dwarf, foliage masses more symmetrical and uniform than species typical. Edwin Smit Conifers, their own selection, 2004, not widely seen until 2010's.

MISC001 - Miscanthus sinensis 'Autumn Anthem' (Walters Gardens)

MISC002 - Miscanthus sinensis 'Oktoberfest' (Walters Gardens)

MISC003 - Miscanthus sinensis var. condensatus 'Luc-Andre LePage' - 5 ft. tall. Leaves margined yellow to 20% surface, midrib also silver, sometimes giving a tricolored look up close. Flowers showy late (October), fall colors golden-yellow to brown. Selected by Michel and Caty Le Damany of Pepinieres LePage, France. ISU 2014 Trials award.

MISC004 - Miscanthus sinensis 'Dread Locks' - 1.6m tall. Flower inflor. in dense clustered tubes, very erect overall, "springs" in one translation, well resembling the tightly braided dreadlocks hair style as small units but the panicle's overall "hair style" not pendulous or cascading in general as found in the human form, colored rich purplish-violet or green tinged red, sometimes showing a "corrugated" or rippled effect with alternating patches of violet-red and silver along the branches. The added floral density and constriction results in heads often held within or just atop the foliage mass, not soaring above it nor open or airy like most modern cultivars. There is a Jamaican grass joke here somewhere but as a formal cultivar register we will of course resist that notion. Selected by Zillmer, intro. 2008.

MISC005 - Miscanthus sinensis 'Digestif' - 1.7-2.0m tall, sometime thinnly branched, hence a bit more natural than some modern compact material, rather relaxed in both flower and foliage compared to the super-dense, uptight modern clones. Leaves narrower, reed-like, open mass, arching to pendulouis, not artificially dense in look, a very rich green with the typical silver midrib. Flower panicles reddish, fairly open and wide, dense in portion but overall very airy, a bit later in season. Selected by Zillmer, intro. 2008

MONA001 - Monarda 'Pardon My Pink' (Proven Winners)

MONA002 - Monarda SUGAR BUZZ Series (Walters Gardens)

MONA003 - Monarda 'Bees Knees' (Burpee, New for 2015)

MONA004 - Monarda 'It's Majic' (incorrectly 'It's Magic') - 60 in. tall, vigorous, tall among genus hybrids. Stems dark purple. Flower corolla violet-pink, described by Intrinsic as "bright purple" but not classically of that color and more violet-pink per other sources. Leaves dark green, proven mildew resistant. Intro. by Intrinsic Perennials 2015, Hebron, Illinois, USA. Intrinsic Perennials 2015 Catalog, accessed 5.9.2015, thought by them to be M/ fistulosa x M. didyma.

MONA005 - Monarda 'Judith's Fancy Fuchsia' - 3-6 ft. tall, large for the genus. Flower heads 1.5-3.0 in. wide, corolla bright fuchsia-purple to dark fuchsia, not magenta or fuchsia-pink, cones darker, up to 4 weeks of bloom with 50 flowers per ploant in Mt. Cuba trials. Mildew resistant fair.



MORU001 - Morus alba 'Ho-O' (NOS Cards, cultivar.org)

MORU002 - Morus 'Lincoln Trail' (Morus alba x ?) - very compact, low-spreading dome to fslightly flat-tiopped, multiple trunks. View website: <a href="http://www.montgomeryparks.org/activities/things\_to\_do/fall/documents/shf\_presentation.pdf">http://www.montgomeryparks.org/activities/things\_to\_do/fall/documents/shf\_presentation.pdf</a>

MYRI001 - Myrica cerifera 'Soleil' (JC Raulston Arboretum)

MYRI002 - Myrica cerifera 'Escarosa' - 16-20 ft. tall x 8-10 ft. wide, a strong, large forn, thick with 8-14 breaks per major limb, these shoots mostly flush with the canopy. Leaves darker green. Selected by PGI from seed collected at Escarosa Bay. Pannhandlegrowers.com, accessed 4.9.2015.

NAND001 - Nandina domestica ALL-A-GLOW™ (Garden Debut)

NAND002 - Nandina domestica SASSY LADY™ (Garden Debut)

NAND003 - Nandina domestica BLUSH PINK™ (Southern Living)

NAND004 - Nandina domestica OBSESSION™ (Southern Living)

NAND005 - Nandina domestica FLIRT™ (Southern Living)

NAND006 - Nandina domestica 'Tuscan Flame' - 3-4 ft. tall x wide, semi-dwarf, more compact and thick than 'Moyer's Red' and and less upright than it. Leaves with rich dusky red to rich coral-red new growth, later more green, showing some bright red most fo the year, leaflets 6.0-8.5cm long x 3.5-6.0cm wide. Fruit red but generally obscured by the dense foliage.. Roots well from cuttings, often in 6-8 weeks. <u>US Patent #21940</u> to Robert John Tancredi, Salem, Oregon, USA in 2011 as sport of unnamed plant in 2000, licensed to www.planthaven.com

NEME001 - Nemesia FRENCH CONNECTION™ (Plant Haven)

NEPH001- Nephrolepis exaltata 'Green Moment' - 31cm x 61.5cm wide, moderate to high vigor, taller than parent cultivar and more vigorous. Fronds medium green (darker than yellowish-green parent 'Boston Blue Bell'), "attractice leaf abscission behavior", apparently dropping less freely, 130 fronds plant, 56 leaflets per frond, these 8.1cm x 4.3 cm wide. US Patent #25311 to Petrus de Boer, Netherlands, as sport of 'Boston Blue Bell' 2006.

NEPH002 - Nephrolepis exaltata EMINA® - plant highly contorted, nearly a medusa's head of fronds with maturity. Fronds and lobes highly twisted into rope-like unit, much undulated and curled under and over, forming a cluster of irregular arms to the plant.

NEPH003 - Nephrolepis exaltata 'Pom Pom' - compact, cascading mound or relatively flat, not much incised nor curled fronts, resembling the pom-pom of cheerleaders in bright green, the fronds forming an organized overlap of one frond upon another in an attractive even if slightly irregularly manner. Web: http://www.vitroplus.nl/v2/fern\_detail.php?fern=81

NOLI001 - Nolina 'La Sibirica' (Cistus Nursery, their own introduction)

NYSS001 - Nyssa sylvatica AFTERBURNER® 'David Odom' (PDF data sheet, nursery website, J.F. Schmidt) - 35 ft. tall x 20 ft. wide, upright pyramidal to ovoid, more symmetrical and uniform than seedlings, straight central leader. Leaves bright green, very glossy, fall color reliably bright red with orange tints, showy, "burning brightly after most seedling tupelo have defoliated".

NYSS002 - Nyssa sylvatica FIRESTARTER™ (J.F. Schmidt)

NYSS003 - Nyssa sylvatica SNOW FLURRIES™ 'Gechrist' - leaves margined cream over lime at first, faintly tinged light orange, later maturing to medium green with near white edges, chimera about 10-15% surface, irregular depth and some in-sectoring or intrusions into the main blade, no major sectoring. Greenleaf Nursery Co. intro. 2011.

NYSS004 - Nyssa sylvatica TUPELO TOWER™ 'WFH1' - 30-40 ft. tall x 10-15 ft. wide, columnar to narrowly pyramidal. Leaves reliably coloring in fall. Cold hardy to USDA 4, one zone better than some southern-raised seedlings.

NYSS005 - Nyssa sylvatica 'Penwood Weeper' - 30-40 ft. tall x 20-30 ft. wide, distinctly weeping, forming a large tent over time, compared by some to the aspect of a weeping cherry. Leaves yellow to orange in fall, showy. Female, fruiting. Founded by Stephen Foltz as 60-year old tree in Lakeside Park, Kentucky, USA.

OCIM001 - Ocimum basilicum FAIRYTALE Series includes hybrids of nearly all colors and leaf shapes.

OCIM002 - Ocimum basilicum PESTO™ CHOCOLATE SWIRL (HortCouture)

OCIM003 - Ocimum basilicum PURPLE GIANT (HortCouture)

OCIM004 - Ocimum basilicum EMERALD WINE™ (Richters, their exclusive)

OCIM005 - Ocimum 'Magic Mountain' (Nichols Garden Nursery)

OENO001 - Oenothera 'Leona' (Red Fox/Dummen, a special variegated clone)

ORIG001 - Origanum vulgare PROFUSION® (Richters) - leaves very aromatic, more flavorful. More cold hardy, surviving Canadian winters at Richters Farm. Selected by Richters in 2012 from an old patch of escaped seedlings from an old planting of Otto Richter made 25 years early to test a very aromatic strain from Greece. Some individual seedlings survived and PROFESION was considered the best of these surviving, durable, high scented seedlings.

OSMA001 - Osmanthus fragrans f. aurantiacus 'Apricot Echo' (Nurseries Caroliniana)

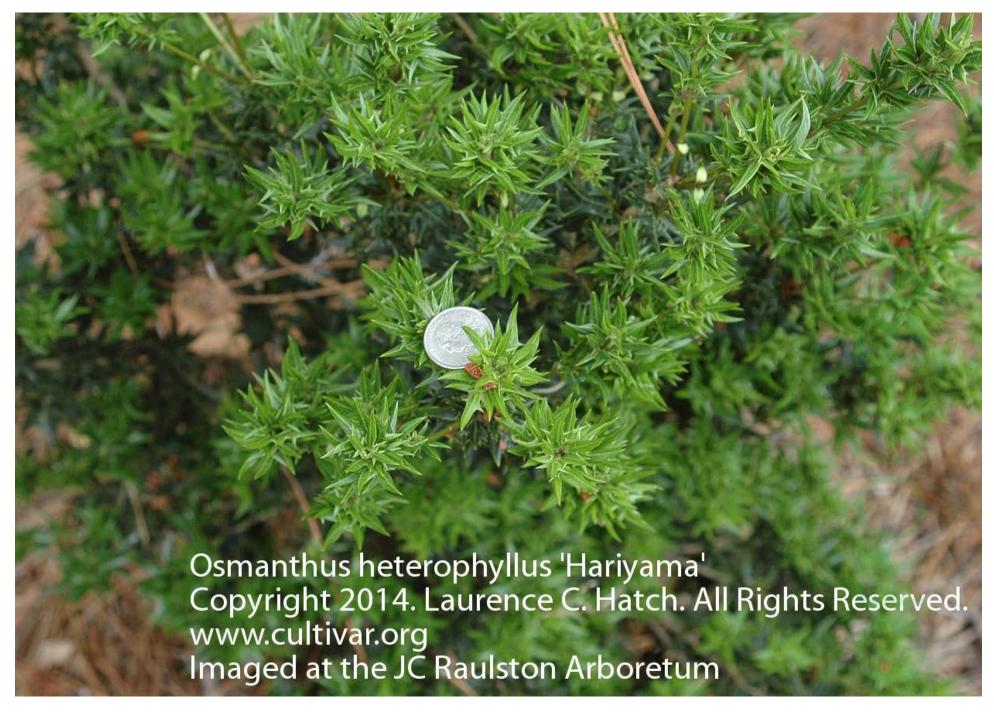
OSMA002 - Osmanthus heterophyllus PARTY LIGHTS™ (Greenleaf)

OSMA003 - Osmanthus x fortunei 'Ninth and Polk' (Cistus Nursery)

OSMA004 - Osmanthus x fortunei 'Yokoi' (Esveld Nursery)

OSMA005 - Osmanthus armatus 'Herkenrode' - highly incised, sharp teeth numerous. 4.12.2015

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OSMA006 - Osmanthus heterophyllus 'Hariyama' ('Hari Yama') is a semi-dwarf, slightly tufty and spiky thing that will need a bit of guidance (pruning, staking) to form a suitably dense and put-together foliage mass with age. It is essentially a more compact, shorter-bladed version of the now popular 'Sasaba'. We now lament that the larger clone can get a bit large (8-10 feet) and in the wrong context is going to become a hostile, unforgiving nightmare full of a thousand green daggers; an accident waiting to happen for man, child, and beast alike. 'Hariyama' should be a more manageable, even if less extreme, alternative. Note my US guarter to show the scale of the leaf clusters.

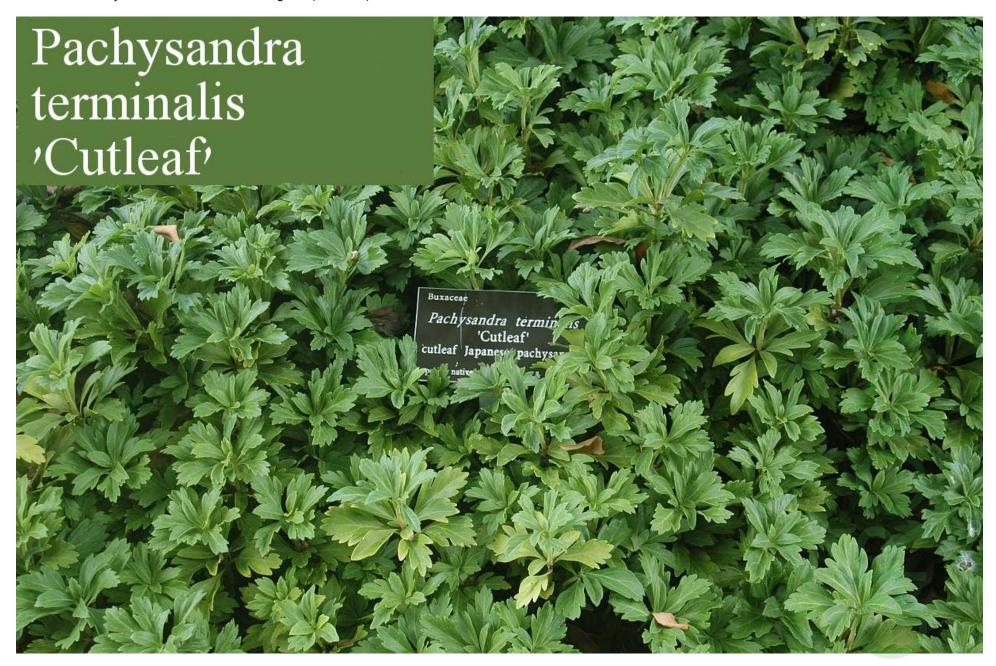
OSTR001 - Ostrya virginiana SUN BEAM™ 'Camdale' - 30-38 ft. (35-40 years), oblong-pyramidal, slightly wider with age, more erect than typical as young trees. Leaves dark green in summer, reliably golden-yellow in fall, about 50% of leaves clinging to the tree in winter as coppery-brown hues. Selected from northern US populations by North Dakota State University, proven reliably cold hardy in USDA 3, introduced 2011.

OSTR002 - Ostrya virginiana FRIENDSHIP™ 'Frizam' - 30 ft. tall x 20 ft. wide, low canopy with about 4 ft. clearance to the ground. Leaves dark green, lemon yellow in fall. Lake County Nursery selection c. 2014.

OSTR003 - Ostrya virginiana AUTUMN TREASURE™ 'JFS-KW5' - 40 ft. tall x 20 ft. wide, reliably more narrow, overall upright-pyramidal to ovoid, more useful for narrow urban spaces including street tree aplkications Leaves dark green, golden yellow in fall, fall leaves dropping cleanly and complete, not leaving brown old foliage in winter. J.F. Schmidt Nursery, 2015-16 introduction, their own selection.



OXYD001 - Oyxdendrum arboreum 'Spiral Twist', not to be confused with Nyssa sylvatica 'Zydeco Twist', is a curious, spreading thing, likely greater beauty with time. Click image if you will. This image is not part of OROC Data Sharing.



PACH002 - Pachysandra terminalis 'Cutleaf' (Raulston Arboretum, summer 2014)

PACH003 - Pachysandra terminalis 'Tiffany'. Plantdelights.com, accessed 4.15.2015

PANI001 Panicum virgatum 'Cape Breeze' (Google Patents)

PARD001 - <u>x Pardancanda 'Wine and Yellow Roses'</u> - 36 in. tall. Flowers made of 6 tepals, alternating 3 yellow with purple to violet-red margins, alternating with three others of this same purple to violet-red coloration. Seed strain so plants will vary.



# Parrotia persica 'Keith Silver'

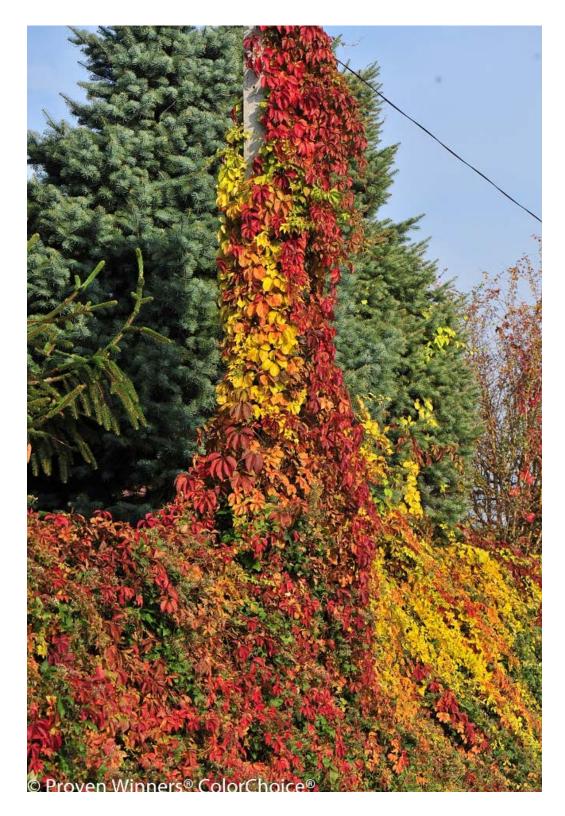
PARR001 Parrotia persica 'Keith Silver' NEW CULTIVAR NAME (June 25,. 2014) (Charles R. Keith Arboretum) - more upright, multiple trunks all crowded and erect, and bark in silvery, gray, and greenish-grey tones, lacking the browns, tawny, and flesh tones of most species material.



PARR002 - Parrotia persica 'Persian Lace'

PART001 Parthenocissus tricuspidata CALICO CAT™ (Upshoot) - a tricolored variegated, bright pink new shoots and older leaves green mottled in white bit. Photos show both compound and simple leaves.

PART002 Parthenocissus tricuspidata 'Grand Slam'. Habit vigorous, strong. Leaves richer red shades in fall than typical. Songsparrow.com, accessed 4.11.2015.



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- PART003 Parthenocissus guinquefolia RED WALL™ blended nicely with...
- PART004 Parthenocissus quinquefolia YELLOW WALL™. Photo courtesy of and owned by www.provenwinners.com
- PEDI001 Pedilanthus macrocarpus 'Chilly Willy' (Civano Nursery)
- PENN001 Pennisetum alopecuroides 'Ginger Love' 2-3 ft. tall x wide. Inflorescence thick, red. Intrinsicperennials.com, accessed 4.14.2015
- PENN002 Pennisetum alopecuroides PRAIRIE WINDS™ 'Desert Plains' 3-4 ft. tall x wide, urpgiht vasey, neater than most existing clones. Leaves green, becoming rich red in fall, having some orange tones too. Flower heads 5 in. long, smoky-purple at first, becoming tan. Selected by Gary Trucks, Amber Wave Gardens, Michigan, USA as improved 'Cassian' seedling.US Patent #20751.
- PENN003 Pennisetum alopecuroides 'Penalope' 50cm tall, 80cm in flowers. Flower panicles rich brownish-red, showy, much larger than typicasl. Selected by Jan Spruyt, vasteplant.be, accessed 5.16.2015
- PENS001 Penstemon 'Kissin Kuzins' (Plant Delights, new 2015)
- PENS002 Penstemon CHA CHA™ CHERRY 24-28 in. tall, vigorous. Flower corolla true cherry red, a bright shade, from very dark, baclkishp-red or dark cherry red, throat pinkish with stripes of red, very floriferous. Terranovanurseries.com, accessed 4.12.2015
- PERO001 Perovskia atriplicifolia 'Denim 'n Lace' 28-32 in. tall x 34-38 in. wide, compact, semi-dwarf, stronger and more upright than older cultivars. Flowers faded denim blue (near sky blue) to lavender-blue effect due to purplish or amethyst calyx. Leaves appear more incised, lacy in appearance. Perennialresource.com, accessed 5.26.2015
- PERS001 Persicaria amplexicaule 'JS Caliente' 50cm tall, 70cm tall in flower, corolla dusky orangish-red, richly toned. Selected by Jan Spruyt, vasteplant.be, accessed 5.17.2015
- PERS002 Persicaria amplexicaule 'JS Calor' 60cm tall, 90cm tall in flower, corolla rich, warm cherry red. Selected by Jan Spruyt, vasteplant.be, accessed 5.17.2015
- PERS003 <u>Persicaria amplexicaule 'JS Delgado Macho'</u> 35cm tall, 50cm tall in flower, a shorter clone than others, corolla rich pinkish-red to medium red. Selected by Jan Spruyt, vasteplant.be, accessed 5.17.2015
- PERS004 <u>Persicaria amplexicaule 'Betty Brandt'</u> 60cm tall, 80cm tall in flower, corolla pinkish-lilac. Selected by Jan Spruyt, vasteplant.be, accessed 5.17.2015, JS® trademark external to cultivar name, applied to many genera, not specific to this genus.
- PERS005 <u>Persicaria amplexicaule 'Sangre'</u> 80cm tall, 100cm tall in flower, corolla rich cherry-red, some pinkish tones, very bright. Selected by Jan Spruyt, vasteplant.be, accessed 5.17.2015, JS® trademark external to cultivar name, applied to many genera, not specific to this genus.
- PERS006 <u>Persicaria amplexicaule SEVEN OAKS VILLAGE</u> 50cm tall, 90cm tall in flower, corolla pink and white in one head, subtle bicolor. Selected by Jan Spruyt, vasteplant.be, accessed 5.17.2015, JS® trademark external to cultivar name, applied to many genera, not specific to this genus.
- PHIL001 Philadelphus 'Dainty Lady' 2.5m tall x 1.5m wide, not dwarf, upright, narrowly spreading, more suitable for small gardens than older cultivars. Leaves narrowly ovate, green, tinged maroon at first. Flowers white, very numerous, very hightly scented, calyx green to maroon, contrasting very nicely in young flowers, raceme inflor. 3.6cm long x 5.4 cm wide, individual flowers to 3.5cm wide. <u>US Plant Patent #24536</u> to Peter R. More on June 10, 2014 as cross of P. microhyllus x P. delvavyi var. calvescens in 1995.

The previous 940 Phlox cultivars are found in Hatch's Perennials.

PHLO001- Phlox pulchra 'Bibb Pink'

- PHLO002 Phlox glaberrima var. triflora 'Forever Pink'. Plantdelights.com, accessed 4.15.2015
- PHLO003 Phlox x procumbens 'Pink Profusion'. Plantdelights.com, accessed 4.15.2015

PHLO004 - Phlox pilosa 'Bungalow Blue' - 15-18 in. tall. Flower head dense, domed, corolla light blue to pa,le lavender-blue, less a lavender-pink compared to species, each petal with two dark purple basal markings. US intro 2014.

PHOT001 - Photinia fraseri MAGICAL VOLCANO 'Kolmavoca' - much as 'Red Robin' with dark glossy red new growth but adds a highly undulate, serrulate to Ilex-like spinose, toothy blade that provides more texture and interest. European trade c. 2000.

It is the policy of OROC to refuse named registration of recently found, unpropagated, or not commercially available witches brooms; most of which are sure to become lost and never part of the trade or collections. Thousands of such names proliferate in modern conifer literature and seem only to serve as nomenclatural place holders and numerical tools to raise the honor of specific nurserymen and collectors whose material often differs not one bit from existing brooms. While some accomplished, scientifically aware broom collectors like Sidney Waxman and Jerry Morris have distinguished themselves by introducing unique combinations of broom traits, truly useful dwarf creations, and naming clones with care and moderation, others today in the US and Eastern Europe, persist in naming every single broom, unique or not, propagated, or not. We will register resemblant brooms if proven to be in the commercial trade.

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PICE001 - Picea engelmannii 'Albert's Cousin' ('Albert's Cousine') - more densely pyramidal, same form as the famous Picea pungens 'Fat Albert', hence appearing to be it's cousin in another species. Selected by Paul Warnick, University of Idaho Arboretum.

PICE002 - Picea engelmannii 'Sweetwater' - narrowly columnar, hanging limbs.

PICE003 - Picea abies 'Catharine's Golden Heart' - 2 ft. tal x 3 ft. wide (10 years), mounded and spreading, not always dense. Leaves golden-yellow. Female strobili red, showy, borne on young plants. Selected by Bon Fincham.

PICE004 - Picea glauca 'Lion Mane' - 2-4 ft. tall x wide (10 years). Leaves typical bluish0-green but brightly accented yellow. Josef Braeu found near the lion pen of an undisclosed zoo.

PICE005 - <u>Picea glauca 'Achat'</u> - as 'Conica' but more compact, slower, fine-textured, 2-4 inl a year or less, and with pale yellow new tips which are green by early summer. Iseli Nursery. intro. 2014-15.

PICE006 - <u>Picea glauca 'The Limey'</u> - fairly typical, open pyramidal species form. Leaves with new tips bright lemon-lime, more yellow with age, interior a dark lime green, finally darker green. Iseli Nursery, intro. 2014-15.

PICE007 - <u>Picea orientalis 'Firelfy'</u> - seedling of 'Skylands;', slower, more compact, smaller tree, same rich yellow softening to gold, finally a more green interior. Iseli Nursery c. 2014.

PICE008 - Picea pungens 'Avatar' - broadly upright, tiered branching. Leaves rich blue much as 'Moetheimii', from which it sprang as a seedling, slower growth than it also, and new needles in "soft blue powder puffs". Iseli Nursery, 2014-15.

PICE009 - <u>Picea pungens 'Zafiro'</u> - short, low pyramidal to wide beehive, 3-6 inches growth a year or less. Leaves rich light blue as 'Moerheimii' but onj a slower plant. Iseli Nursery, intro. 2014-15.

PICE010 - Picea pungens 'Lenawee Light' -7 ft. tall x 3 ft. wide (10 years). Leaves rich golden. Found by Ken Marek, Adrian, Michigan on neighbor Larry's Hubbard's property, named for their County. conifertreasury.org, version 7.0, 2015, accessed 6.2.2015.

PICE011 - Picea pungens 'Lake Bluff' - compact. Leaves shorter, distinctly grayish-blue. Found in Michigan by Mike and Cheryl Davison. conifertreasury.org, version 7.0, 2015, accessed 6.2.2015.

PICE012 - <u>Picea engelmannii 'Blue Magoo'</u> - 6 ft. tall x 4 ft. wide (10 years), narrowly pyramidal, tips distinctly drooping at long, new growth. Leaves in rich grayish-blue to silvery-gray colors. Found the introduced by Buchholz Nursery, bef. 2014. --end of OROC Data Sharing

PINU001 - Pinus nigra 'Komet' (Iseli Nursery, commercial website, article)

PINU002 - Pinus parviflora 'Ooh La La' - compact, dense, globose. Leaves bright bloue as parent 'Glauca'. Mike and Cheryl Davison found as broom of 'Glauca' at an arboretum in Yakima, Washington, USA. Conifertreasury.org, version 7.0, accessed 5.29.2015.

PIST001 - <u>Pistachia chinensis WESTERN SON® 'Pairs Choice'</u> - 30 ft tall x wide, upright-spreading to globose, stronger trunk, robust, good branch angles Leaves dark green, fall color reliably orange to red, however their images shows golden base color with red to orange highlightss, not random as with most seedling populations. Fruit absent, male clone.

jfschmidt.com, accessed 4.24.2015

PLAT001 - Platanus x acerifolia 'Ace of Clubs' - "hybrid'. Leaves very strongly incised, often to 50% deep, gold in fall (New Zealand). Wairere.co.nz, accessed 4.24.2015

PLAT002 - Platanus occidentalis SILVERWOOD™ 'Grenickel' - 75-100 ft. tall, vigorous. Bark more white to cream shades, less tan and brown sections, like a palish Eucalpytus bark in fact. Greenleaf Nursery intro. c. 2014.

PLAT003 - Platanus x acerifolia ROCKFORD ROAD™ 'Grejtn' - 60-75 ft. tall\, vigorous proven clone. Bark more intensely white than typical, having some pale cream to tan patches too. Greenleaf Nursery intro. 2015.



PODO001 - Podocarpus elongatus ICEE BLUE™ 'Monmal' is one of the frostiest of all conifers and certainly tops among the wide-needled ones. This icy tone is nothing new for a juniper or spruce but in this genus most taxa are dark green in our gardens. It is USDA 9 but people have done okay with it in 7b and 8 if in a much-sheltered courtyard against a very warm building. It should be smashing in any conservatory too. Photo above is not available for OROC Data Sharing.

PODO002 - Podocarpus nagi 'Thomasville Hardy' (Nurseries Caroliniana)

PODO003 - Podocarpus macrophyllus EMERALD FLAME™ 'Royal Flush' (Nurseries Caroliniana)

PODO004 - Podocarpus macrophyllus LEMON SPARKLER™ 'Golden Crown' (Nurseries Caroliniana)

PODO005 – Podocarpus macrophyllus var. Maki 'Upright Columnar Cliff' – columnar. Cold hardy in Chapel Hill, North Carolina (USDA 7b). Camforest.com, accessed 4.23.2015, their own selection from their original nursery grounds.

- POLI001 Polianthes x bundrantii 'Chirp'
- POLI002 Polianthes tuberosa 'Swarna Rekah'
- POLI003 Polianthes tuberosa 'Pink Sapphire' 24-36 in. tall. Flowers double, light pink, some darker tints.
- POLI004 Polianthes tuberosa 'Yellow Baby' 35cm tall. Flowers single, light yellow. http://www.ludwigandco.nl/, accessed 4.17.2015
- POLI005 Polianthes tuberosa 'Sensation' 45cm tall. Flowers single, light pink. http://www.ludwigandco.nl/, accessed 4.17.2015
- POLI006 Polianthes tuberosa 'Cinderella' 35cm tall. Flowers single, lavender-pink http://www.ludwigandco.nl/, accessed 4.17.2015
- POLI007 Polianthes tuberosa 'Double Pink' 65cm, very tall. Flowers double, light pink. http://www.ludwigandco.nl/, accessed 4.17.2015
- POLI008 Polianthes tuberosa SUPER GOLD® 65cm tall. Flowers single, dark rich yelow to gold. http://www.ludwigandco.nl/, accessed 4.17.2015

POLY001 (HISTORICAL REGISTRATION)- Polypodium calirhiza 'Sarah Lyman' - fronds bipinnatifid, showier than species typical, more frilly, graceful, plumose, ornate, suggestive of Boston fern cultivars. The Flora of North America regards P. calirhiza as a true, non-hybrid species, an allotetriploid involving P. californicum and P. glycyrrhiza but not a direct hybrid of them alone. Those direct crosses are normally sterile triploids and very different from this new, clearly more complex, mysterious species. This clone found by Sarah Lyman in the wild about 1897 near Napa Valley, grown by her and distributed informally for many years, not named or widely sold until recent decades, absent from all but a few modern references and qualifying as an historical registration.



PONC001 - Poncirus trifoliata 'Snow Dragon' (variegated and twisted).

PONC002 - Poncirus trifoliata 'Tiny Dragon' (Hawksridge Farms)

PONC003 - Poncirus trifoliata 'Baby Dragon' (Nurseries Caroliniana) - same as 'Tiny Dragon'?

POTE001 – Potentilla fruticosa CRÈME BRULE™ 'Bailbrule' – 3.0-35. Ft. tall x 2-3 ft. wide, upright-rounded. Flowers double, bright white, Leaves medium to dark green. USDA 2. Bred at Morden Research Centre, Manitoba, Canada, introduced by Baileynurseries.com, website, accessed 4.23.201

POTE002 - Potentilla fruticosa 'Glamour Girl' (Plants for Europe)

POTE003 - Potentilla fruticosa HAPPY FACE® YELLOW - 24-36 in. tall., compact, globose. Flowers numerous, corolla golden-yellow, blooms most of summer, strong for up to 4 weeks.

POTE004 - Potentilla fruticosa HAPPY FACE® PINK PARADISE 'Kupinpa' - 24-36 in. tall., compact, globose. Flowers numerous, corolla white heavily tinged pink, effectively light pink, patent app cliams "rich pink" (RHS 61C to N57D above), can be semi-double to double, average pertal count 10 (per patent app), 2.9cm wide, generally not shown as doubled on nursery websites (May 2015), may fade in extreme sun, blooms most of summer, strong for up to 4 weeks. <u>US Plant Patent #22732</u> on May 15, 2012 to Henricus Kuijf as sport of 'Pink Beauty' 2006.

POTE004 - Potentilla fruticosa HAPPY FACE® WHITE 'White Lady' - 24-36 in. tall., compact, globose. Flowers numerous, corolla golden-yellow, 3.1cm wide, blooms most of summer, strong for up to 4 weeks. Leaves dark green, not pale as many white-flowered clones. <u>US Plant Patent #22761</u> on May 29, 2012 to Pieter Kolster, self-pollinated 'Abbotswood' seedling 2004, assigned the Spring Meadow Nursery.

POTE005 - Potentilla fruticosa 'Red Lady' - compact, upright, sprfeading. Flower coroola 2.8cm wide (larger than 'Marion Red Robin'), color red, large. <u>US Plant Patent #22767</u> to Pieter Kolster, from selfed 'Marion Red Robin' 2004, selected 2005, assigned to Spring Meadow Nursery.

POPU001 - Populus nigra NORTHERN ESTEEM™ 'Schreiner' - vigorous, large tree in time, having the role of P. nigra or P. deltoides but with especially glossy, finely undulate, emerald green leaves, showing full disease and insect resistance, classic deltoid blades, proven very cold hardy in USDA 3. North Dakota State University purchased in 1978 from a Pennsylvania nursery as P. charkowiensis x P. 'Incrassata', evaluated over 30 years at the NDSU Arboretum and superior to most other large poplars studied. It was evaluated in 2011 by three US Forest Service experts and determined to be P. nigra as var. charkowiensis and var. incrassata are considered two of it's infraspecific variants by many poplar taxonomists (not all). It is considered now to be from the breeding work of E.J. Schreiner of the Northeastern Forest Station, Radnor, PA USA also known as NE308 and is now named for him. Officially introduced 2011. Further study of the name NE308 shows that the American EPA (Envrionmental Prtection Agency) listed it as a desirable "phytoremediation" clone in 1998. In other words, it can help purify a hostile, damaged environment and in the event of global environmental chaos thrive to produce wood for new buildings. Other work suggested that NE308 is photosynthetically more efficient and produces a larger biomess of roots, stems, and leaves than many popular, poplar clones.



PRUN002 - Prunus 'Helen Taft' is one of the newest US National Arboretum creations. Click the link below for the official release notice - and then the image to enlarge. <a href="http://www.usna.usda.gov/Newintro/helen%20taft.pd">http://www.usna.usda.gov/Newintro/helen%20taft.pd</a>

PRUN003 - Prunus 'Abigail Adams' release: http://www.usna.usda.gov/Newintro/Abigail Adams.pdf

PRUN004 - Prunus FIRST BLUSH™ 'JFS-KW14' - 25 ft. tall x 12 ft. wide, narrowly upright-ovoid. Leaves dark green, orange to orangish-red in fall. Flowers double to semi-doubble, open to cupped face, not a rounded or dounle pom-pom double at all, showing stamens, buds darker pink with a calyx in violet-pink with darker violet-red margins, very fragrant. ifschmidt.com, their own selection, introduced 2016.

PRUN005 - Prunus PINK CASCADE™ 'NCPH1' - 12 ft. tall x wide, weeping, a narrow down-turning dome. Leaves dark green, finely textured, orange tones in fall. Flowers light to medium pink, very abundant, calyx a darker violet-red, corolla campanulate in general. USDA 5. Selected at North Carolina State University. Introduced c. 2015. This is not P. persica 'Pink Cascade' or the later homonym of it, later renamed 'Arkansas Pink Cascade'.

PRUN006 - Prunus (Sato-Zakura Group) 'Little Jeremy' - 1.0-1.5m tall, usually grafted on high understock for a small globose tree, medium dense globose, not too congested, occasionally similar to well-known dwarf Prunus persica but with different leaf morphology. Flowers medium pink in bud, opening mear white to white tinged pink, single to semi-double, some petals notched. Selected by Andre van Nijnatten, usually sold under P. serrulata but that pure species is very rare in the West, most material being Sato-Zaukra Group hybrids.

PSEU001 - Pseudotsuga menziesii 'Alber's Elegant Weeping' Conifer Kingdom, online website, accessed 11.23.2013. ha: narrowly pendulous, graceful

Ic: typical green

or, ns: Sam Pratt, Gig Harbor, WA USA, named for his mentor Dr. John Albers

PSEU002 - Pseudotsuga menziesii 'Blacksmith Fork' Porterhowse Farms, Current Specimen List (ACS Database subset), accessed

11.23.2013

ha: dwarf, original broom vase-shaped

or: Carl Wildrick found broom in Utah USA

PSEU003 - Pseudotsuga menziesii 'Boyko's Blue Weeping' Conifer Kingdom, online website, accessed 11.23.2013

ha: narrowly pendulous, graceful

lc: bright blue or: Jim Boyko

PSEU004 - Pseudotsuga menziesii 'Card Canyon' Porterhowse Farms, Current Specimen List (ACS Database subset), accessed 11.23.2013

ha: dwarf from 18 in. wide, subglobose broom

or: Carl Wildrick found in Utah, USA

PSEU005 - Pseudotsuga menziesii 'Crescent Mountain' Garden Web, Conifer Forum, accessed 11.23.2013 with color photo

ha: dwarf

Ic: rich frosty blue

PSEU006 - Pseudotsuga menziesii 'DuPont Dynamite' Conifer Kingdom, online website, accessed 11.23.2013

ha: "super-dense upright globose" from broom

II: shorter

Ic: slightly glaucous-blue, buds showy orangish-brown

or: Dave Olszyk

PSEU007 - seudotsuga menziesii 'Metolius Weeper' Porterhowse Farms, Current Specimen

List (ACS Database subset), accessed PSEU11.23.2013

ha: large, strong, narrow, branches strictly pendulous

or: Porterhowse says Art Anderson with Tim Moriarity found this along the Metolius River in Oregon. He also received

scionwood

or: Frank Hoffman that same year, who apparently discovered it too! The original wild tree died in a forest fire

PSEU008 - Pseudotsuga menziesii 'Helena' Mesterhazy in Conifer Treasury of the Cz. Republic 2.0, 2012

ha: dwarf from a broom, 3cm growth per year

or: Ladislav Musil, Musil Gardens, Cz. c. 2001

PSEU009 - Pseudotsuga menziesii 'Mount Angel Blue' Conifer Kingdom, online website, accessed 11.23.2013

ha: compact from broom

lc: bluish-green

frg: female strobili often numerous

or: Stephanie Krieg found as broom at Evergreen Golf Course, Mt. Angel OR

PSEU010 - Pseudotsuga menziesii 'Shorty's Blue' Buchholz and Buchholz Nursery, online catalog, accessed 11.23.2013

ht: 7 ft. tall x 3.5 ft. wide (10 years)

ha: upright, compact, pyramidal

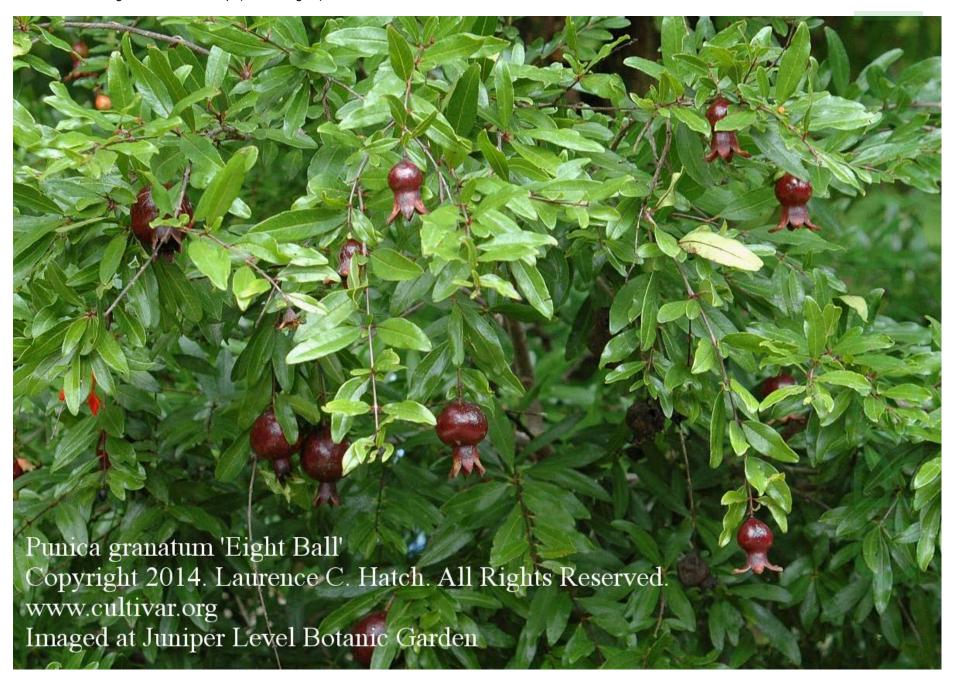
Ic: rich blue

PTER001 - Pterocarya fraxinifolia 'Abbotsbury Giant' - vigorous, larger than species typical. Leaves to 60cm long. Female inflor. to 50cm long, larger than many specimens.

From a notably vigorous, larger in nearly all parts at Abbotsbury Garden, Dorset, England, considered superior to random nursery seedlings.

PULM001 - Pulmonaria 'Darkling Thrush' - as P. longifolia but leaves brown-tinged in late winter and early spring, contrasting well with white spots, flowers corolla dull violet. Desireableplants.com, accessed 5.21.2015, their own random seedling, likely a product of nearby P. longifolia 'Ankum' and perhaps P. saccharata 'Leopard'.

PUNI001 - Punica granatum 'Carrot Top' (Plant Delights)



PUNI002 - Punica granatum 'Eight Ball' is a rather compact clone with small glossy, burgundy red fruit that is more ornamental than edible. The exocarp darkens to a lustrous reddish-black, inspiring Tony Avent to give it one of his usually creative and fun names. This image may NOT be extracted and copied under OROC Data Sharing.

PUNI003 - Punica granatum PURPLE SUNSET® 'PIIPG1' - Habit compact, dense, as parent 'Nana', 3-4 ft. tall x wide, up to 6 ft. tall in warm climates such as Florida. Fruit dark blackish-purple, 2-3 in. wide, generalky not considered edible. US Plant Patent #21031to Dr. Mike Dirr, open pollinated 'Nana' before 2008.

PYRA001 - <u>Pyracantha 'Golden Paradise'</u> - 1.5-1.8m tall x 1.0m wide (10 years). Leaves bright yellow at first, laster more chartreuse. Fruit orange. Coblands.co.uk, accessed 4.25.2015, their own selection, introduced 2014. The first ever all gold-leaved cultivar on the market.

PYRU002 - Pyrus calleryana 'Kea' - leaves glossy green, mix of very dark red and gfreen in fall. Adapted to New Zealand climate. Wairere.co.nz, accessed 4.25.2015

QUER001 - Quercus x bushii 'Seattle Trident' (Bluebell Nursery)

QUER002 - Quercus serrata 'Curly Head' (Bluebell Nursery)

QUER003 - Quercus palustris 'Flaming Suzy' (Bluebell Nursery)

QUER004 - Quercus robus 'Timuki' (Bluebell Nursery) - best purple oak yet and mildew resistant?

QUER005 - Quercus palustris PACIFIC BRILLIANCE™ (Upshoot)

QUER006 - Quercus STREETSPIRE®

QUER007 - FOREST KNIGHT® (J.F. Schmidt) - useful file explains the various Q. robur, bicolor, and alba hybrids with picture of each and how they differ.

QUER008 - Quercus alba 'Wieting' - fall color rich medium to dark red, glowing in some light conditions, very showy. Origin: Mr. Wieting, Germany.

QUER009 - Quercus robur 'Alrnap Weeping' - low, true weeping mound, apparently more constrained and less wild than the old, original 'Pendula'. Photo: http://gardenbreizh.org/photos/Oli/photo-589489.html

QUER010 - Quercus bicolor BUCK'S UNLIMITED™ - vigorous. Flowers, nuts born earlier, often on trees as young as 5 years (vs. 20+ years for species). Fruit (nuts, mast) abundant. Up to 96% seedling survival which together with vigor make this a useful ornamental, landscape taxon. fknursery.com, accessed 5.2.2015., their intro. in cooperation with the Dr. Mark Coggleshall, University of Missouri.

RANU001 - Ranunculus fiscaria 'Orange You Cute' (Plant Delights, their own introduction)

RHAM001 - Rhamnus frangula 'Minaret' - Narrowly erect., desner than old 'Fastigiata'. Leaves dark green, oval, much texture.

RHAP001 - Rhapiolepis umbrellata SOUTHERN MOON™ (Monrovia)

RHAP002 - Rhapiolepis indica COSMIC WHITE™ (Ozbreed).

RHUS001 - Rhus typhina 'Radiance' (Bluebell Nursery, available 2015)

RIBE001 – Ribes sanguineum AMORE 'Anny-2003' – Plants 1.5 tall x 1.0 m wide. Flowers abundant, rich pinkish-red, sweet vanilla fragrance. Bred by Andre van Nijnatten, Netherlands.

RIBE002 - Ribes sanguineum 'Oregon Snowflake' - 1.2m tall x 1.3 m wide, mounded, semi-dwarf, much more compact and dense than WHITE ICICLE™. Leaves deeply lobed, strongly 5-palmatifid, 5-lobed, lobes acute (not obtuse to subobtuse as WHITE ICICLE™), margins also incised to very long-serrate, distinct shape and margins from most popular cultivars, 5.0cm long x 5.3cm wide, longer than WHITE ICICLE™. Flowers in pendulous racemes to 10cm long, 39 flowers (mean), corolla 2cm wide, greenish-white, appearing mostly white from a distance. Dr. Ryan Contreras and Mara Friddle, Oregon State University, Corvallis, Oregon USA from EMS treated seeds, selected 2001.

See HortScience Cultivar Release for additional measurements and details.

RODG001 - Rodgersia 'Kupfermond' - leaves tinged copper to bronze. Flower heads large, light pink, fluffy appearance, held above foliage, sturdy, strong. German origin bef. 2013.

RODG002 - Rodgersia pinnata 'Jade Dragon Mountain' - stems red, showy. Flower heads dense, pink to reddish in bud, maturing to cream. Selected by Spinners from Roy Lancaster Collection L1670.

RODG003 - Rodgersia 'Stoke Gabriel' - leaves pseudopinnate, much as Rodgersia pinnata, dark green, showy red petioles, Flowers white in elongated, arching inflorescences, showy red pedicels. A tricolored mix of green, white, and red shades at once. Selected by Heather Booker, National Rodgersia Collection UK, North Devon, England. Desireableplants.com, accessed 5.21.2015, with "NEW CULTIVAR NAME"

Rosmarinus - Hatch's Cultivars of Woody Plants with 220 cultivars is our nomenclatural standard.

ROSM001 - Rosmarinus officinalis CHEF'S CHOICE® 'Roman Beauty' - 12-18 in. tall x 2 in. wide, compact, suitable for smaller kitchen gardens. Leaves with higher oily content, more spicy, rich in cooking and when pressed, medium green, not very silver nor gray. Flower corolla light sky blue. US Patent #18192 inm 2007 to Christopher Fairweather, UK as open-pollinated Prostratus Group. Cold hardy to -10 deg. F. We believe it deserves registration by OROC as the marketing trademark is quite recent for the US (May 2015). It is ma\rketed by planthaven.com, accessed 5.12.2015, but they only use the 'Roman Beauty' name. The trademark name appears to have originated with:

http://sunsetwesterngardencollection.com/plant-collection/plant/chefs-choice-rosemary accessed 5.12.2015

RUBU001 - Rubus 'Margaret Gordon' (The Garden Flora of Northern Ireland)

RUBU002 - Rubus cockburniana 'Razzle Dazzle' - new growth mottled pink and cream, maturing variegation light green, medium green, various shades of yellow to cream, finely mottled, sometimes more boldly sectored. Introduced by Broken Arrow Nursery. Farreacesafarm.com, accessed 4.13.2015

RUSC001 - Ruscus aculeatus 'Elizabeth Lawrence' (Plant Delights)

RUSC002 - Ruscus hypoglossum 'Mr. Lonely' (Plant Delights)

RUDB001 - Rudbeckia maxima 'Golda Emanis' (Plant Delights, Greg Grant) - chartreuse-green new growth if in good light

SACC001- Saccharum arundinaceum 'Purple People Greeter' (Plant Delights)

SALI001 - Salix crenata 'Gang Bo Ha' (Buchholz Nursery)

SALI002 - Salix alba f. sericea 'Silver Column' (Song Sparrow Nursery) - a narrower version of the popular "silver willow" (this botanical, furry form) found at the Arnold Arb., about 35 ft. tall x 17 ft. wide. Either this or the basic form are amazing contrast trees for adding shimmering sterling tones that surpass most Elaeagnus.

SALI003 - Salix alba 'Swizzlestick' - Habit erect, contorted. Twigs yellow to orange shades in sun. Orgin: Darrel Probst. Farreachesfarm.com, accessed 4.15.2015.



SALI004 - Salix chaenomeloides BLACK CAT™ 'Lubber's Zwart'. Photo above owned by and courtesy of www.provenwinners.com. Do not copy image with OROC data.

SALV001 - Salvia scabra 'Good Hope' (Jelitto Seeds)

SALV002 - Salvia CATHEDRAL™ Series (GreenFuse Botanicals)

SALV003 - Salvia leucantha 'Ferpink' (Plant Delights)

SALV005 – Salvia 'Amistad' – 3-4 ft. Tall x 3 ft. Wide, more compact than most S. guaranitica hybrids. Flower calyx very dark blackish-purple, corolla dark violet-purple. Introduced by Souther Living Plant Collection 2015.

SALV006 - Salvia BLUE NOTE® - 20cm tall x 60cm wide. Flower corolla intense medium blue, calyx very dark. fleursetsenteurs.com, accessed 5.26.2015, their own introduction.

SALV007 - Salvia MELEN® - 20cm tall x 60cm wide. Flower corolla cream to light yellow tinged red in upper labia, calyx very dark, blackish. fleursetsenteurs.com, accessed 5.26.2015, their own introduction. Bronze Medal, Plantarium 2010.

SALV008 - Salvia 'Violin Music' - 20cm tall x 60cm wide. Flower corolla rich lavender-violet. Leaves oval, dark green, 2.5cm long.. fleursetsenteurs.com, accessed 5.26.2015, their own introduction.

SALV009 - Salvia 'Red Swing' - 80cm tall.. Flower corolla rich cardinal or cherry red, calyx purplish-black, contrasting much.. fleursetsenteurs.com, accessed 5.26.2015, their own introduction.

SAMB001 - Sambucus nigra BLACK TOWER™ (Wayside Gardens)

SAMB002 - Sambucus nigra RED HOLY 'Thundercloud' (Esveld)

SANS001 - <u>Sansevieria trifasciata 'Tyler'</u> - 40-45cm tall, much as 'Robusta' (intermediate between Trifasicate Group and Hahnii Group) but more vigorous, 6-7 leaves per rosette (more than similar 'Robusta'), pale yellowish-green crossbands (more pale green in 'Robusta'), thinly margined yellow. Selected by Marvin Villegas, US Patent #25036 in 2014 as improved sport of 'Robusta'

SARR001- Sarracenia 'Carolina Yellow Jacket' (Plant Delights, David Crump)

SARR002 - Sarracenia purpurea 'Jersey Girl' (Plant Delights)

SAUR001 - Saururus crenuus 'Hertford Streaker' (Plant Delights) - slower, compact, not weedy or aggressive as species due to lower vigor of this variegated sport. Leaves heavily margined cream to white, chimera up to 80% surface, the central zone an irregular mix of light grey, silvery-green, and green patches forming the shape of an irregular toothed leaf shape (15-20% surface). Jesse Perry found as sport in Hertford, North Carolina USA, introduced by Plant Delights Nursery, Raleigh, North Carolina 2014.

SCHI001- Schizachryium scoparium 'Standing Ovation' (Wayside Gardens) - 3-4 ft. tall x 12-18 in. wide, very erect, compact. Leaves rich light blue, tinged dark purple near the base, very bright orange, yellowk, red, and purplish-brown fall coloration, blades thicker than species typical. US Plant Patent 25202 to North Creek Nursery.

SCHI002 - Schizachyrium scoparium 'Seasons in The Sun' - 90-110cm tall. Leaves bluish-green, becoming dark purple or purple tinged in late summer and fall

SCHI003 - Schizachyrium scoparium 'Cinnamon Girl' - 65-80cm tall. Leaves dark red to cinnamon-red in fall, a bit of a dusky rose over green with some red before that.

SCHI004 - Schizachyrium scoparium 'Good Vibrations' - 100-120cm tall. Leaves steell bloue to grayhish-blue, no red or other fall colors but keeping this valuable blue sheen to contrast with the rest. Flower racemes much larger than typical, showy, tinged red.

SCHI005 - Schizachyrium scoparium 'Smoke Signal'

SCHI006 - Schizachyrium scoparium 'Twilight Zone'

SCHI007 - Schizachyrium scoparium 'Prairie Munchkin'

SEDU001 - Sedum 'Touchdown Teak'

SEDU002 - Sedum 'Lemonjade' (Walters Gardens)

SEDU003 - <u>Sedum 'Dark Magic'</u> - 12-15 in. tall, very upright, clump-forming, numerous crown per plant. Flower heads large, effectively dark pink. Leaves glossy blackish-purple. Terranovanurseries.com, accessed 4.12.2015

SEDU004 - Sedum 'Cherry Truffle'

SEDU005 - Sedum 'Chocolate Drop'

SEDU006 - Sedum 'Raspberry Truffle'

SEDU007 - Sedum 'Desert Black'

SEDU008 - Sedum 'Desert Blonde'

SEDU009 - Sedum 'Desert Red'

SEDU010 - Sedum 'Rolling Rock'

- SEDU011 Sedum spurium 'Red Rock'
- SEDU012 <u>Sedum ussuriense 'Chuwangsan'</u> 4 in. tall x 12 in. wide, low-spreading. Leaves bluish-green, resembling S. sieboldii but larger and sparsed. Flowers medium lavender-pink. USDA 3a. Crug Farm found on cliffs in S. Korea as BSWJ23.
- SELA001 Selaginella tamarsicina 'Golden Sprite' ('OK Gold')(Plant Delights)
- SMIL001 Smilacina stellata 'Blue Dune' (Plant Delights)
- SMIL002 Smilacina japonica 'Snow Dragon' 12 in. tall. Leaves margined and lightly striped cream to 5-10% surface, this chimera quickly becoming white. USDA 4a hardy or better. plantdelights.com, accessed 5.26.2015
- SOPH001 Sophora japonica 'Winter Gold' ('Gold Standard') (Esveld Nursery) twig and young stems very rich gold in winter. Leaves pale green to yellow in spring, later more typical green. Intro. to US by Don Shadow, imported from Japan. Not seen in the US until 2013, still not widely sold (May 2015).
- SORB001 Sorbus AUTUMN SPIRE® 'Flanrock' (Bluebell Nursery) 4m tall x 1m wide (10 years), narrow to columnar, erect, compact. Leaves in fall rich red to orange shades, often very showy in fall. Fruit mustard yellow, reddish centers. Seedling from 'Joseph Rock'.
- SORG001 Sorgastrum nutans 'Active Volcano' 60cm tall in leaf, 100cm tall in flower, shorter than many clones. Leaves a mix of orange, gray, pink, dusky red, and amber shades in fall. Selected by Jan Spruyt, <u>vasteplant.be</u>, accessed 5.16.2015, under their JS® trademark used for many genera.
- SORG002 Sorgastrum nutans 'Winnetou' 100cm tall in leaf, 180cm tall in flower. Leaves a mix of brownish-red, green, and violet in fall. Flower much longer than species typical. Selected by Jan Spruyt, <u>vasteplant.be</u>, accessed 5.16.2015, under their JS® trademark used for many genera.
- SORG001 Sorgastrum nutans 'Winnetou's Squaw' 60cm tall in leaf, 150cm tall in flower. Leaves blue when flowering. Flowers rich brownish-red shades. Selected by Jan Spruyt, <u>vasteplant.be</u>, accessed 5.16.2015, under their JS® trademark used for many genera. The ICNCP prohibits offensive names and in popular culture (USA, May 2015) the word "squaw" in considered offensive to some for it's historical, pejorative, anatomical meaning in some native tribal languages but it also means "wife" or "soul mate" with much respect. OROC currently accepts this name as cultural meanings are diverse and there is no universal cry to remove use of the term "squaw". The American states of Idaho, Maine, and Montana have opted to remove "squaw" in place and street names.
- SPIR001 Spiraea media BLUE KAZOO® 'SMSMBK' (Spring Meadow Nursery) 2-3 ft. tall x wide. Leaves glaucous blue at first, later more greenish-blue with some red tints, appearing a bit lavender-purple to blue-green from a distance, later more green. Flowers white in large domed corymbs. Cold hardy to -40 deg. F. Marketed by Spring Meadow Nursery and Proven Winners./
- SPIR002 Spiraea x bumalda SUPERSTAR™ 'Denistar' 24-36 in. tall x 36-48 in. wide, vigorous yet compact, much smaller than parent 'Froebelii'. Leaves with scarlet to dark red new growth, becoming a darker green than this species old choices, fall shades in copper to bronze, often very showy. Flowers in corymbs in rich violet-pink, fairly typical of modern hybrids from images. <u>US Plant Patent #22432</u> to Denis Levac in 2012 as sport of 'Froebelii' in 2004.
- SPIR003 Spiraea LIGHTNING STRIKE™ 'Conalex' 18 in. tall x 30 in wide, very compact to dwarf, mounded. Flower inflor. of 12-20 flowers, to dark to medium pinkish-mauve (parent 'Lemondrop' is more medium pink, less mauve), slightly darker centers, some rebeat blooming in summer. Leaves lime green tinged golden-yellow to chartreuse-yellow, may be light green in shade, resistant to sun damage more than 'Lemondrop'.. <u>US Plant Patent #21473</u>, Selected by Mike Farrow, Holly Hill Farms, Maryland, USA as chance seedling of 'Lemondrop', which Farrow also patented in 2004.
- SPIR004 <u>Spiraea 'Sparkling Champagne'</u> 1-2m tall x 1.5-2.0m wide, dense, multi-stemmed. Flowers white with distinct violet-red eyes, red stamens, will rebloom is lightly sheared. Leaves light to medium green, fading to lime green, tips orangish-red at first, another reason to shear it after the first bloom period, fall colors include yellow, lime, and fiery orange to light red shades. Bred by Peter Moore, bredbypetermoore.co.uk, accessed 5.28/2015, using S. hayatana x S. japonica
- SPIR005 Spiraea nipponica GOLDEN GLITTER<sup>™</sup> 'Verspi1' 3-4 ft. tall x wide, dense, compact. Flowers near white, flat-faced, big near old centers, petals very orbicular, like miniature Potentilla in white but in large heads. Leaves light yellow finely speckled and spotted medium green to lime, a true chimeral variegation, not gold or lime suffusions as other clones, new tips mostly yellow, overall a chartreuse look, technically green glitter on a gold base. US Plant Patent #25098 to Bert Verhoef, Netherlands on Nov. 25, 2014 as sport of S. nipponica 'Halward's Silver'

SPIR006 - Spiraea GOLDWING™ 'Bridixsept' - much as 'Little Princess' but leaves rich golden-yellow, paler by summer, not-burning. Andre-briant.fr, accessed 5.21.2015.

SPIR007 - Spiraea japonica MAGNUM ROSE™ 'Brolanspi' - 2m tall x 1.5m wide, robust, vigorous, very strong for the species, elegant. Flower corymbs bright pink to mauvish-pink, later fading nicely to pale pink. Leaves light green, tipped red in spring, later green, yellowish in fall. Andre-briant.fr, accessed 5.21.2015.

STAC001 - Stachyurus praecox 'Sterling Silver' (Nurseries Caroliniana) - white margined leaf.

STAC002 - Stachyurus praecox 'Diane' (Nurseries Caroliniana) - pink flowered, near red markings

STAC003 – Stachyurus chinensis 'Goldbeater' – new growth rich gold, becoming greener. Esveld.nl, accessed 4.24.2015

STAC004 – Stachyurus chinensis 'Wonderful Image' – leaves very faintly mottled, blade narrower, more acuminate Esveld.nl, accessed4.24.2015

STAC005 – Stachyurus chinensis 'Joy Forever' – leaves broadly margined yellow to 45% surface, central green zone an irregular tree shape, margins tinged pink in fall Esveld.nl, accessed 4.24.2015

STAC006 – Stachyurus chinensis 'Senna'

STAC007 – Stachyurus himalaicus 'Dolly' – 3m tall (10 years). Flowers yellow, often cream in common species variants. Esveld.nl, accessed 4.24.2015

STAC008 - <u>Stachyurus chinensis 'Carolina Parakeet'</u> - Petioles pinkish, contrasting. Leaves centrally marked yellow to greenish-yellow, subtle chartreuse, 45-80% of blade surface, the central zone sometimes well defined, other times 3-5 lobed in asymmetry, and the lower portion of midrib above often red to pinkish. Found by Tim Alderton, JC Raulston Arb, as reverse sport of margined 'Magpie'.

STOK001 - Stokesia laevis 'Divinity' (White Flower Farm)

STYR001 - Stryax japonicus MARLEYS PINK PARASOL® 'JLWeeping' (Bailey Nurseries) - combines weeping habit and true pink flowers. Trademarked confirmed registrated in US by OROC search at uspto.gov

STYR002 - Styrax japonicus 'Evening Light' (Hawksridge Farms)

STYR003 - Styrax japonicus 'Jippei-Kawamure' (Esveld Nursery)

STYR004 - Styrax japonicus 'Peter Pan' (Esveld Nursery)

STYR005 - Styrax japonicus 'Spring Showers' (USDA/USNA)

STYR006 - Styrax americanus 'Baby Blue (JC Raulston Arboretum)

STYR007 - Styrax japonica 'Frosted Emerald' - slower than species typical. Leaves heavily mottled cream in very irregularly pattern, some random, others near margin with some submarginal banding.

STYR008 - Styrax japonicus 'Bombastic' - Esveld.nl, accessed 4.24.2015

STYR009 - Styrax japonicus 'Tinkerbell' - smaller tree, 3m (10 years). Leaves smaller, refined, often slightly folded. Esveld.nl, accessed 4.24.2015

STYR010 - Styrax japonicus 'Wespelaar' - leaves very wide, much as 'Fargesii', green, becoming more brownish-purple in fall. Flowers numerous, white, very showy. Selected at Arboretum Wespelaar, Belgium, but not listed under their own selections of cultivars on their website, accessed 5.20.2015. Offered by panglobalplants.com and esveld.nl on

this same date.

SYNE001 - Syneilesis palmata'Kikko' (Plant Delights) - a spectacular variegate with a cut palmatifid leaf.

TAXO001 - T. distichum LINDSEY'S SKYWARD™ 'Skyward' (Monrovia)

TAXO002 - Taxodium distichum 'Cody's Feathers' (JC Raulston Arboretum)

TAXO003 - <u>Taxodium 'Banita'</u> (T. distichum x T. mucronatum) - 80 ft. tall x 40 ft. wide in China, Texas plants at SFA were 14 ft. in 3 years, vigorous, neat form, not producing knees. Leaves light emerald green, evergreen in USDA 8, less so in USDA 7. Reduce\d Cercospora leaf blight. Hardy to USDA 7. Origin: China, controlled hybrid, introduced to US by Dr. David Creech, Stephen F. Austin State University, tested there as T502. We first say it sold as mailorder by www.camforest.com, accessed 4.13.2015.

TAXO004 - Taxodium distichum 'Boxer's Path' - compact, sport of witches broom, 2-4 inches a year. Found by Mr. Umar in Philadelphia, Pennsylvania, USA not far from the Museum of Art made famous by fkictional boxer Rocky Babloa of movie fame and a statue there today. Conifertreasury.org, version 7.0, accessed 5.29.2015.

TAXO005 - <u>Taxodium distchicum 'Jims Little Guy'</u> - dwarf to semi-dwarf, erect, tufted and cloud-like at times, generally on the theme of 'Peves Minaret' but in some ways different, too early to define in detail. Found at JBerry Nursery, Grand Saline, Texas as broom seedling. Taxodium expert Dr. David Creech says it can be rooted with careful cutting selection unlike 'Peve Minaret' (which is grafted and thus rare) and thus has potential for wider use.

TAXO006 - Taxodium distichum 'Twisted Logic' - twigs contorted, very showy in winder. Tom Cox, Georgia, found as seedling. coniferkingdom.com, accessed 5.29.2015

TAXU001 - Taxus baccata 'Intermezzo' (Buchholz Nursery)

TAXU002 - Taxus caespitosa 'Rezek's Gold' (Plant Delights, formerly T. baccata 'Aurescens Nana')

TERN001 - Ternstroemia gymnanthera 'Golden Bear' - registration based on palnt at JC Raulston Arboretum, Raleigh, North Carolina, USA accessioned as 120829 in 2012.

THAL001 - Thalictrum ichangense 'Evening Star' (Plant Delights)

THUJ001 - Thuja occidentalis 'Park Vlaanderen' (Buchholz Nursery)

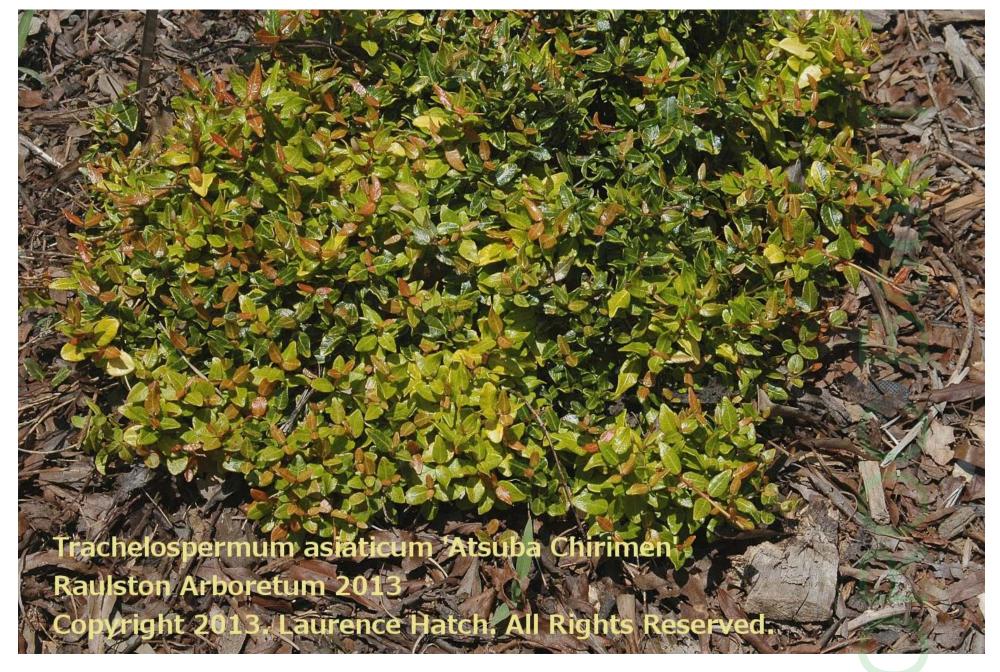
THUJ002 - Thuja occidentalis GOLDSTRIKE™ (Wayside Gardens)

THUJ003 - Thuia (standishii x plicata) EMBER WAVES™ 'MonPin' (Monrovia, New 2015)

THUJ004 - Thuja occidentalis 'Golden Anne' (newplants.nl)

THUJ005 - Thuja (plicata x standishii) VIRGINIAN™ (Upshoot)

TILI001 - Tilia 'Jubilee' (Esveld Nursery)



TRAC001 - Trachelospermum asiaticum 'Atsuba Chirimen'

TRAC002 - <u>Trachelospermum asiaticum FLAT MAT™</u> 'FT01' (Ozbreed) - see originator's <u>YouTube Video</u>

TRAD001 - Tradescantia 'Angelic Charm' (Terra Nova Nurseries)

TRAD002 - Tradescantia AMETHYST KISS™ (North Creek Nurseries)



TRIC001 - Tricyrtis hirta var. masomunei 'Precious Metal'.

TSUG001 - Tsuga canadensis GOLDEN DUCHESS™ 'MonKinn' (Monrovia) - a golden weeper at last? maybe not but certainly closer than anything before.



ULMU001 - Ulmus parvifolia 'Blizzard'. Image above.

ULMU002 - <u>Ulmus davidiana var. japonica NORTHERN EXPRESS® 'Burgundy Glow'</u> - 28 ft. tall x 24 ft. wide, smaller to medium sized for the genus, globose to subglobose, somewhat open branching. Leaves medium green in summer, becoming rich apricot orange to dark burgundy red in fall. Resistant to Dutch Elm Disease, minimal black leaf spot damage. Cold hardy to USDA 3. Selected at North Dakota State University, introduced 2014. <a href="http://www.ag.ndsu.edu/plantsciences/research/introductions/northern-empress">http://www.ag.ndsu.edu/plantsciences/research/introductions/northern-empress</a>, accessed 5.12.2015.

ULMU003 - <u>Ulmus americana COLONIAL SPIRIT® 'JFS-Prince II'</u> - 65 ft. tall x 50 ft. wide, upright-arching (classic species vase look), symmetrical over time, strongly branching. Leaves dark green, mixed yellow shades in fall. DED (Dutch Elm Disease) resistant. USDA 4 hardiness. Selected by jfschmidt.com, accessed 5.16.2015, introduced 2016.

---end of OROC Data Sharing

VACC01 - Vaccinium corymbosum PINK ICING™ 'ZF06--79' - 3-4 ft. tall x wide, mounded to slightly spreading. Leaves semi-evergreen, new growth pink, glaucous blue, and light green, later medium green, very strong plants quite pink in new tips. Fruit large, sweet. BRAZELBERRIES® name not registered with OROC as it is applied to more than one genus and is thus not a taxonomic equivalent.

US patent #23336.

VERB001 - Verbascum chaixii 'Croatian Blood' (Plant Delights)

VERN001 - <u>Vernonia angustifolia 'Plum Peachy'</u> (Plant Delights) - 48 in. tall. Leaves linear (as species), somewhat Amsonia-like before flowering. Flowers in open heads to 8 in wide, dark purple, larger heads than species typical. USDA 5a. Selected by Tony Avent from wild populations near Turner County, Georgia, USA, trailed as A2GA-003B.

VERN002 - <u>Vernonia 'Southern Cross'</u> (Instrinsic Perennials) - 36 in. tall x wide. Leaves dark green, 0.5 in. wide, dark green, remaining clean all season. Flower heads purplish-lavender, white filaments, petals very incised and lacy. Intrinsic Perennials from seed of V. lettermanii, but a blade much wider, likely an interspecific hybrid, introduced 2013.

VERN003 - <u>Vernonia altissima 'Jonesboro Giant'</u> (Plant Delights) - 144 in. tall, large for the genus. Leaves dark green. Flower heads dark purple to rich lilac. USDA 5a. Selected by Tony Avent, Plantdelights.com in 2000, found in wild near Jonesboro, Arkansas, USA, notably erect and sturdy while other seedlings there had fallen over due to climate and flower weight. It remains strong in their trials.

VERN004 - Vernonia crinita 'Betty Blindeman' - 125cm tall, becoming 160cm tall in flower. Flower corolla purplish-lavender to pale lilac. Selected by Jan Spruyt, vasteplant.be, accessed 5.17.2015

VERN005 - Vernonia noveboracensis 'White Lightning' - Flower buds greenish-yellow, opening to white to creamy-white rays, not lavender to purple shades as species. Selected by Jelitto.com, accessed 5.2.2015, their own selection, intro. 2014.

VERO001 - Veronica 'Blue Bomb' by Graham Rice (RHS, Parkers, new cultivar)

VERO002 - Veronica 'Aspire' (Terra Nova Nurseries, commercial website)

VERO003 - Veronica 'Very Van Gogh' (Walters Gardens)

VERO004 - Veronica incana 'Pure Silver' Ilnstrinsic Perennais, accessed 4.15.2015

VERO005 - <u>Veronica 'Hotel California'</u> - 24 in tall in flowers. Leaves green at first, turning red by blooming time and remaining so later, giving a new contrast not normally seen. Flower spikes medium blue. Intrinsic Perennials, introduiced 2015.

VERO006 - <u>Veronica 'Spike'</u> - 12-15 in. tall in flower, foliage before flowering low, compact. Flower spokes very erect and elongated, medium blue to slightly violet-blue. Said to be improved over 'Royal Candles'. Intrinsic Perennials, intro. 2014.

VERO007 - <u>Veronica 'Pure Silver'</u> - 12 in. tall, becoming 15 in. tall or more in flower, plant vigorous, and with improved longevity in borders. Leaves very greenish-silver to pale silver, showy. Flower colorol sky blue at first, made paler by a silvery calyx and peduncle, opening light violet-blue to medium blue. More adaptable to low drainage conditions than most silver-leaved, ie. V. incana cultivars, handling heavy soils and moist, rainy conditions better, higher longevity in borders. Intrinsic Perennials, intro. 2009

VERO008 - <u>Veronica gentianoides 'Little Blues'</u> - 15cm tall in flower, very compact. Flower color light blue with darker veins, yellowish center. Selected by Jelitto.com, their own seed strain, intro. 2015.



VIBU002 - Viburnum bracteatum ALL THE GLOWS™

VIBU003 - Viburnum obovatum 'Raulston Hardy' (JC Raulston Arboretum)

VIBRU04 - Viburnum dentatum 'Golden Arrow'

VIBU005 - Viburnum plicatum SHARON KAY™ (Upshoot)

VIBU006 - Viburnum LIME MARTINI™ (Upshoot)

VIBU007 - <u>Viburnum tinus ROYAL BABY 'Bridixhuit'</u> - 1m tall x wide, compact, globose to subglobose, dwarf version of species. Leaves more narrow, elliptic-lanceolate to narrow elliptic. Flower heads white, very numerous, umbels to 2cm wide. Andre Briant.

VITE001 - Vitex agnus-castus DELTA BLUES™ (Wayside Gardens)

VITE002 - Vitex agnus-castus 'Riverbanks White' (Nurseries Caroliniana)





VITE003 - Vitex agnus-castus BLUE DIDDLEY®. Image owned by and courtesy of www.provenwinners.com. Do not extract or use this image with OROC data.

WEIG001 - Weigela WINGS OF FIRE™ (Peter van Rijssen).

WEIG002 - Weigela SONIC BOOM PEARL

WEIG003 - Weigela RUBY FUSION™ (Star) - 3-4 ft. tall x wide. Flower corolla pinkish-red becoming dark ruby red, open campanulate with spreading lobes which are much incised and undulate than common for this genus, stamens cream to white, showy for contrast. Leaves chartreuse to yellow-green, sometimes very yellow in sunny, new tips, the very newest leaves may have very thin ruby red margins, pictotee style which do not last long, calyx lime to chartreuse, also with these dark red edges and tints, the blade finely serrulate and also undulate, broadly so but this almost creating the look of crenations or small shallow lobes.

Bred by NovaFlora LLC, introduced 2014 via Star Roses and Plants.

WEIG004 - Weigela LEMON ICE™ (Lake County Nursery) - pale yellow flowers in early April, showy red stems too.

WEIG005 -Weigela RED TWEETIE BIRD™ (Lake County Nursery) - dark green leaf, bright red flowers on strong plants of 4 ft. tall.

WEIG006 - Weigela MOR-COLORFUL™ 'Morcolzam' - 4 ft. tall x 5 ft. wide, subglobose, compact. Leaves broadly margined greenish-yellow becoming more creamy-yellow, chimera about 20-35% surface, slightly rugose, reminding one of a good Cornus florida variegate. Flowers light pink in bud, opening all white.USDA 5.Lake County Nursery, intro. c. 2013.

WEIG007 - Weigela 'Blazeaway' - 30-40 cm tall x 50cm wide, originator likes it grafted high on 'Bristol Ruby' for standard 1.5-2.0m tall, forming an arching, cascading show plant. Flowers medium pink, very tubular, Digitalis-like, often rebllooming later in summer. Bred by Peter Moore, UK 1990 as species W. florida x 'Evita'. Leaves medium green, tinged medium to dusky dark red in fall, showy.

WEIG008 - Weigela ALL SUMMER RED™ or CRIMSON KISSES™ 'Slingco 1' ('Slinco', 'Slingco') - 3 ft.tall x wide, compact to semi-dwarf (more so than parents 'Red Prince' and 'Evita'), subglobose Leaves green. Flowers rich pinkish-red to medium crimson-red to medium-violet- red, definately more than cherry or tomato tones here, much pink to violet in the background, well named for "lipstick red" kisses, commercially thought in the cosmetic industry to be something of a hot magenta-red ot glowing rose-red (May 2015). USDA 4 hardiness. <u>US Plant Patent #23654</u> on June 11, 2013 to Gijsbertus Verhoef, Hazerswoude, Netherlands 2005, cross of 'Evita' and 'Red Prince', selected 2007. The originator Bert Verhoef, bertverhoef.com, accessed 5.28.2015 uses the ALL SUMMER RED™ trademark while Monrovia has used CRIMSON KISSES. The various spellings of the cultivar name, including on the originator's website, can lead to confusion. 'Slingco 1' is what appears in the US Patent Office records.

WEIG009 - Weigela MAROON SWOON™ 'Slingo 2' - 1.3-1.5m tall x 80-100cm wide, much taller than the originator's CRIMSON KISSES™, upright-rounded, compact. Flower corolla color dark rich red all year, uniformly colored, stamens white to cream, contrasting. Leaves dark green. Selected by Gijsbertus Verhoef, Netherlands. Connonnurseries.com, accessed 5.27/2015

WEIG010 - Weigela TUXEDO™ or EBONY AND IVORY™ 'Velda' - 80-100cm tall x 1.0-1.3m wide. Flower corolla color near white, campanulate, semi-open among modern hybrids, calyx much as the leaves, generally a dark burgundy-purple in full anthesis, throat slightly gold or yellow tinged but not bodly so, a small gold throat or stripe at best, semi-showy as such for contrast. Leaves very dark brownish-purple appearing near black, the cultivar name being a contrast black and white as with the tuxedo or "black tie and tails" approach to fancy, formal dress.Bred by Gijsbertus Verhoef, Netherlands.Mr. Verhoef aty bertverHoef.com, accessed 5.28.2015, uses the EBONY AND IVORY™ trademark.

WEIG011 - Weigela MINOR BLACK™ 'Verweig3' - 2-4 ft. tall x wide, mounded to compact. Leaves dark maroon to blackish-purple. Flower corolla deep pink. Bred by Bert Verhoef, bertverhoef.com, accessed 5.28.2015, intro. c. 2006.

WIST001 - Wisteria macrostachya SUMMER CASCADE™ 'Betty Matthews' - 15-25 ft. tall, cascading mound, densely covered in flowers. Flower corolla deep lavender-blue with some paler portions. Proven cold hardy at the Minnesota Landscape Arboretum, USDA 4 or better. Firsteditionplants.com, accessed 4.14.2015, introduced c. 2012, first retail sales 2013

WOOD001 - Woodwardia unigemmata 'Ping Wu'

WOOD002 - Woodwardia orientalis 'Mamma Mia' (Plant Delights)

YUCC001 - Yucca filamentosa 'Bronze Age' (Walters Gardens, new 2014)

YUCC002 - Yucca linearifolia 'Line Dance' (Plant Delights)

ZELK001 - Zelkova serrata GOLD FALLS™ (Monrovia)

<u>UNREGISTERED - Zelkova serrata 'Luminifera' (Esveld Nursery)</u> - post-1959 Latin name, thus illegitimate and invalid. A correction to 'Luminiferous' is suggested but we cannot yet identify the originator.

ZELK002 - Zelkova serrata DAVID'S WEEPABOUT® 'JSC Kingsthree'

ha: semi-pendulous, suggestive more of 'Green Veil' than a true, full blown weeper but distinct from

ha: that clone in foliage.

It: slightly twisted

II, Im: more incised, very elongated, apex nearly filiform or thread-like

or: James Cavet, JSC Nursery

so: www.heritageseedlings.com, accessed 2014

ZELK003 - Zelkova serrata 'Green Mansions'

Ic: margins white-flecked, an irregularly spotted margins (ie. margino-maculata style) as in

Ic: 'Goshiki' but possibly a larger chimera than it. We have yet to compare both so it might be a rename.

in: www.heritageseedlings.com, accessed 2014

## **OROC Declaration**

While the International Society for Horticultural Science (ISHS) Commission for Nomenclature and Cultivar Registration via the role of the International Cultivar Registration Authority (ICRA) over the last fifty years has succeeded in some valuable measure to stablize the vast nomenclature of garden plants, and in some genera serve the scientific and gardening communities with brilliance and deep scholarship, in many ways they have failed to lead, proactively seek knowledge, communicate, and innovate for the majority of economically important and culturally precious landscape taxa. Fewer than 1% of new woody plants, 2% of hardy herbaceous perennials, and 0% of annual bedding plants (given that no registrars exist) are catalogued each year. Nor do the vast majority of nurserymen, including worldclass breeders in a genus for decades, know

with whom in ICRA to communicate nor do most see any merit or value in their process.

When most of these incomplete registrations in hundreds of under-served genera appear, sometimes after years of delay since submission, one must purchase thousands of dollars worth of society, academic, and other periodicals to be fully informed, thus the scheme becoming an elitist communication paradigm that excludes all but the most wealthy institutions and financially able collectors; or those who just happen to live near libraries with few budget restrictions. A simple question to an ICRA may cost one upwards of \$200 to acquire their data, leaving amateurs and students bewildered and unaided. We know. We were those students asked to pay up.

Furthermore the existing system is designed not to serve the public or even a devoted set of collectors but the perpetuation of chosen societies, institutions, favored nurseries, author-ICRA, nurserymen-ICRA, and gardens through sequestration of knowledge for sheer profit and control that goes far beyond the rules of the nomenclatural codes. In this internet era where publication costs literally nothing, the *status quo* with cultivar registration remains even more puzzling and intolerable. Garden plants and the people who cherish them are supremely worthy of a far more accesible and modern system, requiring both reform of the ICRA and revolutionary new alternate channels.

We as the OROC, a consortium of horticultural scholars, taxonomists, breeders, plantsmen and plantswomen, geneticists, professors, landscape designers, curators, garden administrators, librarians, landscape architects, floriculturists, nurserymen, students, the odd botanist (aren't they all?), plant explorer, web guru, Master Gardeners, and accomplished amateurs strongly disagree with the money-first, elitist control of cultivar knowledge in what can be, and we believe should be a free, fair, and very open system. In this mind we will give more, do more, and share more towards the improvement of students, scholars, plantsmen, the general public, and all our gardens everywhere. If you have an internet connection, you will pay nothing to be informed.

You have our promise that free, effective, highly informed, proactive, and scientifically rich communication will be given, constantly improved, refined, and augmented at all times.

# **OROC Principles and Remedies**

**Principle 1. 100% New registration access.** All new registration data is shared online 100% free with no preferences for any persons, parties, corporations, or organizations in terms of access, timing, or data delivery. No society dues, purchases of any product or service, journal subscription fees, or other paid fees or compensation will be required for access to this new cultivar data.

**Principle 1.A.** We affirm that the purpose of cultivar registration should never be financial support of a plant society, botanical garden, arboretum, organization, publisher, their staff, or other entity, nor is it acceptable to monetize and control data access for personal, professional, and organizational reasons. Cultivar registration must favor open, status-neutral, communication of plant information regardless of ability or willingness to pay, join an organization, or subcribe to specific media.

Principle 1.B. Non-interference with tradtional monographs and databases. The primary goal of the OROC program is cataloging and communication new cultivar introductions, allowing authors, database developers, curators, germplasm managers, and other compiling parties to write more complete checklists and encyclopedia as their own work product, integrating OROC data as they choose. When it becomes logical, economically viable, and a strong scientific need, OROC will endeavor to create and share complete checklists as 100% free publications, mindful to avoid direct competition with authors, whenever possible or feasible, on whom we depend for free and willing exchange of data.

**Principle 2. No fee policy**. No fees or other compensation are charged for the registrations, processing or communication of data, or any changes to same. Lack of membership, legal standing, inclusion, nor any other fees or conditions will exclude a person from registering a cultivar.

**Principle 3. Expert Assistance**. Scientific support including experts in taxonomy, genetics, and the specific genus, all when possible, are provided readily, at no cost, and without delay. An unpaid, uncompensated, all volunteer panel of experts will be assembled when possible to assist in all these matters.

Principle 4. Immediate Data Delivery. Registration data will be provided online in a timely manner within 24 hours as a goal, and sooner if possible.

**Principle 5. ICNCP.** The International Code of Nomenclature for Cultivated Plants (ICNCP) is our guide for cultivar name acceptance and evaluation when possible, our Board of Directors allowing exceptions to be clearly stated and explained.

Principle 6. Commercial Links. Commercial links for promotion, mailorder sales, sales contacts, and other communications will be encouraged and communicated as an incentive for registration and general cooperation. This has been widely discussed as a failure to motivate registration with the current ICRA system. Nurserymen and plant breeders need exposure, deserve it in fact, and providing them a printed address reference in some barely read journal is not what they need, want, or desire. Also important is the easy, mailorder or local availability of new cultivars to the buying public. There is nothing more frustating than seeing an exciting, breakthrough cultivar registration and finding no listing anywhere to acquire it.

**Principle 7. No Delay Policy.** Registrations are not delayed for any commercial reason such as publication of book or product by a participant except by legal demand by an attorney on record requiring such an order. The delay of publication of data for the purpose of book publication by an Author-ICRA, patron of some institution, or a noted horticultural society is considered abuse of the system and will not be tolerated.

**Principle 8. Patent and PBR Monitoring.** Application for a Plant Patent or Breeders Rights is considered a content capture event worthy of automatic registration and recognition. Staff in this project are to monitor all Patent and PBR sites on a regular basis.

**Principle 9. Proactive Data Seeking.** We will seek out new cultivars by any ethical and legal means possible and consider all publications of cultivars in catalogs, books, monographs, checklists, websites, or other media to be worthy of our automatic registration without or without the consent of the originator, nominant, introducer, patent holder, patent assignee, or other party. Our registrations will be both proactive and reactive, the first from our own study and the second from submissions sent to us.

**Principle 10. Communication paradigm.** Data will be distributed by the most innovative, technologically efficient, and effective means of communication possible. OROC will invest time, money, and resources to study, test, and acquire new technologies, tools, hardware and software, and all other means or methods for efficient transfer of our free data to the most users possible.

**Principle 11. Volunteer and Student Mandate.** Volunteers will be the basis of our data development and communication program. When possible we will have at least 20% of our staff as student interns to keep use fresh, modern, and technologically informed.

**Principle 11.A. CCR Program.** Commissioned Cultivar Registrars (CCR) will be trained and appointed from the ranks of known experts and eager students to provide modern, high level service at no cost and yet service of great value to our Registrants.

**Principle 12.** In the early stages, Http://www.cultivar.org is the default free website for registration data but is given no preference over other websites or media in any aspect or function. In future we will list all other sites with a full availability of OROC data and regular updates of such. The process for use and extraction of registrations from the cultivar.org pages will discussed below.

**Principle 13. Elimination of Registration Obstacles.** We will not impose severe and undesirable requirements upon registrants such as demand for surrounding copyrights to images, submission of nursery stock, herbarium vouchers, or plant tissues for documentation or evaluation, and need for extensive, multi-year cultivar trials. Such is the perogative of patent and breeder's rights organizations and by no means under any code the right of a cultivar registrar.

**Principle 13.A.** OROC will promote and assist with maximum documentation of a new cultivar but are mindful that our duty is registration and at no time are we to comment on the merits of a new cultivar except in a clearly editorial context with a named author. It is the work of plant trials committees, Plant Plant, and Plant Breeders Rights authorities to evaluate the unique merits of a new plant.

Principle 14. A Board of Directors will supervise all activities and have power with a simplle majority to rule on any issue.

Principle 15. Excluded genera policy. Our Board of Directors will determine a list of genera well served via ICRA with high scholarship, communication, data access, and other criteria which will be excluded from the OROC process. Exclusions will be posted on our registration forms and related portals. The OROC program will not accept registrations in certain genera due to their size, complexity, specialized interest, and existing success in the ICRA and other programs. Subject to amendment by the Board of Directors our current list of excluded genera are: all Bromeliaceae, Camellia, Dahlia, Dianthus, Fuchsia, Gladiolus, Hemerocallis, Hibiscus rosa-sinensis (and tender hybrids), Hosta, Iris, Lilium, all orchids, Paeonia, Rhododendron, Rosa, Saintpaulia and all other Gesneriaceae, Syringa, and Tulipa.

Principle 16. We will endeavor with care and to cooperate with ICRA, plant society, and other expert organizations in genera to exchange data whenever of mutual interest.

Principle 17. Proven effective registration tools such as those used at Coleussociety.com and ICRA will serve as models for other genera and plant groups in our scope.

Principle 18. Data will be made available in multiple formats and for multiple computer and media platforms so far as cost permits.

**Principle 19. CCR** Resources. Refusal of later homonyms and synonyms in registration will be based on all available literature from any reputable source. Staff have free access to Cultivars of Woody Plants, Hatch's Perennials, HITS, and other cultivar.org references at no cost to determine previous or confusing use of names that the ICNCP forbids. We further recommend use of the RHS Horticultural Database (not the new, Plant Finder), International plantsnames, com, and plantscope.nl in this process.

**Principle 20. Sensible Cultivar Name Policy.** We will seek the registration of sensible, easily read, and communicated cultivar names in natural, vernacular language at all times, discouraging the use of trademarked names as the sole, preferred, logical, or *de facto* name of the garden taxon.

**Principle 20.A**. We believe the flight of commercial parties in using unregistered trademark names as the sole name for a single cultivar stems in part from the ICRA system and widespread refusals, abuses, and criticisms of plant breeders.

**Principle 20.Rejection of some trademark names** for OROC registration purposes. While OROC cannot determine the merits, validity, or legal status of your trademark, we have chosen to reject some trademark applications as non-taxonomic entities or those not relating directly to individual cultivars and their groups. These are:

• 20.B.1. Cultivar to Trademark and Trademark to Cultivar Conversions. We will not refuse the registation of any cultivar if the originator approved use of a registered or unregistered trademark name of the identifical name and spelling prior to it being considered of cultivar rank. No name can thus be both a trademark and cultivar name at once. Once a trademark, always a trademark - and once a cultivar (such as in a Plant Patent) - always a cultivar. We will of course understand errors in trade or other publications by persons not having permission of the originator or assignee to control name use. We will consider the originator's first published intent for the

taxon, whether an originator-sanctioned catalog, article, or press release, or the first legal patent or PBR publication as the means of establishing cultivar vs. trademark intent and permanent status.

- 20.B.2. Multigenera Marketing Trademarks vs. Taxonomicaly Direct Cultivar or Cultivar Group Synonyms. We will register trademarked names only if they are direct homologues (de facto trade synonyms) of (equivalents to) either one cultivar name or one cultivar group in a single genus, on a purely one-to-one basis with the cultivar or cultivar group rank. Trademarked names for general collections of taxa which span more than one genus will not be accepted here and considered non-taxonomic marketing names. These non-nomenclatural marketing or grouping names may be noted by the CCR as a means of identifying the plant in gardens and on nursery labels.
- 20.B.3. Disallowed unregistered trademark terms and names. We will refuse any cultivar registration where the trademark name claims trademark status over a name, legal property, or term that cannot be trademarked, registered or not, due to existing, scientific,legal, popular, and common use. For example, SHININNG™

  COLEUS is acceptable but not SHINNING COLEUS™ because the Latin genus name is a scientific name and not subject to trademark law or control in most countries.
- 20.B.4. Trademarks without legal or historical standing. We will refuse any cultivar registration with a trademark for which the creator of it wishes to append to an existing cultivar name for which they have no legal standing, historical connection at the time of origination, originator or nominant status, exclusive rights assignment, PBR or Patent control, or other grounds for claiming that cultivar as their own to name or market. For example, a party has decided to append an unregistered trademark to the old Cotoneaster horizontalis 'Variegatus' with no connection to it in history, law, science, or any known realm or jurisdiction. It will be chaos if tens of thousands of existing, often old, cultivars come in play as trademark marketing opportunities. We will refuse these trademarks as usurpations of scientific nomenclature and naming rights unless granted by a national or federal trademark agency. If a party has a unique or distinct clone of an existing cultivar and wishes to name it, this should be done in terms of a new, vernacular, non-Latin cultivar name according to the rules and with a matching trademark name if they wish.
- 20.B.5. Unregistered to Registered Trademark Conversions. OROC will not reject a cultivar registration if the trademark has been legally registered with a national or federal agency if it previously appeared as an unregistered trademark. Many such agencies and law firms of note recommend preliminary or temporary use of unregistered trademark marks until the registration process is complete.

**Principle 21.** The staff will endeavor and be proactive at all times to communicate with originators and introducers of cultivars to gain further clarity of descriptions, histories, origins, nomenclature, and to seek rights of high quality images. We will seek out answers rather than waiting for them to be asked by other parties. We will cultivate relationships with plant originators, showing no favoritism, but seeking to serve them as friends, colleagues, and horticultural partners.

**Principle 21.A.** Our model will be to serve Registrants with eagerness, willingness, and full awareness of their goals for the use and commercial promotion of a new cultivar, serving as much as we can, charging them nothing, and thus encouraging future registrations under our policy of honesty and helpfulness at all times. Flawless customer service and communication without delay will be our goal at all times.

Principle 22. Printed and Bound Registers. Fees may be charged to persons or libraries wishing to have printed, traditionally published, or bound copies of registrations but only as a means to recover costs and this with an absolute minimum of expense to the buyer and as nearly as possible to no profit nor loss to the project. We will work to minimize these demands and costs via our online website and ebooks that satisfy the needs of the academic, scientific, and all other traditional library communities.

Principle 22.A. Free ebooks with registrations will be studied with the desire to offer these via iTunes, Google Play Books, Amazon Kindle, and similar services that support a worldwide audience.

**Principle 23.** The Board of Directors may delete or modify any of these principles with an 80% or higher majority vote and add new principes with the same voting standard.

**Principle 24. Objective, non-evaluation mission.** OROC will have no function in determining the usefulness, commercial merits, overly resemblant taxonomy, or otherwise comment on the scientific merits of a new cultivar as has been a declared abuse of ICRA in refusing registrations well outside their defined role. The declaration of these merits is the role of Plant Patent, PBR, and cultivar trial administrators and not the role of any Registrar.

Principle 24.A. Respect for the necessity of commercial resemblant cultivars. OROC understands the commercial needs, rights, and needs of nurseries and marketing firms in this highly competitive age with so many nurseries and garden failing and falling, that highly resemblant cultivars are logical and frankly required. Everyone needs their own dwarf purple Loropetalum, a compact gold-leaved Physocarpus, the super narrow, wintergreen and denser than coral Thuja cultivar, and that glowing (but not too harsh) pink Phlox paniculata with massive heads that do not flop above mildew-free foliage. OROC will refuse no resemblant registrations based on the natural convergence of commercial requirements in our big world, knowing that the competition of likes and near equals lead to better plants over time. We will seek to distinguish them when possible by noting comparisons and contrasts in detail.

Principle 24.B. Reference to existing, objective cultivar evaluations and trial reports. While it is not the function or OROC or any other cultivar registration program to determine the garden merits, distinctiveness, or commercial potential for a given cultivar, we do reserve the link to respected university, plant society, and third part evaluation and trial programs and include this data in a cultivar data sharing section. Persons are welcome to submit links to proven trial organizations to provide a diversity of viewpoints on a particular cultivar from trial grounds around the world.

Principle 25. Conditional ornamental qualifications. We will accept registration in certain genera which contain high ornamental, landscape-worthy plants but refuse registration of cultivars purely for pomological, agronomic, olericultural, or non-aesthetic production of fruit, flowers, leaves, and other plants parts. Grounds for considering a taxon ornamental or semi-ornamental, even an edible-landscape plant, include but are not limited to: high colored or variegated foliage, highly colored and abundant fruit, unique plant habit, highly showy leaf colors such as gold, blue, or red foliage, showy bark or twigs, highly colored and abundant flowers, doubleness or incision of flower, incised or unusual lobing of the leaf blade, and fragrance of the flowers.

**Principle 25. A.** Subject to a 80% majority vote of the Board of Directors, OROC will only accept ornamental taxa in the following genera if proven or know to be ornamental and the originator must provide sufficient data to prove a highly aesthetic status: Brassica, Carya, Fragaria, Juglans, Lactuca, Malus, Musa, Pisium, Prunus, Pyrus, Punica, Rubus, Saccharum, and Zea.

**Principle 26. Ban on Name Holding or Reservation.** No system of cultivar name reservation or "holding" will be allowed or implemented. This ICRA abuse with hefty fees for name reservation and later for actual registeration and later registration data changes will not be permitted at any time or place.

**Principle 26.A**. **Fake cultivar rejection.** Registrations based on previous "reserved" names fraudulently published for plants which do not yet exist, using doubtful images and descriptions will not be accepted. Some originators freely admit this practice and one had stated "the next good seedling I find will be called Y...and am laying claim to the name now". Registering a breeding or selection goal not extant or real will be rejected.

**Principle 27.** Preference for registration will not be dependent on any marketing opportunities, advertising participation, or other means of compensating the OROC project. All registrants will be treated equally regardless of participation, past or present.

**Principle 27.A.** All new cultivar registrations will be completely open on at least one website (currently the default www.cultivar.org) without requirement for membership, registration of use, signing up, transfer of personal information, ad presentations, or any other act even if free and without obligation. These listings are part of the OROC Data Sharing Program.

**Principle 27.B.** Complete, historical (past to present or past only) cultivar checklists and horticultural monographs if 100% free may require access by means of registration or sign for a newletter, password, or similar program as a means of documentating use and assuring data integrity and security of these specialized, very large documents which fall outside the OROC Data Sharing Program. In most cases these documents contain images, text, and other contents which must preserve copyright compliance and previous legal agreements and are appropriate for sharing but maintaining the rights of authors, image copyright holders, and other considerations which do not permit free exchange without considerations or conditions.

Principle 27.C. Respect for Existing Cultivar Publications. Due to existing author agreements, previous sales promises to customers, copyright notices, and publication contracts, some content at cultivar.org and other allied sites, namedly CULTIVAR.ORG DIRECT ACCESS will be exempt from OROC Data Sharing. We will endeavor to convert some CULTIVAR.ORG DIRECT ACCESS material to 100% OROC free content as legal and contractual obligations pass. It is not the purpose or goal of OROC to render horticultural authorship in terms of cultivar checklists, horticultural monographs, and other cultivar databases obsolete by demanding no-cost access at all times. Indeed the profit motive is essential to get great, large works completed and allow the authors to retire with modest royalties as they deserve and require.

**Principle 27.D.** OROC will encourage free sharing of large monographs and checklists, mindful of the necessity of authors to fund their careers, expensive research programs, highly beneficial breeding and conservation projects, preservation of their valuable gardens and worldclass collections in an era of high taxation, but trying to maximize the amount of free material at all times within these practical boundaries. OROC will seek the donation of manuscripts from living authors as well as gifts from the author's estate via secured, long-term gift management.

**Principle 28. Mandate for New Technologies.** We will use new technologies, communication media, and all other techniques of scientific, commercial, and informational merit to communicate our data. Currently we use the resources of 123contactform which provide real analytics, graphs, Google Maps to cultivar origins and display gardens, social media feeds, video embeds, numerous free marketing tools for registrants, JPG image uploads, and many other modern tools.;

Principe 29. Response Time Requirement.. Registrants and all parties will receive a response within 24 hours during business (weekdays) when possible and no later than 48 under any circumstance with a reply well-researched with due diligence, providing a complete answer when possible and a preliminary report when necessary. Followups must be swift and regular for complex projects at all times. We will never tolerate lack of responses and long delays as typical of ICRA and plant society communications under any terms as these are our valuable partners, friends, and worthy creators of our future gardens who demand respect and the highest level of honor at all times.

**Principle 30**. In the spirit of international scientific cooperation the OROC will at all times offer registration data to ICRA and other parties of similar standing and authority (such as well-known authors, breeders, scholars) in a given genus for their own use, consideration, providing no copyright restrictions on their use or sharing of this data. This effort will be proactive and not reactive, waiting only for requests.

**Principle 31. Cultivar Group Registrations**. Cultivar Groups may be registered as if an individual cultivar for the purposes of documenting this useful taxonomic grouping and establishing the originator or nominant in question. The group may be based on a trademarked entity such as FANCY® PINK, FANCY® WHITE, FANCY® RED, FANCY® PINK WITH WHITE EYE, FANCY® DARK RED, and FANCY® HOT PINK.

**Principle 31. A. Cultivar Subgroup Registration.** When a group of cultivars exceeds at least 8 taxa in terms of the combination of two major traits or two accepted Cultivar Groups or a clean genetic merger thereof, the Subgroup may be registered.

Principle 31. B. Cultivar Groups, SERIES, and trademarks. The group registration will be termed a SERIES if based on a trademarked entity such as FANCY® PINK, FANCY® WHITE, FANCY® PINK WITH WHITE EYE, FANCY® DARK RED, and FANCY® HOT PINK. This would known as the FANCY® Series but had their been 'Fancy White', 'Fancy Pink' it would be called the (Fancy Group) in the context of cultivar nomenclature

Principle 32. Annual Surveys for Improvement. OROC will conduct annual surveys of major plant originators, their organizations, and students to determine new ways to

serve them better, communicate more information freely, efficienty, and in the most useful formats. The OROC Board of Directors is tasked for an annual action plan for implementation of the best survey ideas.

Principle 33. OROC Archives and INCA. We will archive all online and scanned documents in digital form to form an OROC Archive that will be distributed to all Board of Director members, Certified Cultivar Registrars (CCR), and selected universities for long-term storage and safe-keeping. Cultivar.org's INCA (Internet Nursery Catalog Archive) already has more than 40 gigabytes of cultivar description data since 2000 and will also be used in this archiving project. Due to copyright restrictions on nursery catalogs, academic journals, many websites, and formal books, the archive cannot be made available to the public. Our internal distribution is solely for purposes of maintaining the information over future years without loss of information as the internet or author's remove their contents.

**Principle 34. OROC Non-profit Status.** The OROC Board of Directors will consider and personally fund conversion of this group to an indendent non-profit corporation at such time it deems appropriate and helpful to the mission. No fees, taxes, or other considerations will be charged for administration of the OROC program.

**Principle 35, Respect for Patent and PBR Processes.** We will respect the needs and requests of any originator to follow Plant Patent and Plant Breeders Rights rules and not interfere in those processes by premature communication or distribution of plant data.

**Principle 35.A.** We do reserve the right to publish knowledge of a cultivar if it appears in existing publications or is clearly on display in admissible areas of a public garden, and do so on the ground that Horticultural Media have access to this same plant imagery and data.

**Principle 36. Selection and Role of CCR.** Whenever possible, Commissioned Cultivar Registrars (CCR) will be selected for broad knowledge of many plant types and genera so they assist each other in backup roles for others when unavailable and to educate themselves on a richer diversity of plants. We wish to avoid dependence on any one or two people for individual genera processing and thus have wider, deeper expertise from collaboration.

Principle 36.A. CCR and the Board will have a ready pool of specialists available to assist the CCR in specific genera situations and complex or difficult decisions.

Principle 37. Multiple submission tools and forms. We want the data whether by little or much effort, simple to complex, and so OROC will accommodate all originators with whatever level of time, devotion, detail focus, or control they wish when telling OROC about their new creation. When possible we will accept cultivar registrations with these styles of tools: 1) Just Tell Us. A simple email providing whatever data and links they can, 2) a simple short form that can but cut and pasted into email for even more information, and 3) a much more extensive, digital tool allowing capture of submitted images, Google maps, complex morphological radio and check boxes, more details history, social media feeds, multiple links and email approaches, and all available, powerful and yet useful techologies.

Principle 37.A. Mandate for registration tool innovation. Our volunteers including CCR and Board of Directors will at all time run experiments with new data submission and communication tools to not only offer better tools but new alteratives to familiar, existing, and more traditional ones. OROC staff will at all times educate themselves on new, affordable, rational communication tools, especially those free or at low cost to OROC, and always free to our consumers, learning from every new tool or platform, modifying them with skill, and always learning to be more, preserve more, and share more for the least possible effort and expense.