SENTINEL ORCHIDS

THE FINEST SELECTED ORCHID PLANTS - OPEN BY APPOINTMENT 1131 Rossiter Lane, Radnor, Pa. 19087-2812 (610) 688-8528, FAX (610) 687-5909 **E-mail: markitectw@comcast.net**

2019 LISTING:

DEAR ORCHID ENTHUSIAST:

My name is Mark Werther and I have been growing orchids since 1960. I am pleased to publish the 2019 catalog that represents the work of 11 years. In 2013 I had a partial burnout in the second floor, BURN ZONE; 100's of plants were discarded. At that time the collection was totally reevaluated and several hundred plants were also discarded based on lack of performance or latent virus hits. For the past four years I have been on a mission to gather superior plants to further improve the collection and these plants are virus tested per usual procedure. Payments for plants will hold them until weather permits after Winter.

Please note that all plants are very limited and may only be one available. Plants of smaller sizes and lessor price are sometimes available. No foreign orders and no US orders requiring CITES, IMPORT/EXPORT and PHYTO PERMITS.



Designed by Mark Werther, Architect. To be seen as an integral part of residential structures. South facing greenhouse view. The ridge is 24 feet in height. One of the few greenhouses in the world designed to operate with second story growing. 8mm double wall acrylic roof panels, triple wall construction: 2 exterior wythes of 6" concrete masonry units, 2" Styrofoam in center combination wall system for passive solar performance. The garage beyond has 30 solar panels that generate 6KW.



1200 square foot first floor area. Plants can be on benches or hung at 6 various heights.



Upper floor. Also well-known as the 'BURN ZONE'. Access by circular stair. Galvanized steel walkways supported by bottom cords of custom designed aluminum spanning trusses. Plants are suspended in galvanized metal trays and are hung from two levels of aluminum cross tubes. North wall has ³/₄" expanded metal wire for hanging. Both manual and motor operated ridge vents. Two 24" oscillating fans with 6 misting nozzles each utilized for humidification, and cooling. New 65% shade cloth.

Broughtonia Species

Sentinel has specialized in Broughtonia species and hybrids since 1980. They are all warm growing and are very rewarding in the quality and length of time that the plants can be in flower. Plants grow quickly during the warmer months.

Broughtonia negrilensis ' Sentinel' JC/AOS. On Slab. \$200.00



Awarded the Judges Commendation for the fine patterning markings within the lip. **Broughtonia negrilensis 'Poco Loco'.** One only. \$180.00



A Sentinel hybrid made between 'Moose' HCC/AOS and 'Sentinel' JC/AOS. 'Moose' is in orchid heaven, but son of Moose is here represented. Unusual form as flowers open widely and produces large number of flowers. Growing in a plastic spider pot.

Broughtonia Hybrids

To get an overview on the *Broughtonia complex read the article in the December, 1987 AOS Bulletin. Sentinel has selected varieties over* the years that are consistent performers. We look for high quality flowers, ease of growth, clean growth and multi-flowering per year. Sentinel has at least 16 awards in the Broughtonia complex. Hybrids are grown under bright light conditions with good air movement with most in plastic pots clay pots with an open mix. In general, plants grown in pots, grow out of their pots in less than two years and will flower each time they establish new growths. It is common to have plants in this group flower four times per year.

Cattleyopsistonia Cayman'Pinkie'. \$50.00



(Cattleyopsis lindenii x Bro. sanguinea). These little cuties took the best from both parents. Plants only 6" in height. Remnance of toothed leaf edges. 18" inflorescences with branching at ends showing 1 ½" pink sepals and petals. Beautiful open lip darker pink and lined with raspberry stripes coalescing centrally. Center is light yellow.

'J & D'. \$65.00 A larger flower than 'Pinkie'

Ctna. Mem. Henry Goldberg 'Odom's'. \$100.00 - \$125.00



Clusters of finely formed darkest red flowers 1 $\frac{1}{2}$ " across. Spectacular. Good grower and flowerer. 2 – 4 bulb flowering sized divisions in 3 and 3 $\frac{1}{2}$ " pots.

Ctna. Mem. Henry Goldberg 'Sentinel 1'. \$50.00 - \$75.00



(Ctna. Keith Roth x Ctna. Why Not). Clusters of red 2 ½" flowers that look like round Jamaica Reds on compact plants only 10" in height. Fine form. Very strong growing. Long lasting. Elongating inflorescences. Great show plant. 4" pots.

Ctna. Orglades' Little Lover 'Sentinel's Choice' HCC/AOS. \$250.00

2" full tricolored flowers - up to 15 on an inflorescence. Pink sepals flused light raspberry. Petals and lip fuchsia with petal flared internally yellow.

Ctna. Rosy Jewel 'Maili'. \$60.00 - \$75.00 Special.



(C. bowringiana x Broughtonia sanguinea). First registered Cattleytonia and still one of the best high quality and consistent, strong grower. Large heads of 10 flowers or more - 2 1/2" flat lavender with darker lip. Makes specimens quickly. Splash petal. Compact plant to 12". Clusters up to 12, 2" flowers at the end of inflorescences, very long lasting. Raspberry pink with central yellow flare on petals. Darker lip with bright yellow center. 6".

Ctna. Starrlyn (Ctna. Capri x Ctna. Why Not)

'Rubelite' AM/AOS. \$175.00



Seven to ten flat 2 $\frac{1}{4}$ " electric reddish flowers - ivory mid rib, yellow eyes in throat. Vigorous plant. 4-5".

'SVO II' \$100.00



Cluster of 1 3/4" dark red flowers with semi-peloric yellow flares on petals. Lip dark red, yellow centrally. An improved Ctna. Why Not.4"

Laeliacatonia Happy Face 'H & R'. \$70.00 (Lctna Peggy San x Lc. Mari's Song). Great tricolor cross - flowers 3".





Laeliacatonia Mighty Titan 'Parkside' AM/AOS. \$50.00

(Ctna. Jamaica Red x L. anceps). Plants selected in flower for form and color. Compact vigorous plants grow to 14". Pinkish purple round closed stars to 2 ³/₄", broad lip darker. Up to 20 flowers on branched vertical inflorescences. Great hybrid. 5 – 6" pots. Laeliacatonia Mighty Titan 'Sentinel' HCC/AOS. \$100.00



(Ctna. Jamaica Red x L. anceps). Compact vigorous plants grow to 14". Pinkish purple closed stars to 2 ¾", broad lip darker. Up to 20 flowers on branched inflorescences. Almost identical to the Parkside AM/AOS form above. 5 - 6" pots.

Laeliacatonia Quest's Sexy Eyes 'Fuchsia Sentinel' HCC/AOS. \$250.00.



(Lc. Shellie Compton x Ctna. Capri). Awarded 7-20-11. Compact plant to about 14". Up to 10 wellshaped exceptionally bright, neon like $3\frac{1}{2}$ " flowers. Sepals light violet pink with darker splash at tips showing vestigal pelorism. Magenta petals with notable interior median line, Broad magenta lip. Likes to grow. 6" pots., 41/2" back.

Otaara Hwa Yuan Bay 'She Shu' HCC/AOS. \$60.00



(Lctna. Peggy San x Blc. Sunset Bay). Four or more $3\frac{1}{4}$ " fragrant tricolor flowers of fine form. Plant compact to about 12" only. Large flower mass in comparison to plant size. $4\frac{1}{2}$ ".

Cattleya Family Species

Rhyncholaelia digbyana 'Mrs Chase' AM/AOS Two available. \$80.00



The best growing digbyana that I have seen. Growing in 6" plastic pan. **C. amethystoglossa.** \$100.00 - \$150.00



4n tetraploid forms. Several plants from H & R that cost me \$100 as seedlings. 12 – 15" in height to in bud. Well established vigorous. Picture shown of first to flower - matched existing awards. **C. aurantiaca 'Orange Jewel'** \$100.00



(John's Orange Jewel AM/AOS x self). A Fred Stewart selfing, vigorous plant to 16" tall producing cluster of 14 orange flowers with red spots in lip. This is likely a true aurantiaca - relatively broad lip. 6" pot. **C. aurantiaca 'Golden Dew AM/AOS.** \$60.00 - \$120.00



Fine yellow form of the species acquired from Fred Stewart 20 years ago. Moderate sized and tight prolific growth habit. $4^{\circ} - 5^{\circ}$.

C. aurantiaca 'Kumquat' HCC/AOS. \$60.00



Purchased from Fred Stewart 1990. Original mericlone SM394. 10, two inch yellow flowers of good from. Lip yellow with orange on each side of throat. Small flowering size in 3" pots.

C. aurantiaca 'Sentinel's Tangerine'. \$100.00

A sibling between "Wieland' and 'Orchidglade'. Very similar to 'Orange Jewel', but more of a golden orange. Relatively open lip with cinnabar dots and stripes. 12 or more flowers per inflorescence. 6" **C loddigesii var. harrisoniana 'Harford's Favorite' HCC/AOS** \$200.00 1 only.



Often confused with loddigesii. Taller plants to about 18". This flowering with 7, 4" flowers. Open lip exposing column and pronounced yellow crest. Fine quality diploid form. **C. intermedia aguinii (Waldor).** \$175.00



Developed from sibling forms of Orlata. Advanced breeding flattens the 3 ¹/₂" flowers producing one of finest forms I have seen unlike many of the aquinii's that exhibit crippling. 5". **C. intermedia 'Sentinel's Pink Orlata'** \$100.00



Again Orlata breeding – varieties were 'Orlata Imperial' by 'Gigantea'. This is plant #4. The flowers measure over 5". Plant about 14" in height. 4". One near blooming sized well-rooted division. One of the best of the fine formed, large flowered skinneri's. Normally 8, 4" bright pink flowers with darker pink lip and yellow eye. Fast growing plants to 20". New growths clear of black spotting. I believe this is an original division, not a mericlone. 6"

C. intermedia 'Sentinel's Exceptional' AM/AOS \$250.00 (1)

80 point AM/AOS. Orlata breeding. Crown Fox type. Looks like tetraploid with 14" growth, turgid leaves and bulbs $\frac{3}{4}$ " in diameter. Up to 5, 5" light pink flowers with wide segments and light raspberry peppering. 1 $\frac{3}{4}$ " broad open lip front and edged in reddish-purple. One division available in 5" clear plastic pot.

C. labiata var. Rubra'. \$120.00



Energetic plants selected from the Duffin collection.. Up to four 6" pink flowers slight flare on petals. Well formed magenta lip. 6" plastic pots.





Quality cordigera. Came from Ruben in Orchids. 5" clay. Enc. cordigera 'Sentinel's Numero Uno'. \$60.00 Fine form. Growing in 4" clay and tree fern. Blooming sized. Epidendrum floribundum 'FANGtastic'. \$70.00



This variety is almost an alba but it has a slight bit of pink suffesed in the flower. Stem of 1" fowers. Plants growing in net pots to about 8 inches in height..

Cattleya Hybrids



Display in the **BURN ZONE** of Blc. Brunswick Gem 'Sentinels Watermelon' HCC/AOS and Blc. Goldenzelle 'Lemon Chiffon' AM/AOS.

Bc. Daffodil 'Orange' \$75.00



(Rhyncol. Glauca x C. aurantiaca). Compact primary hybrid plant blooming with up to three $2\frac{1}{2}$ " flowers. Starts orange then changes to yellow. Up to 3 flowers per inflorescence. **Blc. Amy Linden 'Sentinel's Peach Parfait'.** \$80.00 - 125.00



(Blc. Whitewater Falls 'Newberrry Gold' x C. Horace 'Maxima' AM/AOS). A florist's dream. Normally produces 4 - 6, five inch flowers in a tight bunch - instant flower arrangement. Pastel shades of pink, peach, yellow all together. Lip Magenta. Division to be made in Spring.

, orange and yellow. Award/exhibition quality. Large vigorous plants to 20". Flowers more than once per year. Surcharge to ship these things except in smaller pot sizes. 6-7".

Blc. Brassy Gold #1. \$100.00. One available.

(C. Chocolate Drop x Blc. Love Sound). Strong growing plant with clusters of 3" orange-golden flowers with reddish-purple lip. Very similar to Blc. Brassy Gold 'Sentinel' that received an HCC. 6" plastic pan.

Blc. Bouton D'Or 'Lewis' AM/AOS. \$150.00 - \$175.00



(Blc. Buttercup x C. Wolteriana). One of the great Cattleyas. Beautifully shaped 4" flowers in peach to apricot. Usually flowers in February/March. 3 - 6 flowers per inflorescence Growths have now reached an amazing 22" in height. Recent 5 bulb division. Carter and Holmes just sold a division for \$250.00 **Blc. Bouton D'Or 'Pridgen'.** One only. \$300.00

(Blc. Buttercup x C. Wolteriana). One of the great Cattleyas. Better than Lewis. Beautifully shaped 4" flowers in peach to apricot. Usually flowers in February/March. 3 – 6 flowers per inflorescence. Amazing story. It took me close to ten years to get the plant to proper floweing size. It was WORTH THE WAIT. Grows and flowers very well.

Blc. Brunswick Gem 'Sentinel's Watermelon' HCC/AOS. \$350.00



(Blc. Owen Holmes 'Mendenhall' AM/AOS x C. Horace Maxima 'AM/AOS). Flowered again 3/14 with a 6" flower. Recently released and very limited. 5" outstanding watermelon red of fine form. It took several years to establish these properly. They are really growing strongly and will only get better as the plants show multiple leads. Should easily move to AM. 5, 6"

Blc. Carolina Orange D'Or 'Lenette' AM/AOS. \$200.00

(Blc. Carolina Golden D'or x Blc. Malworth D'or). 4" fine concolor orange flowers of fine form. Broad open lip. 5, 6"

Blc. Carolina Golden D'Or 'Lenette #2" AM/AOS. \$180.00

(Blc. Bouton D'Or x C. Warpaint). Beautifully shaped 4" orange flowers with broad open orange lip with concentric golden orange and cinnabar halos at column. 4 - 6 flowers per inflorescence. 6".

Blc. Carolina Golden D'Or 'Lenette #5' AM/AOS. \$200.00



(Blc. Bouton D'Or x C. Warpaint). Beautifully shaped 4" orange flowers with broad open orange lip with concentric cinnabar overlay from the Warpaint. 4 - 6 flowers per inflorescence. 6". **Blc. Carolina Golden D'Or.** \$100.00

(Blc. Bouton D'Or x C. War Paint) I purchased a group of these from Lenette before they closed shop. It has taken me 5 years to get these up to size. Flowers are consistently 3 ¹/₂" dark orange with the character-istic red orange open lip with orange center line. Has the influence of C. War Paint with brick

red central suffusion, more on the orange in the sepals and petals. Plants grow to 12-14". The next flowering should be exceptional.#2, #5, #10.6".

Blc. Cashen's Silk D'Or 5" Blooming size. \$80.00

(Blc. Bouton D'Or 'Orange Glow HCC/AOS x C. Horace 'Maxima' AM/AOS).

Should be similar to Goldenzelle. Flowering size on next new growth. Waiting for next bloom to see if it is in yellow, orange or peach tones with purple in the lip.

Blc. Cherry Suisse.

(C. Chocolate Drop x Blc. Oconee). Vigorous plants that produce red enameled texture, full star shaped flowers. Open well-developed trumpet shaped lips. First one I bloomed was 'Sentinel's Red Enamel'. These normally produce 4 - 6 flowers up to 4 $\frac{1}{2}$ ". They can flower several times per year. Fragrant. I purchased second group of seedlings about four years ago and these are now mature and showing high quality flowers – only the best were kept.

'Sentinel's Red Enamel' AM/AOS. \$175.00



Very fast growing and vigorous. Often flowers twice a year with heads of up to 7, 4" brilliant dark enamel red well-formed flowers. One of the best of this hybrid. Much flatter than most with broader lip with attractive yellow in side lobes. 6".

'Sentinel's Exception' (#2) \$150.00



Mature plants. This is a winner. Typical dark burgundy red with a violet neon overtone. Broader petals and lip than my awarded ones. Flowered from one of the unnamed group below. 6"

'Emily' FCC/AOS \$120.00



Very fine form. Solid red with a bit of yellow at side lobes. Almost identical to 'Sentinels Red Enamel'. 6"

'Garnet Sentinel' #1 \$100.00



A lighter reddish bronze. Lip is notable for the contrast between the red skirt and the yellow side lobes. 6"

'Rubelite 1' (#1a, #1b, #1c). \$80.00

4" enameled flowers showing burgundy with a hint of purple. Broad darker burgundy lip with slight yellow markings in throat.

'Rubelite 2'. One only. \$80.00



This is a new back plant and should take off by July. Very unusual. This time, 8 clustered flowers on one inflorescence. $3\frac{1}{2}$ plus. Sepals and petals look red and have violet suffusion – closer to a color called cerise. Fine broad lip with yellow under column. Unbelievably fragrant. 6"

'#12 'Rhodolite 1'. \$120.00

Just repotted these. Should be ready in the Spring of 2015. Extremely dark burgundy red. Petals show slightly lighter veining with solid darkness along mid-rib. Lip even darker with a bit of orange back in throat.

Blc. Goldenzelle

(C. Horace 'Maxima' AM/AOS x Blc. Fortune 'Golden Throne' HCC/AOS). One of the finest hybrids of the past ten years. Sturdy, extremely vigorous, fast growing plants with tight growth systems that often produce multiple leads. Full, beautiful flowers. Plants selected for this offering are some of the finest from the grex and are <u>mature</u> flowered varieties.

'Lemon Chiffon' AM/AOS. Form ORC-LAB. \$350.00. Form YWR. \$100.00



Note: These are mericlones obtained from Stewart Orchids and are vigorous, heavy bulbed and leaved unlike many of the mericlones on the market. Full butter-yellow with red-purple dart in center of broad lip. Plants normally develop multiple leads. The ORC-LAB form is quite flat and yellow flowers are up to 6". The center lines of the petals are slightly lighter yellow. The YWR form are slightly smaller, more yellow and more ruffled. All sizable plants with substantial bulbs. 6" **Blc. Iona Gold 'Sentinel'.** \$140.00



(Blc. Waikiki Gold x Blc. Yellow Imp). Production of 3 glowing 4" yellow flowers. Lip yellow with defined cinnabar throat. Highly fragrant. Positive influence of Waikiki Gold. Plant only 12" tall. Not a fast grower but worth it. 5" (1).

Blc. Memoria Helen Brown 'Sweet Afton' AM/AOS. One 6" available. \$140.00. Several 4" @\$45.00



(Blc. Xanthette x Lc. Ann Follis). Stocky bifoliate with two to three very heavy substanced 5" yellow flowers showing the influence of C. granulosa in the pinkish-red lip coloring. This mericlone has a shift and has better form than the awarded flowers.

Blc. Momilani Rainbow 'Sentinel's Pastel' HCC/AOS. \$175.00

(Lc. Mari's Song x Blc. Orange Nugget). Unusual variety as it is pink with yellow suffusion at base of petals along mid-rib continuing to a purple line. Pink lip, yellow interior. 4" flowers. Plant to 16" in height. 5"

Blc. Mount Hood 'Orchidglade' AM/AOS.



(Bc. De'ese x C. Claris). Classic 6"soft pink, broad pink ruffled lip with darker pink central dart, white halo and yellow throat. Awarded in 1966. 5" - 6" pots. \$75.00 - 125.00

Blc. Hamana Tip 'Saeki'. \$75.00

(Blc. Stephen Oliver Fouraker x B. glauca). Slightly starry large flowers – a surprising outcome as I would have expected the glauca to have been more dominant. 5 1/2" crystalline white flowers with 2 $\frac{1}{2}$ " broad open lip dominantly deep violet at skirt and border, yellow below column. Strongly fragrant with maximum plant size to 15". Likes bright light to flower well.

Blc. Morning Song 'Sentinel'. \$40.00



(Bl. Morning Glory x Lc. Melody Fair). 3 - 4 flowers per inflorescence. Selected 5" white flowers with solid purple lip. Fine for a nodosa hybrid. 5". 1 @ \$40.00. Blc (Rlc.) Plum Island 'Newberry' HCC/AOS 6". 1 @ \$160.00



(C. Interglossa x Blc. Oconee). Beautifully growing plant with substantial bulbs. Last flowering had five 4 ½" burgundy colored flowers with full lips. Petals have lighter midline. Lip can be slightly isthmus. **Blc. Ruby Swiss 'Ridsley'.** \$125.00

(C. Chocolate Drop x Blc. Owen Holmes) Very similar to Cherry Suisse with cluster of dark red enameled 3 ¹/₂" flowers but with flowers closer to the Chocolate Drop. 6" Only one.

(Blc. Pink Sensation 'In The Pink' x Blc. Pamela Hetherington 'Coronation' FCC/AOS. Finally up to size and proper growth patterns. Received seedlings in 10/03. Suggests tetraploids. Saved only the best. Large soft pink with broad lip with yellow center. Not shown for judging as yet. 6".

Blc. Magic Meadow 'Sentinel's Chartreuse' AM/AOS. 3 1/2" - 6". \$200.00 - \$400.00



(Rhyncolaelia digbyana x Blc. Helen Brown)

<u>Spectacular</u> well-formed green. Hard as candle substance. Received an 86 point AM in 2016. Can produce up to five 5" flowers per inflorescence. Several plants available. Good grower with either unifoliate or bifoliate leaves. Far superior to "Napolean' variety.

Blc. Meditation 'Lahaina Lipstick II'. \$175.00



(Blc. Deesse x Lc. Fedora). Plant grows exceptionally well. 5" white with colored lip flowers. 6" pot.

Blc. Turandot 'Guaxupe'. \$150.00



(C. Bob Betts x Blc. Pastoral). One of the finest formed of the pink Blc's. Up to four 4 ½ full pink flowers.

Blc. Victor Umi Peltier 'Carla's Green'. \$400.00



(Blc. Waikiki Gold x Blc. Helen Brown). 2 - 4, $4\frac{1}{2}$ " chartreuse flowers with two lobed lip, bright yellow with central light red veining. Flowers like wax. Bifoliate very heavy leaf structure. Plant height 12". I have this plant growing exceptionally well. These may be the only virus free divisions available. Blc Waikiki Gold

(Blc. Pink Surprise x C. forbesii). Most people expect concolor yellows as they are familiar with the cultivars 'Lea' and 'Uno'. 'Uno' did not grow well for Sentinel. However, I found a superior growing plant of 'Lea'. Sentinel forms are very unusual and beautiful. They are all vigorous growers and flower two to three times per year with up to six 4" flowers. Color range and intensity change with temperature.

'Pink Spot' AM/AOS. \$140.00 - \$250.00. 5" - 7"



Fragrant. Pink Spot flowers 4" – 4 1/2". Pink with raspberry dots sometimes, with incredible striated lip. The flowers are temperature sensitive and will have a yellow background in very hot weather. 'Easter Morn' HCC/AOS. \$175.00 - \$250.00



Some smaller plants available at When I first saw this in flower, I begged for a piece. It took six years to get a division. A tricolor – pink, white and green – a pastel delight. Opens green with pink, ends up cream, green, yellow and pink. A very strong grower. 5 - 6". **'Sentinel's Tricolor' AM/AOS.** \$300.00 One only.



After several showings, it was awarded with six 4" flowers but can flower with more. An unusual and well formed quadricolor. Cream yellow petals with soft pink edge profusion – slightly peloric. Petals light orange with limited maroon salt and pepper dots. Open lip, cream yellow with dark pink at edge of skirt, darker yellow centrally. Award upgraded to 83 point AM on July 19, 2017.

C. Caribbean 'Orange Bowl' HCC/AOS. \$40.00

(C. Margaret Stewart x C. aurantiaca). 12" bifoliate plants – nice growth habit. Inflorescence with 7 or 8, 3" apricot star shaped flowers. Lip yellow and hot pink tip.

C. Catherine Digwood 'White Cocktail'. \$80.00



(C. Lady Veitch x C. intermedia). Classic cocktail orchid – 5" white with soft yellow in lip. Bifoliate, 12" in height, fragrant well held flowers, a good grower.

C. Landate 'Sentinel's Bronze' AM/AOS \$150.00 - \$175.00.

(C. aclandiae 'Merita' x C. guttata alba). Awarded 83 pts. When awarded had 12 flowers on one inflorescence. Sepals and petals yellow-brown with maroon spots. Lip strong purple with white side lobes. 4" clear plastic pot.

C. Louise Georgiana \$80.00 One Only



(C. intermedia x C. Souvenir de Louis Sander)

Classic cocktail orchid – $4\frac{1}{2}$ " white with minimal soft yellow in lip. Bifoliate, 12" in height, fragrant with up to 4 well held flowers per inflorescence and a VERY prolific grower.

C. Memoria Dina Izumi 'Brookside'. \$60.00



(C. Chocolate Drop x Barbara Kirch). Now here is a good one. There are other varieties, but Sentinel chose this one for its form and color. Tight growing plants that can make multiple leads. Up to 8 well positioned 3 1/4" dark pinkish-purple flowers with broad lip, red with yellow eyes. Outstanding for a Chocolate Drop cross. 4 - 6".

C. Milton Warne 'Premier' AM/AOS. \$140.00

- (C. Hybrida x C. Suavior). Classic splash petal. Vigorous grower
- C. Sierra Blanca 'Mt. Whitney' AM/AOS. \$125.00 \$150.00



C. Athene Chagaris x C. Norton Benis). 6" beautifully formed, fragrant classic white with yellow/gold center in lip. Flowers December to February. Plant originally from Stewarts. 5 - 6". **C. Viola Sanjume 'Orange Blossum'** One division. 6" \$60.00



(C. Baby Jane x C. aurantiaca). Cluster of 2" orange stars. Compact plant to about 15".

Epi. Pacific Sangria 'Sentinel's Vibrant Red' AM/AOS. \$200.00

(Epi. Sun Valley 'Heads Up' x Epi. Pacific Pepper 'Mulligans'). This has been on the provisional list and is now registered and recorded. Probably the best red to come out of Cal's plants. These are large keikis. Plant grows to three feet plus tall. Available later 2012.

Lc. Ann Cobb 'Bill' \$200.00 (1)



(Ctt. Doctor Max Schneider x C. Twinkle Star). So far three five inch flowers. Electric reddish-purple with semi-spade lip. Plant to about 24" in height.

Lc. Burgundy Delight 'Sentinel'. \$120.00

(C. Chocolate Drop x Lc. Mini Purple). I selected this several years ago at the NYC Show. Finally have several divisions. Three or more 6 cm electric magenta stars. Tight tubular lip dark red with purple striations in lip trumpet. Plant 10" size. (1)

Lc. Candy Corn 'Star of Hamana'. \$100.00



(C. Dubiosa x Lc. Trick or Treat). These plants are virus free mericlones. Typical form is the clusters 3" wihte star with the yellow darts at the ends of the sepals and petals and yellow lip. Mericlone shifts are occurring creating the yellow on yellow. No guarantee of which are totally stable.

Lc. Chit Chat 'Sentinel'. \$90.00

(C. aurantiaca x Lc. Coronet). 10 - 12, $2\frac{1}{2}$ " pure orange stars that are similar to Stewart' variety 'Tangerine' HCC/AOS 79 pts. $\frac{1}{2}$ " wide open lip makes this superior. Typical reddish stripes in throat from the aurantiaca parent. Flowers February. 6"

Lc. Gila Wilderness 'Takara Sienne' PC/JOS \$100.00



(Lc. Red Empress x Lc. Kevin Green). Classic impressive 5" plus splash petal. Crystalline white with large fuchsia petal tips. Lip fuchsia with yellow center. Flower form a bit open. Color and fragrance outstanding. I sold this plant at least ten years ago and then repurchased a division. I placed it in the burn zone and it decided it should grow well. Must be grown in bright light. New growths surpassing previous and expect high quality flowers. Only 3, 5".

Lc. Ken Battle 'Gold Crown' AM/AOS 4" \$50.00, 6" \$100.00.



(L. crispata x C. Confetti). Three inch yellow stars. Tubular lip darker yellow. Moderate sized plant from Laelia parent.

Lc. Milton Warne 'Premier' AM/AOS. \$100 - \$150.00

(C. Hybrida x C. Suavis) Classic. Vigorous soft pink with purple lip and flares on petals. Can produce up eight, 51/2" flowers.. Will often flower more than once per year. 6"

Can produce up eight, 51/2 howers.. Will often hower more than once per year.

Lc. Prism Palette (Lc. Colorama 'The Clown' x C. Horace 'Maxima' AM/AOS). 'Mischief' AM/AOS 5" \$100.00. One only

Great historic plant -2 to 3 tricolor flowers over 5". Could

'Eastern Sunrise'. 5" \$150.00. One only

Fine quality tricolor acquired thru Duffin Collection. Sentinel; believes that these are only divisions available.

Pot. Carolina Golden D'or 'Lenette #2' AM/AOS. \$150.00



Fine clear orange. Slight red blushing on lip. 6"

(Blc. Orange Nugget x Pot. Twentyfour Carat). The cross can be variable in the amount of cinnabar picotee on the petal edges and lip. Very stong growing unifoliate to bifoliate 14" tall plants with up to 4, $3\frac{1}{2}$ " – 4" bright orange flowers. Flowers in February. 6"

Pot. Ester Costa 'Orange Fantasy' HCC/AOS. \$400.00. Only one.

(Blc. Jane Helton x Pot. Gordon Sui). Classic orange breeder. 5"

Pot. Fortune Teller 'Lucky Alicia' AM/AOS. \$150.00



(Blc. Xanthette x Slc. Tropic Flare). Very vigorous grower. Glowing impressive dark orange flowers with red edge flush. Broad red lip, orange and gold centrally. Flowers almost 5". $4\frac{1}{2}$ " – 6" **Slc. Hobcaw 'Lenette' AM/AOS.** \$120.00



(Lc. Spring Imp x Sc. Beaufort). 82 point AM. Great compact catt. to about 10". Up to 6 bright orange 2 ³/₄" full flowers per inflorescence with well-formed red lip, yellow centrally. Especially vigorous tight growing plant. Picture on right shows 6 flowers on one inflorescence on plant in three inch pot. Good specimen potential. 5"

Pot. Life's Charm 'Sentinel's Peach Neon' AM/AOS. \$200.00



(Blc. Izumi Canyon 'SVO' x Slc. Circle of Life 'Trailblazer'). This is a real find. Good compact grower with fat bulbs and leaves to about 10" in height. Floriferous, up to 4, 3 ¼" perfectly formed pastel peach with purple neon accents on sepals and petals, reddish-orange lip with orange center. With a little patience this will make incredible specimen plants. As I predicted it received an AM/AOS, September of 2015. 4". One available possibly 2018.

Pot. Lois Duffin 'Mt. Airy' HCC/AOS. One available 4". \$150.00



(Brassavola nodosa x Slc. Red Wing). One of the better nodosa hybrids. 5" pink sepals and petals with light flare. Magnificent magenta lip. Sepals and petals change to white after a month. **Pot. Paxton Brooks 'Orange Surprise'.** \$300.00 Available 2017



(Blc. Miami Gold 'Mendenhall' x Slc. Final Touch 'Golden Fleece'). Several plants are now flowering with three flowers in 4" pots. One of the finest 4 - 5" oranges I have seen in a long time. Plants to about 16" tall when full sized. I have not shown yet, but should acquire an easy AM. 4 - 5 - 6". **Slc. (Ctt) Golden Wax 'Lone Star II' HCC/AOS.** 1 Available. \$130.00



(Slc. Kauai Sarbright x C. Chocolate Drop). Cluster of pure yellow-gold 3" star shaped flowers. Bifoliate plant 16" in height. 6" plastic pot.

SIc. Kerry Caldwell 'Sentinel' HCC/AOS. \$120.00



(Slc. Starry Sky x Slc. Bright Angel 'OC'). Special. Great plant, only 9" high. Tight bulb structure produces 3 - 4, $2\frac{3}{4}$ " sparkling white flowers with slight pink tinge with contrasting trumpet shaped magenta lip. Very showy. Can see these flowers from 50 feet. Should get an AM on next flowering. 3" clay pot.

Slc. Cindi Lauper. (C. Mrs. Mahler 'Mem. Fred Tomkins' x Slc. Tiny Titan).

Red Exception. #16. Spectacular result. \$300.00

Can have from 2 - 4, $3 \frac{1}{4}$ " dark red flowers with slightly spade bright red lip and contrasting yellow side lobes. Very heavy substance. Will most likely get an AM on next flowering



Divergence. \$50.00



Totally different result with open flowers in the pink and and reddish-purple tones.

Cattleya Brabantiae

One parent is C. loddigesii v. harrisoniana 'Streeter's Choice' FCC/AOS. The other is aclandiae. The loddigesi falls into the category of "Is that correctly named?" as it looks like a hybrid. The cross has received numerous awards including 7 Sentinel awards plus a Matsatoshi Miyamoto Cattleya Alliance Award in 2002. Typically 4" violet,pink, rose to hot pink flowers, some with small raspberry spots. #2 'Sentinel's Surprise' AM/AOS' 82 pts, 11/99, 6, 6. Two available. \$300.00



Fluorescent rose-lavender with raspberry spots. Broad ruffled lip.

#6 'Sentinel's Sensation' AM/AOS 80 pts 6/15/05, 6, 6, 6, 5. Four available. \$250.00 - \$300.00 Up to 8, 4" hot pink flowers w/concentrations of small burgundy dots @ sepal & petal ends. Pink lip Contrasting burgundy dart centrally. Wonderfully fragrant.



#7 'Violet Sentinel AM/AOS 80pts 8/17/05. One 6"available. \$300.00
Up to 8, 3 5/8" violet-pink flat full stars. Sepals and petals w/salt & pepper spots @ ends. Broad lip w/purple skirt, It. yellow under column. Side lobes pink w/yellow front ruffling.
#9 'Sentinel's Rose' HCC/AOS 78 pts 6/21/01 One available. \$300.00
Dark pink with sparse deeper pink spots towards speal and petal tips.

Blue and Amethyst. Just a reminder. Many of the "blues' have been around for a while. Granier was not at all careful in his virus control. It is not so easy to find clean plants. **Blc. Volcano Blue '#2'.** \$50.00 - \$80.00



(Blc. Lois McNeil x Lc. Blue Boy 'Aoki' JC/AOS). Beautiful vigorous large bifoliate plants up to 20". 8 (so far) or more 4" plus flowers, strong violet sepals and petals, lip amethyst with creamy yellow center. November flowering. Very fragrant. Smaller plants to flower in 1 year: \$50.00 Larger \$100.00. **C. Granier 'Blue Terrie' HCC/AOS.** \$150.00 -\$180.00



(C. Valentine x C. Joan Landsberg). Strong growing bifoliate to 18" tall. Up to six, 5" flowers of fine form and sparkling texture. Fragrant flowers on one inflorescence; full flowers lilac; darker lip with wisteria blue disc and butter yellow throat; column pristine white. October/November flowering. The 76 point HCC issued in 2002 does not do justice to this flower and I believe it is one of the best of the Graniers. 6".

C Grezaffi's Blue 'Shawn' \$80.00 (Blc. Victoria x C. Holdenii). Nice blue. Fast growing and relatively compact growth habit (14"). 5" light blue sepals, medium amethyst blue petals and darker blue lip with pale yellow center. 6"

C. Granier's Pride 'Patty' AM/AOS \$180.00



(C. Minerva x C. walkeriana). Closer to the Minerva with cluster of 3 or more fragrant 4 ½ flowers. Sepals and petals very light lilac. Well formerd lip amethyst at skirt, centrally yellow. Plant only 10-12" in height. 5" – one

C. skinneri coerulea 'Orchidglade'. \$80.00



Clusters of 3" light blue flowers on very unusual plant <u>only 8" in height</u>. Quick growing. Flowers in March. One four bulb plant in 4" pot.

L. purpurata 'Shusteriana'. Purple. \$50.00

H & R colchicine treated but with purple lip coloring.

Lc. C. G. Roebling. 'Beecheview and Sentinel Types'. \$60.00

(L. purpurata x C. gaskelliana 'Blue Dragon'). Similar to L. purpurata Werckhuaseri'. Whitre with amethyst colored lip.

Lc. Gran 'Blue Beauty' HCC/AOS. \$230.00



(Lc. Canhamiana x C. Ariel). Vigorous bifoliate to 18". Notable influence of C. bowringiana in growth and number of flowers. Six or more 4" plus flowers per inflorescence. Sepals and petals soft lilac, lip surround deep wisteria blue, yellow center. 6" pots.

Lc. Schilleriana 'Waldor Type'. \$150.00. Two available.

(C. intermedia v. coerulea x L. purpurata v. werkhauseri). 4" white sepals and petals with blue lip. Shape is close to the larger purpurata. Unlike many, this one is a good grower. 5"

Brassavola Section

Established nodosas can flower several times per year and they pass this characteristic to their hybrids. We have gravitated towards this group and acquired a large selection of fine species and hybrids. Like the Broughtonias, they like a taste of lime water several times per year. Species 'Lady of the Night' nodosa's do not like to be disturbed and are slow to develop roots after repotting. Observation has shown that they tend to position their new growths above the media. So I have recently transferred most to very open base: charcoal, large bark and expanded clay both in clay, and plastic (pans mostly) with lots of holes. The plants are putting out good roots. I think this is the ideal combination for the plants as it mimics their habitats where they never have wet feet. It is fortunate that Sentinel sorted through hundreds of flowering plants at Fred Fuch's nursery in Homestead. The 1992 Florida Andrew hurricane decimated most of these plant stocks.

Brassavola gardneri \$45.00

('Valley Isle' x 'Paulwella'). Not very common. Appearance intermediate between cordata and nodosa but close to the cordate with 4 - 6 flowers per inflorescence. Growing in $3\frac{1}{2}$ " spider pots with lots of growths. Flowering size next growth.

Brassavola nodosa

#2. \$100.00



5" ice green sepals and petals held straight with 1 3/8" wide white heart shaped lip with notable reddish spotting in throat. Mostly clay pots with tree fern with charcoal. Three to four flowers per inflorescence.

'Audrey' \$150.00 Only 1.



51/2" hint of green sepals and petals. This has finally shown its true nature. Very large well-shaped flowers. $1\frac{1}{2}$ " white heart shaped lip. Dorsal bending forward, sepals and petals on almost flat plane. Probably award quality. 4-5 flowers per inflorescence. 5".

'Eloyce's Moonbeam' AM/AOS. \$200.00. Only 1.

Awarded last year with one inflorescence with four flowers. New blooming has 6" flowers. Holds petals out straight.

'Silver Dollar. \$100.00.



Thought to be a variety that was sold by Stewarts in California. Good grower with well-conformed flowers

Brassavola nodosa Hybrids

This group is totally underrated and often ignored by most Cattleya growers that are looking for big full flowers. What they do not see is the fast, strong multi-growth, multi-flowering capabilities, exceptionally bright and unusual combinations of colors, often with unusual spots. Many consider them as novelties. Any offered are very select and have proven their quality. Sentinel anticipated their potential and has been willing to wait several years for the best to mature and has blooming divisions. The number of awards we have received attests to their quality.

Brassavola Little Stars 'Rene' \$85.00.

This was awarded an 84 point CCM with about 300 flowers. Not just any flowers – how about 4 - 5" across of fine form? It was getting to the point that I could not lift it, so I divided it. These divisions are well established and are off to their next CCM's of the future. Why waste time with mediocre varieties? **Brassocattleya Karin Lomer 'Ed Mikulka' AM/AOS** (3) \$75.00.

(C. Perciviliana x B. nodosa). This combination produced a huge, well formed nodosa with over a 6" span. Flowers pure white with minimal purple dots in throat. Excellent tight grower. 5" pots. **Blc. Don Pepe.** (Blc. Erin Kobayashi 'Lahaina Gold' x B. nodosa).

Purchased many of these seedlings after I saw one in bloom. Many have flowered and I kept the best. Still evaluating – divisions available. They have been 3 - 4" ice-green, white and yellow and combinations. A bit starry with broad well-formed lips. Very vigorous.

'Mardi Gras' AM/AOS. \$150.00 - \$200.00



Normally three to five 5" fragrant chartreuse flowers per inflorescence with broad creamy-white lip, yellow and light raspberry markings in throat. Surprisingly fast, prolific grower that could be cultivated to CCM status. Impressive flowering stance. It flowers several times per year. In colder weather the flowers can be concolor yellow. The bulbs are increasing in size, so this could even get better. 5 - 6" pots.

'Chartreuse Sentinel'. \$80.00

Chartreuse sepals and petals with broad white lip with darker chartreuse and raspberry in throat. Very similar to 'Mardi Gras'. 6".

Blc. Golden Tangs (Blc. Waikiki Gold x Bl. Richard Mueller).

I have seen hundreds of this cross in bloom and carefully selected what I thought were the best plants and flowers. Most did not appreciate or see the potential. I have been proved right with several awards and spectacular performance. These start to show best as they produce multiple inflorescences with clusters of four to five or more $4^{\circ} - 5^{\circ}$ brightly colored orange, gold and yellow flowers. Sometimes the inflorescences branch.

'Conundrum' AM/AOS 83 pts. \$200.00



4 ¹/₄" flowers, yellow to orangy-gold sepals and petals. Well-formed lip with darker gold in throat. Vigorous growth pattern with plant height to 14". Last flowering produced 9 flowers on a branched inflorescence. High award for Golden Tang. Very impressive when exhibiting multiple inflorescences. 5 - 6".

'Millennium Sentinel'. \$100.00



4 ¼" bright golden yellow flowers of fine form. Beautiful lip with slight orange halo within Five flowers to the inflorescence. Flowers flat stars. Award quality.

'Golden Moon'. \$100.00

4" light orange flowers of fine form. Extraordinary open trumpet shaped lip with covered with red spots. Flowers flat stars. $4 \frac{1}{2}$ ".

'Perfect Sentinel'. \$100.00



4" yellow orange with spotting in broad lip. 6" pans.
'Sentinel's Bicolor' HCC/AOS. \$140.00 Yellow to gold flowers to 4" with distinctive maroon dotting on lip and orange throat. 5- 6"
'Sentinel's Lemon'. \$80.00
3 ³/₄ - 4" beautifully formed yellow flowers with orange edging. 5"
'Sentinel's Mango Bicolor'. \$70.00 Up to 4 ¹/₂" well-formed bicolor flowers. Bright yellow with hit of green. Open tubular lip. Light red on tip of lip and light red picotee on petals. Only one plant in a 4 ¹/₂" pot.
Blc. Morning Star 'Sentinel' \$60.00

(Blc. Morning Glory x Blc. Melody Fair). Fine 4-5" white with magenta lip. Plants tight growing and height to 12". **5" - 6"**

PAPHIOPEDILUM

All Paphs. are now growing in cypress mulch. Root action has been excellent. Plants will be checked at time of order for exact pot size and size and number of growths.

Paph. Alcides 'Roebelinii' HCC/AOS \$100.00



(P. hirsutissimum x P. insigne). Awarded in 1991 with 79 points to Penn V alley Orchids. Flowers 51/2". 2 growths plus, 18" leaf span. One plant.

Paph. Charlesworthii 'Sentinel'. Several plants. \$35.00 - \$50.00



Yes, a vigorous Charlesworthii that could form specimens. Natural size is 3". Well conformed dorsal 2 3/8" wide. Leaf span from 8" to 12" with one to three growths. Growing happily in 2 1/4" rose pots in very bright light.

Paph. Dollgoldi 'Sentinel's Golden Eagle' HCC/AOS \$100.00 - \$200.00



(Paph. rothschildianum x Paph. armeniacum). Fast grower and easy to flower. Bright golden flowers with light red stripes $6\frac{1}{2}$ flower when awarded.. $4 - 5\frac{1}{2}$ **Paph. Friedrich Mellon 'Sentinel's Bronze'** 4" \$50.00



(P. Alma Gavaert x P. Fairieanum album 'Jac'). Quite unusual. Take a Fairieanum and stripe the white dorsal like Alma Gaveart. Petals have a bronze upper hirsute edge with bright green and darker green stripes to mid rib. Lower half of petals are cream with green stripes again with bronze hairs. Pouch medium green with darker green veination with upper edge light bronze. Grows well. Minimum 2 gr +. **Paph. Gloria Naugle -** Krull-Smith seedlings. **\$40.00 - \$100.00**

(Paph. micranthum 'Crystelle' x Paph. rothschildianum). Exceptional breeding. 6 – 12" leaf spans. **Paph. Gloria Naugle -** Krull-Smith breeding, flowering sized. **\$80.00 - \$135.00**

(Paph. micranthum 'Krull's King' FCC/AOS x Paph. rothschildianum 'Excelsior' FCC/AOS). I saw some of this cross exhibited by Krull-Smith at Longwood Gardens. They were awarded FCC's. I ordered about a dozen plants in 2008. The plants have narrow growthed leaves. All had to be divided and reestablished. Very nice looking plants, all sizes in 4 - 5" pots. Multiple growths, most flowering size. **Paph. Gloria Naugle 'Burgundy' AM/AOS \$200.00**.

(P. rothchildianum 'Daya Red' x P. Micranthum 'Red'). 86 pts. 4/16/14. One of top five awarded cultivars. 15cm - 57/8" dark flower notable for horizontal petal stance and flat, upright dorsal sepal with intense dark coloration; dorsal sepal, synsepal and petals chartreuse with dark burgundy striations; pouch light raspberry pink with darker pink venation; staminode white, yellow centrally. Division has one mature growth and two new growths. 5" pot. One only.

Paph. Gloria Naugle 'Sentinel's Raspberry' AM/AOS. \$160.00 - \$200.00

(P. rothschildianum '266A' x P. micranthum 'Red'). 80 points, August 15, 2007, 5 ½" flower with a yellow background with dark maroon striping. Lip cerise. Judges' comment was awarded for unusually bright coloration and novelty of color contrasts. Prolific grower. Two mature growths. 5" pots. **Paph. Gloria Naugle. \$40.00 - \$100.00**.

This is a mixed group of this hybrid that Sentinel has been growing since 2006 - 2007. They are hard leaved and grow steadily but not quickly. Plants with leaf spans from 6' - 14''. Most are offsets from the same groups that received AM's above.

Paph. Harold Koopowitz 'Sentinel's First'. \$140.00



(P. rothschildianum 'In-Charm' x P. malipoense 'Fragrance'). I purchased many of these as the leaves were beautiful, broad, and turgid. This was the first to flower. One new and one older growth. 5". **Paph. Harold Koopowitz 'Almost April 1**st. \$80.00

(P. rothchildianum 'In-Charm' x P. malipoense 'Fragrance'). When I purchased these HK's in 2008, they were large, beautiful plants. This one has one mature and one almost mature growth. The larger growth has a 22" spread. Leaves 2 3/8" across. Unflowered but ready. 5"

Paph. Harold Koopowitz FCC GROUP \$200.00



This is the group the **Sentinel FCC – 94 points** *is part of.* Awarded with three flowers. Some have flowered but have not been evaluated or selected. Two mature growth plants most with new growth. **Paph. Hsiying Moonlight 'Sentinel' AM/AOS** \$185.00



(P. primulinum var. flavum x P. Yosemite Moon). Two to three 4 ½" pure green flowers. 80 point AM. Several growths, 16" total leaf span. Good grower, beautiful plants. One in 5". **Paph. insigne 'Good Form'.** 4". \$50.00



Nice looking plants that grow amd flower extremely well. Quality 3 ½" flower. 3 growth plants.

(Paph. Muriel Constance x Paph. Hsinying Franz). Plant 1 \$70.00

Blooming sized plant. Several growths. 5"

(Paph. Muriel Constance x Paph. Hsinying Franz). \$70.00

White with raspberry stripes and spots. Impressive. One plus one new growth.

Paph. Via Ojai 'Jim's Delight' HCC/AOS. \$100.00

Beautiful white with slight yellow center flush topped with burgundy salt and pepper speckling.

(2) in 4" pots. Single growths.

Paph Via Ojai 'Jim's Pride' HCC/AOS. \$125.00, \$185.00

77 points,12/78. White flower with light yellow suffusion. Burgundy pepper spotting over central area and petals. One of the better whites with Hellas suffusion. Plant with 2 plus growths. \$185.00. Smaller 12" fresh growth division. \$125.00

Paph. villosum 'Maisie's 89'. Albo-marginata form \$80.00, \$120.00



Purchased this plant in 1989. It is a great grower and flowerer. Distintive coloring, 4" quality flowers. I believe this is the scarce albo-margnata form with the white doral and exceptionally strong cental maroon stripe. Several plants 3 growths.

Paph. Whitemoor 'Norriton' FCC/AOS. \$100.00 - \$120.00



(P. Dervish x P. F. C. Puddle). Classic white Puddle hybrid. White with greenish flush. One to several growths.

SMALL AND WARM GROWING CYMBIDIUMS – SPECIAL VARIETIES Cymbidium Chian-Tsy Mascot 'Sentinel' AM/AOS \$60.00



(Cym. Golden Elf x Cym. ensifolium). We think this may be an individual variety as the lip does not curl under as much as other varieties. Warm growing plant with leaves to 2 feet. Can have 15 bulbs in a 6" pot. Erect inflorescence with as many as 12, 3" concolor yellow flowers with strong lemon perfume. Flowers have elegance from the Chinese ensifolium. Flowering in September/October. **Cymbidium insigne sp. Seidenfadenii x Cym. Cindy Lou 'Geyserland' 4N.** \$35.00 Small beautifully shaped white flowers. Single maturing bulb. Growing fast. 4"

Cymbidium iriodes 'Sentinel' \$125.00

Rare species similar to a smaller tracyanum. Fairly large plant. 6" Cymbidium Penny Serenade 'Mt. Airy' JC/AOS. \$100.00



(Cym. Cricket x Cym. pumilum). Absolutely charming great miniature devonianum hybrid. Plant to only 12" high. Pendulous cluster of 40 flowered inflorescence with 1 1/8" flowers. Sepals and petals light bronzy cocoa with red spots. Dark red lip with yellow crest at column. Awarded JC for compactness of plant, large mass and distribution of flowers on inflorescence. 4" **Cymbidium Sean Duffin 'Mt. Airy' HCC/AOS.** \$120.00



(Cym. insigne x Cym. Dolly). Great white miniature. Upright inflorescences with 16 plus 2 5/8" white flat stars. White lip slightly undercurved with yellow centrally and very light pink spots. 4"

MISCELLANEOUS

Brassia Rex 'Waiomao Spotless' FCC/AOS. \$40.00 - 80.00



My first bloom had ten, 11" flowers. Chartreuse with white lip and yellow crest. Strong, nice looking plants. Large, beautiful bulbs. A great show plant as it is much more striking than the typical Brassias. Fragrant. $5 \frac{1}{2}$ "

Cymbidium irioides 'Sentinel'. \$100.00

Imagine a smaller flowered Traceyanum with more intense color. This is a rare and very good one. A standard sized cymbidium. Grows exceptionally well. Repotted in November, 2014 – great root systems.

Cymbidium sinense 'Da Mo Guan' \$50.00

One of the best mini-cyms with beautiful variegated foliage. Usually white and green. Some light yellow and green leaves to 15" in height. This plant grows very well. 3, 3 ½" pots. Minimum 5-6 bulbs. **Dendrobium chrysotoxum v. suavissimum 'Elaine' AM/AOS.** \$75.00 - \$150.00

Great form of the species Bright yellow-gold with black disc in throat of lip. 4 - 5" plastic. Easy growing and blooming. Fine form with flowers close to 4". This is their third year and the growths are extending beyond their pans with great August/September flower displays. That is good as they mature in their pots and will produce hig quality flowers. The plants like to produce two growths per front bulb. Prolific. 4 - 6" plastic pans.

Oncidium maculatum 'Paulo' AM/AOS \$50.00

One of the best maculatums. Generally 10 or more flowers per inflorescence. Flowers 1 ³/₄" yellow green background with large brown sposts, chartreuse lip. Wonderfully medicinally fragrant. 4-5" **Phalaenopsis cornu-cervi. Red form.** \$60.00

8" leaf span. All quality. Previously flowered dark maroon stars. These are the Chataladgie type. **Vanda Chao Praya Emerald 'Sentinel'.** \$100.00(one stem) – \$175.00 (three stems)



(V. tessellata alba x V. vietnamica). Plant can get to 2' in height. But will flower on one foot high growths. Very attractive and charming group of 10, $1 \frac{1}{2}$ " green flowers and a contrasting white lip. Intermediate between the tessellata and the vietnamica. Easy to flower.

MINIATURES

Neofinetia falcata. Many of the more esoteric, both green and variegated forms do not grow well. You are getting the strong growers. With medium light, lots of water, strong air movement on and below plants, I grow these in plastic pots in my open bark mixture..

Green standard types. \$25.00 - \$45.00

These are selfings and siblings. All large fine flowered forms. Falcatas often just sit around. These really grow well. All green robust foliage.

'Abundant'. \$40 - \$60.00

('White Tara' x Crystal Palace AM/AOS). A sibling cross of the **Amami Island type.** Yes, leaf spans to 9-10 inches. Large flowered.

Variegated. I have been collecting these for several years and have selected some of the best growng forms. I collect simple, strong variegation with plants that develop good root systems.



'Gojo Fukurin'. \$50.00 - \$100.00

One of my favorites based on strength of the yellow against the contrasting green and ease of growth. Single to multiple growths. $2\frac{1}{2} - 3^{\circ}$.

Macroclinium (Notylia) xiphorous. \$40.00



Plant fans to only 2" across that form clusters. Can only describe flowers as a cluster of pink mosquitoes – the cluster of flowers is several times larger than the plant. Neat. Rare. Easy to grow and flower. About 10 plants available, and do not have a source for additional plants. **Ornithocephalus.** From Columbia, Mexico. 3 - 4" fans like to be mounted on cork. They grow in low to medium light and like to have wet feet. The varieties are not often stocked by specialty growers. When they are offered, the tiny sizes of the plants offered compared to the prices are outrageous. I try to grow them for a year or two to get more than one growth. Plants will form multiple fans in several years and put on an incredible show as they flower from many of the leaf axils. 3/16" to 5/16" white flowers accented with green.

Ornithocephalis cochleaiformis. Single 2" fans - \$40.00 Large plants - \$100.00



Fat fan structure to about 4" across at maturity. Flowers in early spring with upright inflorescence with ¼" translucent white and dark green flowers. Similar to gladiatus. Single growth fans on cork **inflexus.** \$35.00 Mature single growth. Flat fans to 4" in width. Produce inflorescences from many from the axils making an impressive show of white and green flowers.

Stenosarcus Vanguard. 2 of same plant. \$45.00



(Stenorhynchus speciosa x Sarcoglottis species). Easy growing terrestrial that will form specimens. Beautiful silver/white spotted leaves. Inflorescence gets to about 18" tall with tubular red-orangy flowers, open in front.

DENDROCHILUM

Sentinel has been interested in this group for about 20 years. I have selected several of the best growing and large flowering bulb group. They love to be reported each year or two and respond to

new mix. We find a good time to repot is just as new growths start to swell, but well rooted plants can be repotted almost any time. Remove all dead bulbs, divide if necessary to encourage plant to form growths in a full circle. It may take two to three pottings and some crimping to shape correctly, but it will be worth the effort. Use open mix. Plastic pots work well. It is better to keep moving the plants up one pot size then try to make them fill out a pot too large. Moderate light, lots of water and fertilizer. The following are tested varieties:

Dendrochilum cobbianum. <u>These are highly selected/superior varieties and flowering sized plants.</u> The identification of these plants and flowers is not especially clear. We have grouped similar flowering types together; in this case under cobbianum (type). They usually have the fragrance of mown hay.

'Sentinel's Poco'. \$30.00 - \$60.00

Bulb and leaf up to 12". 2" high bulbs, $\frac{3}{4}$ " at base tapering to 3/8". Unusually clean, prolific tight growth habit and ease of flowering. Ideal for specimen culture. $\frac{1}{2}$ " flowers with cream sepals and petals with orange shaded lip and chartreuse center. Up to 50 flowers per inflorescence with $\frac{1}{2}$ " flowers in February-March.

'Cobbianum type'. \$25.00 - \$50.00

Plant to 15" in height. 3" bulbs tapering from $\frac{1}{2}$ " to $\frac{1}{4}$ ". November to December flowering. 5/8" chartreuse sepals and petals with bright yellow-green lip.

'Sentinel Especial'. \$30.00

Plant to only 6" in height.

'Chartreuse Sentinel'. \$40.00

Unusually diminuitive plant - maximum height to 8". Rounder leaf structure. Flowers transluscent pale green to chartreuse.

'Sentinel's Aurea II'. \$40.00



Plant to 10" with fairly large 2" bulbs. October flowering exceptional yellow. 5" **Dendrochilum magnum.** 4 - 8 bulb \$45.00.

This is a group of the highest quality magnums that I have seen. A true monarch of Dendrochilums. Attractive plants with bulbs and leaves to 25". Pendulous inflorescences have 15" of blooms - 90 flowers. 3/4" flowers start out chartreuse, change to lemon yellow and then golden orange. Contrasting greenish-white hoods. Commonly makes two new growth per bulb. These plants have been carefully worked on for many years and are in perfect condition. Fragrance of honey and spice. Flowers August - September. 'Sentinel's Yellow Pearls', Sentinel's Lemon Drops', Sentinel's Lemon', 'Sentinel's Golden Gems', Sentinel's Spectacular'. 4" - 6".

Dendrobiums

Many growers shy away from Dendrobes and it is understandable because of their reputation as difficult and inconsistent growers. Many are inferior as they are difficult to flower, have consistent bud drop or form too many keikis. Varieties can be selected that are easy growing and flowering with minimal understanding of their cultural requirements. If you have bright and airy conditions, these plants are a delight. Here are suggestions:

- 1. All biggibum types do very well slabbed on cork. Allow sufficient room for plants to increase in size. They will grow in small sized clay pots with open mix.
- 2. When potting Phalaenopsis type Dendrobiums and many other dendrobiums they must be <u>very</u> <u>underpotted.</u>

- 3. They must have a <u>minimal amount of an open type mix</u>. They will be top heavy, so it helps to stake securely and to weight the bottom of the pots. Use extra drainage material to reduce mix in the pot.
- 4. They prefer clay pots which lets them dry out quickly, but plastic pots with hole patterns also works.
- 5. Water often when temperatures are warm. Reduce watering if night time temperatures drop below 62 degrees.
- 6. <u>Use absolutely minimal nitrogen fertilizers</u>. When in active growth, fertilize often with low dilution.
- 7. Selected plants that might form keikis (off shoots) wait until root development is 3'" 4" and remove and slab or pot.

Bigibbum Compactum Types

Sentinel has been collecting bigibbum types since 1980. Bigibbum is the small form of Dendrobium phalaenopsis. We have selected a few that grow well with good growth habit. They can flower more than once a year with 2" flowers that are long lasting. We transferred all the bigibbum types to cork slabs. They form specimens quickly and are very rewarding with myriads of flowers. If they make keikis, wait until they establish roots and remove them and reslab. All of these plants are blooming size, propagated from stock and are in limited quantities.

Dendrobium bigibbum (phal., bigibbum compactum) 'Harford' HCC/AOS - 78 pts. \$40.-75.00



Sentinel received the award on this plant in 1990 as Dendrobium phalaenopsis var. compactum. It is an exceptional grower – compact bulbs to 6" with dark pink flowers of fine form. Main flowering season is August - September. Slabbed.

Dendrobium phalaenopsis (bigibbum compactum) 'Oka' HCC/AOS (79points – 9/21/16). \$150.00.



Sentinel received this plant from Mr. Oka in Hawaii at least 15 years ago. It grows taller to about 16" and is less likely to keiki. Larger flowers than Harford. Flowered with 14 on one inflorescence – great cascade. Slabbed.

Dendrobium Darlin Imp 'Sentinel's Candy Stripe'. \$35. - \$50.00



These 2" striped charmers are great. Normally plant grows to about 12", but can grow taller. The canes are only pencil width and grow very tightly. Spectacular vertical inflorescences of perfectly arranged pink flowers with darker purple candy stripes. Very unusual. Slabbed.

Dendrobium Vivian Snider 'Pink Stars'. \$50.00. (D. Little Profusion x D. bigibbum compactum)



Highly selected. Charming tight growing plants with maximum 8" high bulbs. Cascading multiple inflorescences about a foot long with 2" dark pink lightly striped horizontal stars. Wonderful contrasting darker pink lips with raspberry in the throat. Do not disturb for several seasons and you will have an impressive specimen. On cork slabs with approximately 10 growths. As predicted one slabbed plant received an 84 point CCM on 9/21/16 with a mass of 72 flowers and 9 buds on 12 inflorescences. A total of 19 growths.

Other Dendrobiums

Dendrobium chrysotoxum suavissimun 'Elaine' AM/AOS \$100.00



Awarded in 2014. Fine variety of the species. Large flower with notable dark lip center. Easy to grow and flower. 4 - 6 bulb divisions. 5".

Dendrobium Andree Millar & New Guinea types. \$30.00

(D. atroviolaceum x D. convolutum). Easy to grow, topped with clusters of green flowers with purple striations on lip. Very showy 2 ½" amethyst overlaid flowers on arching inflorescences with as many as 10 flowers from selected plants. Flowers last for months. Plants to 14" in height in 5" pots. **Dendrobium Ise 'Pearl' AM/AOS** Mounted \$40.00



(D. moniliforme x D. stricklandianum). Plants were commom 20 years ago. I managed to get some keikis and grew them up. Very desirable nice looking pendant thin canes to 16". 2 ½" flowers along the canes several times per year. Long lasting white with chartreuse center. **Dendrobium Le-Lo-Lei 'Hawaii'** \$50.00 for smaller plants.



(D. Candy Stripe x D. Theodore Takiguchi). Vigorous plant to 2 feet. Can bloom often with some of the best 3" candy stripe flowers available. This can be spectacular. Keep tightly potted with moderate. Brig

Dend. loddigesii 'Silver Charm'. \$40.00



Mounted on cedar. Edge variegated form very desireable. Grows extremely well and has standard pink flowers.

Pseudorhipsalis ramulosa. \$12.00



Small multi-leaved plants in 2" rose pots on right. Mature plant on left. Can turn red in bright light. Flowers turn into white balls along leaf edges. Plant loves its orchid friends.

Succulents and Cacti

I started with succulents and cacti as a new grower 50 years ago. In 2004 I had the urge and opportunity to restart my collections. I concentrated on Haworthias – the windowed rosette succulents from South Africa as I was fascinated by the window and growth patterns, markings and colors. I could not help myself and also collected small growing Aloes and Gasterias. Part of the collection are Schick hybrid cacti Echinopis – these produce huge, gorgeous flowers. Within the specialty are fine examples

of **variegated Haworthias.** Over the years I have discarded ones I did not like and propagated the best – so there are lots of great selected plants. They have adapted well growing near the orchids and benefit from extra water and fertilizer. See pictures below. Inquire if you have an interest.



PHILOSOPHY OF GROWING

As a 16 year old, I was fortunate to become a member of the Southeastern Pennsylvania Orchid Society. The society had an incredible number of unbelievably knowledgeable fine growers that commonly filled the show tables with over two hundred flowering plants. The impression created a standard of quality that has inspired me for over 50 years.

I became an American Orchid Society accredited judge in 1988 in the Mid-Atlantic Region (Philadelphia). For most of those years I had been responsible for Judges' Education and Training. I believe that my knowledge base and standards of excellence should benefit judges, potential orchid judges, and just as important, educating orchid growers. I am now Chairman. I lead the judgings presenting as much orchid educational material as possible to the Judges and Exhibitors.

I maintain and express very high standards on quality. Most Sentinel plants are limited and some are one of a kind. Please review carefully, as many limited plants may not be available again for several years. The selections listed are almost always based on beauty and a plant's performance. I observe and learn from judging, attending shows, seeing fine examples on show tables, speaking with growers around the country and researching. I am looking for quality in flower with great attention to strong growth in both leaf structure and root expansion. These qualities are partially represented by 60 awards since 2007 and over a hundred prior. Multiple times per year flowering is a bonus. I trade and purchase from top growers to acquire exceptional non-virused plants. I do not usually collect a plant just because it has historical value. Each plant requested will be carefully inspected for its rooting and growth maturity in pot. Only plants that I feel are properly growing will be released. The most common response from purchasers is Sentinel plants are exceptional performers. Better to have ten fine plants than 50 average or poor ones.

Some have been wondering if Sentinel is still in business. Seven things have taken place.

1. It has taken me over thirteen years to adjust the collection to have only the best growing and flowering plants

2. In the last five years, I completed over 2500 virus tests.

September 2013 I had an upper level heat burnout and lost several hundred plants and damage to several hundred more. The process of re-establishing damaged plants and general repotting has taken two to four years. As plants re-established they showed their strengths and weaknesses and provided another test for being maintained. This repair and repotting process has been the catalyst for the updated philosophy of brutalism. So based on performance and especially root generation, many more plants, even amongst previously selected plants, were not growing optimally and out they went!
 I now have a new ridge vent system and two 24" oscillating fans with 6 misting heads each that provide humidification and cooling that boosts the growth.

5. I am using Jack's Orchid Fertilizers: Orchid Well Water and Orchid Blossom Booster with added Magnesium and Calcium. This is combined with liquid Seaweed, Fish Emulsion, and top dress additives and Organics with some very impressive results.

6. I have started using cypress mulch for the Paphs and many of the Cattleyas with exceptional results. I have also reduced the amount of fines in the bark mixes so they are much more open with better rooting results.

7. I was able to purchase approximatrely 100 plants from the Duffin Collection and another 100 superior plants from top growers in the last two years. They were all virus tested and have proved to be superior. Divisions of many are becoming available.

The best plants perform with larger and more growths and better root systems and I favor and concentrate on those plants Since most plants were reported, this season is producing expanded root systems and closer to 'full power blooming'.

The most significant occurrence in the orchid world has been the availability of Agdia Company's individual virus testing kits that became available about six years ago. The kits can identify cymbidium mosaic (CymMV) and odontoglossum ringspot (ORSV) virus, the most common of the orchid viruses. I started testing for orchid viruses in the 1960's with the electron microscope or indicator plants followed by serological testing available through a few labs and agencies. Some growers claimed they could identify virus by chlorotic and necrotic markings and patterns on leaves and color break on flowers – the infamous "nurseryman's test". However, this was not always accurate as physical virus symptoms are sometimes identical to characteristics from environmental anomalies and chemicals and many plants do not show distinct symptoms. I have cross referenced and retested to insure the accuracy of

the tests. Virus 'hits' were in old collection plants, new collection plants and some incoming seedlings and mericlones. Many were a complete surprise as the plants showed no typical virus markings or patterns. Repotting seems to be the most critical transmission time. Absolute vigilance must be maintained in sterilizing cutting tools and tool handles, using new or sterilized pots, washing hands and maintaining a sterile work surface. As careful as I am, there are a few instances of transmission.

Sentinel is always on vigil; a mission for plants not growing properly. New growths are looked at very carefully for chlorosis, while it is also possible to question imperfect growth surfaces. I often recheck for virus as sometimes newly divided plants may be infected and not show virus concentrations sufficient to produce positives on initial tests." Virused plants, plants not growing optimally, plants with minimal root systems and flowers with color break and other undesirable/inconsistent flowering characteristics were and are discarded. Why nurse weak plants? Let the best express themselves without time wasting neighbors!

Sentinel Orchids has finally reached its goal of having 'just about' a virus free collection. The question arises, and rightly so, is it possible to maintain a virus free collection? With careful sanitation, preventative and active insect control (including maintaining all plants inside the greenhouse), continued sterile methods for divisions and repotting, along with a regimen of testing incoming plants, the answer is almost yes for the test viruses. However, vigilance and care is required. There are other less common viruses not identified. Usually plants with these look and grow questionably and are also discarded.

I watch as too many growers ignore possible virused plants and poorly growing plants. The answers are that they are not interested in the problems or the viruses are not expressing themselves and they believe are doing no harm and therefore do not exist or are benign – they have established their own 'VIRUS IGNORANCE STANDARDS'. These growers are poorly informed and do not seem to realize that one virused plant can act as a 'Typhoid Mary' and infect a whole collection, thus contaminating previously virus free and valuable specimens.

I am now proud to say that I have been placed on a **No-Buy Listing** with two large growers that advertise on ebay. They were upset that I complained about receiving virused plants and refused any more contact. Some of the plants were mericlones. These sellers are ignorant. Unfortunately, too many hybridizers, cloners and suppliers are interested in selling plants and not determining if they are virus free, grow and flower properly. Buyer beware when dealing with untested plants and misbelieving growers..

I expect a portion of my plants to be non-cooperative as some are genetically pre-disposed to problems. There are numbers of orchids that will not acclimate to my conditions. Too many orchid growers commonly select plants based on first seen flowers without any consideration of potential robustness, including root growth, and quality.

Plants arriving from other areas of the country are examined carefully and I remove all dead and questionable roots. They will often require 2 or more years to generate full root systems and acclimate. I call this process the FLORIDA HAWAIIAN SYNDROME. I usually do not evaluate a new plant until, at least, its second flowering cycle as it needs a developed root system to perform properly. Any plants exhibiting fractious behavior including non-rooting, non-flowering, inconsistent growing and flowering, and are disease prone are discarded. This process determines if a plant is suitable for Sentinel's collection and Sentinel's customers. Evaluation is on-going; so there is little fear of wasting time potting questionable and possibly virused plants. They achieve their priority path to the trash can. An incredible result has been the fabulous overall health and robustness of the plants in the collection. Sentinel's growing methodology, observation and testing, including the 'BURN ZONE', has made a tremendous difference in the quality and output of the collection.

Do not assume that a mericlone in the Sentinel Collection is similar to what is on the market. Mericlones often 'sport', which means they can be accurate or can shift for the worse or better than the original. Sentinel carefully selects 'better sports' and evaluates their growing and flowering characteristics. In addition, I search for the one or two plants within a cross to place in the testing program. A mericlone or selected plant is not assumed to be superior until it has performed in the normal growing and flowering process.

It is common for the plants to require several years and as much as 10 years to properly mature their growth and performance. Please note that many will consider our offerings expensive. Awarded plants, exhibition quality – often with a high acquisition price, rarity, virus free and limited numbers of unique and carefully selected plants are the basis for the pricing. These plants represent LIMITED divisions of highly selected orchids that in most cases are part of the Sentinel Collection. Many of these plants are closely held and many offerings are ONE only or TWO plants. I also evaluate and purchase what I think are superior seedlings and unusual orchids in limited multiples to offer to customers.

The majority of plants grown are not in competition with the ubiquitous hybrids and mericlones normally available. When I purchase or trade for a \$100 - \$400 dollar division, Sentinel takes the chance and makes the time commitment to observe and maintain only successful plants and flowers. Do not think that most of these plants arrive in perfect condition. They require significant time and work and grooming to achieve plant growth and flower quality that complies with my standards. Most of my customers quickly understand that you get what you pay for. The marketplace is overloaded with average quality plants and mericlones and plants in tiny pots that are highly overpriced and often reach orchid heaven quickly or take many years to achieve flowering size, if at all.

You will soon find that the plants you purchase can become a profitable investment. The quality of Sentinel plants are known in the Orchid World. Collection plants grow and can be divided. Once the divisions are established, they can be traded or sold for their original price or current value, thus recouping the original plant investment. The next division represents future profit. Most of Sentinel's plants are limited divisions so they are not usually competing with other plants in the market and hold their value.

The recent changes in taxonomic orchid 'names' have created a nightmare of nomenclature. I use some of these new classifications, if I like them. The rest will have to stabilize over the next five to ten years before I relabel.

Sentinel Orchids takes all information requests seriously. I try to provide reasonable information to all requests and enjoy speaking with orchid people. Complex E-mail responses are extremely time consuming and I will no longer attempt them. If you have a serious inquiry, please call (610-688-8528), or, at the least, place your name, address and phone number on your e-mail, so I may call you and answer all of your inquiries in a few minutes.

In the past few years there have been too many inquiries from what I call the "PRETEND ORCHID GROWERS', AKA: surfers, the ridiculous, the curious and tourists. They are usually novices that think it is my duty to endlessly provide information and very often they have no intention of ordering. They often agonize over the purchase of one orchid plant. It is rare for these people to call and speak to me personally; they most often like to hide behind their e-mails and then 'disappear'. Those few of you that enjoy this scenario waste my time. You take away my contact time from those that are truly interested.

I apologize and unfortunately must enforce the \$200.00 minimum. However, with some exceptions – mainly, if I can place plants into smaller boxes that can be shipped USPS Priority. You can direct your displeasure at the 'government' for rules, stipulations, policies, rising energy costs and tax structures. The cost of USPS shipping, supplies, mixes and support items has increased by at least 30% in the last three years. A large number of businesses make 'doing business' a more cumbersome and expensive

exercise and their lack of efficiency wastes time and this translates into time and money lost. All visitation to the greenhouse is by appointment only.

SENTINEL TIPS

1. It is difficult to explain to new growers to be cautious in what they purchase. A moderate to large number of orchid plants are genetically predisposed to grow in narrow environmental slots or not grow well.

2. A beautiful flower(s) does not always equate to a well rooted and growing plant. A bargain is often not a bargain. Try not to accept or purchase plants that have minimal roots. When selecting plants, always ask how well the plant grows? Do not be afraid to ask if a plant will grow under your conditions. Always ask the orchid merchant if the plants offered are virus tested. If the answer in no and there is no replacement or refund policy – WALK AWAY!!!

3. A high percentage of plants offered are not superior varieties and are still expensive.

4. It can be a big mistake to purchase seedlings in $2 - 2\frac{1}{2}$ " pots. Unless they are well developed, you are lucky and/or have perfect conditions, expect to lose seedlings.

5. Know your dealer and the level of what they are selling.

6. Try to purchase plants in flower with good root systems; maybe fewer plants, but much better results.

 Orchids should be repotted in the correct media(s) and preferably every two years or sooner. Paphiopedilums respond to repotting every year – be very careful to not damage healthy roots. Sentinel has been repotting all of the Paph's and Phrags in Cypress Mulch. My supplier now CHEWY.
 Quart Bags sell for \$14.00 to \$17.00 and if you order three, they are generally postpaid. I add about 10% large perlite and sprinkle some powdered limestone through the mix. The results so far have been excellent.

8. Every orchid has its own growing speed. Observe them, talk to them, pull them out of their pots every once in a while to say hello. Make friends. If it grows out of, or about to grow out of its pot, especially if there are exposed roots, repot it; don't be time locked.

9. I avoided for years placing plants in baskets. If anything needed to be done to the plants, they were difficult to extract especially if on deteriorating wood slats. There is a caveat to roots in the pot. Some plants like to have exposed roots like C. walkeriana, nobilor and aclandiae, many other cattleya species, Brassavola nodosa, Broughtonias, etc. Let the roots go where they want. You can also slab them or plastic web pots work very well with charcoal, exploded clay, stone and large hard bark and especially the cupress. The more open the filler the better. If the roots outgrow the web pot, take the whole thing and shift to appropriate larger web pot.

10. Be prepared to experiment with various medias (bark mixes, tree fern, sphagnum, stones, combinations of whatever), until your plants respond nicely.

11. I was able to obtain clear plastic pots in several sizes and I have been experimenting. These pots seem to accelerate root growth especially in Paphs and Phals. The pots will all get algae deposits that will affect the plants if they get too thick. So I am restricting the use to mainly Phal; aenopsis. I am repotting in under two years so I take the plant out of the pot to reuse or a new pot utilized.

12. Whether you are using green or clear plastic pots, I find it necessary to place 1/8" holes on the bottom of and on the sides. The number of holes depends on how much moisture you want to hold in the pot. I try to keep the holes in patterns so it does not look like the pots were hit with a shotgun. Please note that the distribution of the holes is very important as adding holes on the sides vastly increases the total air movement within the pot.

13. It is probably not your fault. I have had two of the same plant and divisions of the same plant, potted at the same time and placed next to each other. One grows vigorously and one refuses to develop properly. It just means that there may have been minor differences in size, root structure, exposure, drainage – all of which effect success or failure.

14. The object of growing is to select and produce the best orchids possible based on your taste, budget and space requirements. Sentinel has basic principles that will help you in this endeavor:

a. Worry about growing roots first, growth and flowers will follow. Nice new and proliferating green root tips means the plant is happy. No visible green root tips – there is a problem. It is best to

have sturdy plants with extensive root systems – their strength makes them naturally less susceptible to infection and will produce better flowers.

b. Do not overpot you plants. Size your living root mass to allow a year or two's expansion in the pot, not sized for the growth above. Sentinel's recommendation is the root mass is generally 60% of the new pot size volume.

c. In almost all cases, repot acquired plants to your mix and pots. The exceptions are when a new plant is potted the way you would do it, or, if a plant should not be touched when it is in its rest period. Check all newly acquired plants for insects, disease, loss of roots and clean and repot as required.

d. If you can get good quality bark, use it - look for hard nuggets with minimal dust and minimal soft wood chips (chaff). I have tried the bark from New Zealand. With shipping, it is too expensive. The New Zealand bark also has the characteristic of becoming saturated and not drying out quickly and reportedly has a base(vs. acid) quality. I have returned to the standard bark based on cost and normal performance. Since plants are growing out of the pots in usually 1 ½ years, the standard barks are fine.

e. Percentages of bark sizes are adjusted based on the root system. Sentinel has changed its percentages on bark. Mainly the amount of FINES has been drastically reduced on 3" pots and above. 70% medium bark, 10% fine bark, 10% medium to large perlite, and 10% medium charcoal. This creates a more open mix and seems to force better root action. As I pot I discard soft and thin slice bark. You can always adjust for more fines in the smaller pot and use the large pieces of bark in 6" and above pots.

f. Sentinel recommends creating an aerated mix for most plants and watering more often. I pot using the mix dry. A mix of mostly large components allows for more air circulation within the mix and promotes more vigorous root systems. To gain additional aeration, I have been adding patterns 1/8" holes on the bottoms and sides of plastic pots with flamed steel rods. By using the more open mix I am able to get very good root action with dry and short cycle growers and species in plastic pots. Utilize pan type pots and follow the maximum 60% or more root volume for the species and short cycle growers.

g. I recommend utilizing fertilizer that has no urea as a nitrogen source. The urea can cause soft growth that places the plant under stress and makes the plant more susceptible to disease. Sentinel has been utilizing Jacks by Peters. They have two formulas: Orchid Well Water 16-4-20 with trace elements and Calcium and Magnesium. From November to April, I go to the Blossom Booster 10-30-20 with trace elements. I have seen a positive reaction of the plants.

15. After observation, it is apparent that a mass of new growth starts in May and June in the Cattleya Group. The older growths slightly shrivel with energy going into the new growths. You should increase your watering and fertilizer.

16. I also use organics during active growth such as seaweed, fish emulsion, crab shell, etc. Fertilizing with both the inorganic and organic until November at a minimum of twice a week will have very prolific results. In November, utilize the low nitrogen – More Bloom fertilizer.

17. Sentinel utilizes both preventative spraying and reactive spraying. There are few to no beasties in our plants. Once in a while we get some surface insects, but they are easily disposed of with some light insecticide, dish washing soap and dormant oil sprays. Only apply these substances on cloudy days or with cooler temperatures or during rainy periods to avoid burning. Always test a few plants to make sure you get proper concentrations and coverage with no damage. Never let the beasties get entrenched and always very carefully examine any incoming plants for problems. I generally maintain a hand sprayer with dormant oil, dishwasher soap and an insecticide to give plants a general preventative spraying both on repotting and prior to entering the collection.

18. Some growers have scale and often it may not proliferate for weeks to months. It is particularly annoying. Go to the hardware store (not Home Depot) and buy some decent hand sprayers to keep the solution of 2/3's water and 1/3 dish washing soap. Add more water if too viscous in sprayer. Wash your hands several times if previously worked on other plants. Assuming the plant is physically worth treating, I strip the plant of mix, dead roots and remove as many dry sheaths as possible, especially at bulb bases and the rhizome. Copiously spray the leaves, bulbs and especially the bulb-rhizome junctions and the leaf axils. Let sit for a few minutes. Lightly rub your hands on the surfaces. Do not

break tissue surfaces. For tighter areas use a soft sterilized sponge to get into ridges and notches. The sponges are cheap and you can soak them in Clorox to sterilize between use. Sometime with heavier concentrations and in ridgy areas you will need something to get into the spaces – Q-Tips, a sharpened soft eraser or equal will do the job. Wash the plant off. The first treatment often loosens the sheaths. Take as much sheathing off as you can. Spray again. Check the plant in the next month to make sure the scale is gone. If you suspect you did not get it all, spray again and wash off. Most of the time this works. Plants infected badly with scale get a yellowing and you have to hope the poisonous effect did not debilitate the victim. The soaping process will kill almost any zoo of unfriendlies present and does not take very long beyond your normal repotting. Note: this process does not eliminate the need for prophylactic spraying with systemics of your choice.

19. Frequent watering and active fertilization can break down mix quicker. My feeling is: I am repotting every 1 $\frac{1}{2}$ to 2 years so I am ahead of the problem. This does not resolve the growing out of the pot syndrome.

20. When new growths edge or grow outside or send roots outside the pots, act quickly and repot as these new roots are difficult to protect when more than one to two inches. The exception to this is some Cattleya Species with very short growth periods. One must be very careful to disturb the roots as little as possible. Early and very careful repotting or adding a half pot to pick up the new roots may be necessary. This may also be a case to utilize large baskets.

21. When plants grow in several directions leaving holes centrally or start crossing each other, it is usually time to divide to 'reshape'. Too many back growths take up space and should be trimmed off. 22. My treatment for plants with no or minimal roots is to hang them up with Spanish Moss wrapped loosely around and extending down from the rhizome. Place in medium light area. Water often. You will be surprised how many can regenerate roots.

23. I recently was left with a blue Cattleya single immature new growth. I placed about a half inch of sphagnum moss under and around the base of the growth on a cork slab. Two months later I was surprised to see a half dozen 2" roots springing from the base. I carefully took off the cork and placed it in the smallest pot I could to restart the plant.

24. With my discussions and presentations on Polyrhizza(Dendrophylax) and Broughtonias starting in the 1980's, based on rooting on indigenous trees and absorption of forms of calcium from the tree cambium layer, I was the first to explain the application of powdered limestone as necessary for plants living on coral/limestone sub-surfaces. Polyrhizza, Brassavola nodosa, Broughtonia, many Paphs, etc., need application several times per year with more during the growing seasons. Wet down plants. lightly powder, carefully wash to allow minimal residue or some cloudiness to the drops of water. Allow to remain for one to two minutes. Wash off any remainder. The limestone can also be applied as part of a general injector watering program, but most will not dissolve. What does get suspended in the solution is usually enough to do the job.

25. If the majority of your plants are growing well and you have other plants not growing and flowering properly, there is a reason - either they do not agree with your growing methods or your environment, the plants are genetically disposed to grow poorly and/or, may be virused. It takes some experience and will power, but be prepared to try other techniques, give them away or head for the trash can.

Conditions of Sale:

Sentinel's orchid business is based on personal customer service and supplying only highest quality plants. Please note that all offerings are very limited with some plants with only one division available.

1. Minimum mail order is normally \$200.00. Smaller orders can sometimes be processed with a \$20.00 packing and handling charge plus shipping.

2. All orders must be prepaid by check, Paypal, money order or credit card.

3. Although Sentinel is an approved Pennsylvania State Nursery, CITES approvals are not reasonable to obtain, therefore, sorry, but only orders to USA unless <u>you have a CITES purveyor in the USA that</u> <u>will obtain the inspections and ship the plants. Please NOTE, restricting states requiring CITES are also non-ship.</u>

4. My time is limited as this is not my main business. I love to speak with orchid people and like to be helpful; so if you want to talk, use your telephone, especially if you desire additional information on a specific plant.

5. All of our plants are quality, tested (unless otherwise noted) and are offered virus free. If you utilize an Agdia Test packet and discover virus within four weeks. We will credit or refund. Not many nurseries are even concerned. Caveat emptor on E-bay and the like.

6. All plants are offered in limited numbers, sometimes only 1. Please remember that it can take several years to get an established division of only one plant. Often smaller divisions may be available at lessor cost. Many of the offerings are 'closely held'. This means highly selected divisions are very limited and rarely seen in collections. Sentinel does not compete with other dealers in providing low priced plants in the thousands. Do not hesitate to request recommendations.

7. Make a list of plants that you would like to order and contact Sentinel (**610-688-8528**). A five minute phone call will save much time. Let me know where you are located. Plants that you would like to order will be evaluated and marked or pulled. Any plants found that are not in perfect condition will not be forwarded. Often different sizes are available. We do not substitute unless discussed and approved.

8. When I confirm you order, you may provide your full shipping address, preferred shipping time, special instructions and your E-mail, and phone number(s) by phone or E-mail.

<u>markitectw@comcast.net</u> If you anticipate requiring more information about plants, different sizes available, then contact by phone.

9. When Sentinel confirms your order and determines best way of forwarding, a final invoice will be generated with charges for packing and shipping.

10. If not paying by credit card, please forward money order or check. Your order will be held for ten days maximum until payment is received. After ten days, orders without payment will be considered void and plants made available to other customers.

11. Sentinel plants are guaranteed for a limited time, generally 60 days with proper care. Our customers rarely have problems, but we provide the guaranty anyway, as even sturdy plants sometimes decide to make the journey to orchid heaven. We want you to be satisfied with your plants. If you are not <u>for any reason</u>, first notify us, then return the plants within ten days and we will refund your purchase price. Our liability is limited to the purchase price of the plants. Purchaser is responsible for packing and postage of return plants.

12 This list cancels previous listings. We reserve the right to limit quantities.

13. Almost all of our shipments are sent priority US Postal Service. Minimum packing cost starts at about \$10.00 for small plant orders. We will quote you our estimated price for shipping.

14. We usually do not ship plants between Nov. 30 - April 1. Some orders are processed during that time and sent out during weather breaks. We will be happy to tag your plants, grow them larger and ship when weather permits. Customers are welcome to pick up plants at the greenhouse by appointment.

15. Pennsylvania residents, please add 6% sales tax to cost of plants and shipping.

16. Discounts: May be deducted, additional plants included and/or offset shipping costs. Except for plants **SPECIAL** marked - no further discount.

 \$600.00 - \$999.00
 10%

 \$1000.00 - \$1999.00
 15%

 \$2000 20% - Investor discount.

Directions from Pennsylvania Turnpike - Valley Forge Exit - 202 North to first traffic light at Chili's and Best Western (King of Prussia Mall is to your left). Make a right and travel 1.7 miles to Weadley Road. Make a right. Travel 1.2 miles to Rossiter. Make a right. First driveway on right is 1131. Make a right and park in the first parking lot. You have arrived. **From 202 south** make a left at the Chili's and Best Western and follow directions above.

Directions from 95 to 476. Take 476N towards Plymouth Meeting. Exit #13 at Villanova, Rt.30, stay in middle of ramp and cross over Lancaster Pike (Rt. 30) onto King of Prussia Road. Go under Radnor

Station railroad bridge and proceed straight 1 1/2 miles to Weadley Road on the right. Make a right and first street to the left is Rossiter. Make a left onto Rossiter and turn right into the first driveway (1131).

Traveling on 476 South, exit at 76 West Valley Forge. Take the second exit 329 (first is Gulph Mills). Stay to the left at the light make a left and travel to next light. Make a left on Weadley Road. Travel 1.2 miles and make a right on Rossiter. Sentinel is 1131 – the first drive on the right.

From 76 Expressway traveling west from Philadelphia. Exit at Henderson Road/King of Prussia Stay to the left at the light, make a left onto South Gulph Road and travel to next light. Make a left on Weadley Road. Travel 1.2 miles and make a right on Rossiter. Sentinel is 1131 – the first drive on the right.

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