## NEW VARIETIES

Developed by: Ying Doon Moy Research Director

San Antonio Botanical Garden San Antonio, Texas U.S.A.

# LIST OF NEW VARIETIES CREATED BY YING DOON MOY SAN ANTONIO BOTANICAL GARDEN

1990 — 1998

## IN GRATITUDE

I wish to sincerely thank the following people and institutions who have contributed significantly to my horticultural success in recent years:

- The Mind Science Foundation, for bringing significant recognition to my work by awarding me the 1986 Imagineer Award for successfully creating and developing new varieties of papaya for the South Texas environment.
- 2. The City of San Antonio, for similarly recognizing my work with the City Award in 1986, and again with the Star Award in 1994.
- The Garden Club of America, for encouraging my work on developing the Moy
   Grande Hibiscus, and subsequently commending its success by awarding me the Montine
   Mention Horticultural Award in 1997.
- 4. Mr. Ronald R. Darner, the former Director of Parks and Recreation Department of San Antonio, for encouraging and promoting my research at the San Antonio Botanical Garden.
- Mr. Paul Cox, the Assistant Director of the San Antonio Botanical Garden, for always giving me support on my research.
- 6. The San Antonio Botanical Garden Society, Vice-President Harry W. Mazal, Ms. Marjie Scharff and their crew, for supporting, presenting and preserving the new varieties of Hibiscus and other "fruits of my labor" at the San Antonio Botanical Garden
- 7. Dr. Jerry Parsons, Professor of the Texas A&M University Extension Station in

San Antonio, for providing important support on the development of the Moy Grande Hibiscus and other varieties.

8. The City of San Antonio and the numerous foundations, societies and clubs that I have not already named, for providing encouragement, commendation, and support for my work.

Ying Doon Moy Research Director The San Antonio Botanical Garden June 12, 1998

23.

## THE LIST OF VARIETIES Papaya hybrid Aromatic 1. 2. Delicious 3. Dulce Ginger hybrid Giant 4. 5. Noble 6. Robusta Tecoma hybrid Floribunda 7. Sunrise 8. 9. Sunset Roses hybrid Dwarf Beauty 10. Palace Pink 11. 12. Red Lotus Shiny Wax 13. Hibiscus hybrid 14. Advance 15. Charming 16. Grand Beauty Lamp Shade 17. 18. Little Suzy 19. Moy Grande 20. New Baltimore New century 21. None Stop 22.

Star

### Chinese Hibiscus hybrid 24. All Gold Beauty 25. Eig Coat 26. Big Red 27. 28. Champion Red Child Face 29. 30. Coral Country Girl 31. Crab's claw 32. Delicacy 33. Dwarf chrysanthemum 34. Dwarf Princess 35. Evening Cloud 36. Firework 37. Flowering Ball 38. Fresh 39. Frugal 40. Ganjiang Sword 41. Glittering Blight 42. Golden Carp 43. Golden Dish 44. Golden Light 45. 46. Golden Umbrella Good Luck 47. Graceful Lady 48. Hidden Star 49. Light Cloud 50. Lion King 51. Lotus 52. Mature Peach 53

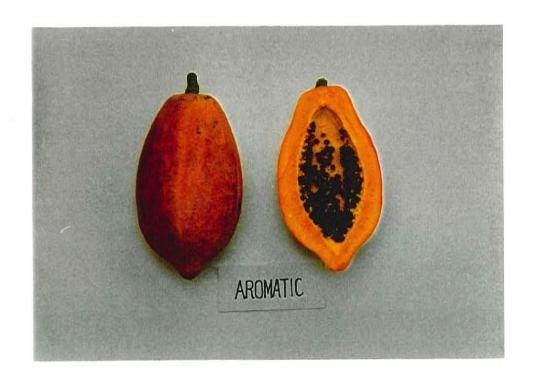
Mini Doll	54.
Mini Pink	55.
Morning Cloud	56.
Moxie Sword	57.
Pink Cup	58.
Red Dragon	59.
Red Duster	60.
Rising Sun	61.
Rouge	62.
Shiny and Shadow	63.
Silk Flower	64.
Spider	65.
Spring Sunshine	66.
Struggle	67.
Tiger	68.
Trumpet Pink	69.
White Face Monkey	70.
Windmill	71 -

Papaya hybrid

Aromatic

One of the daughter of Dulce.

Strong tree, the leaves are big, and hang down like an umbrella. It has a deep green color. The fruits are medium size, 2-3 lbs, sweet and have a special orchid smell. The deficiency of the fruit is having a little fiber, but it has a good storage character, after storing for 5 days it is still fresh, deep orange red color.



Papaya hybrid

Delicious

The daughter of Dulce.

Medium size fruit, 2-2.5 lbs. perfect lemon shape, sweet, tender and juicy, good quality.



Papaya hybrid

Dulce

San Antonio Early x Florida No. 1

A strong growing and tall variety with a beautiful growing style. The fruits are 3-5 lbs, big lemon shape and sweet. The yellow flowers appear early and the fruit comes from the base of the trunk and grows to the top, igood harvest.



Ginger hybrid

Giant

Hedychium coccineum 'orange' x H. coronarium

A strong and tall plant, it grows up to 200 cm., having big leaves, length x width  $= 43.0 \times 13.5$  cm. The inflorescence is big, the length and width of the inflorescence is 35.5 and 25.5 cm. the big flowers have 8.3-9.5 cm. diameter. but the petals are a little narrower than the father's petal, the lemon yellow flowers have a lovely fragrant smell. It is easily propagated and growing up.



Ginger hybrid

Noble

Hedychium coronarium x H. coccineum 'pink'

This plant has many new shoots making a large plant group. Their blooming season is long, June-October. The plant is tall but strong enough. The flower is medium, white color with some egg yellow in the center, lovely fragrant. The inflorescence is big having many flowers on it.



Ginger hybrid

Robusta Varigated Ginger

Hedychium flavum x H. coccineum 'red'

Medium height plant has a large strong stem (pesudostem), the distance between the leaves on the pesudostem are shorter, so the leaves of this variety has density. It has a special character in its shorter but broader leaves that is the green leaves having some light yellow stripes or spots in it. The orange flowers are fragrant and lovely.



Hybrid Tecoma

Floribunda

An interspecies hybrid. The parent is T. alata and T. stans A beautiful half round and dense crown bush, its height is 165 cm. the diameter is 165 cm. too. The multiple trunks have some purple color on its surface. It blooms longer in Summer and Autumn. The medium size bell-like flowers have the orange-yellow color and have orange-brown stripes inside the bell from the bottom to the throat. The upper 2 of the 5 petals have deeper color which are orange brown. The diameter of the flower is 5.0 cm.

It is easy to grow and easy to take care of. It has a high drought and heat resistance and its cold tolerance is strong too. In Winter, after it's cut back and mulched with the wood chips, it will come back and will bloom every year.

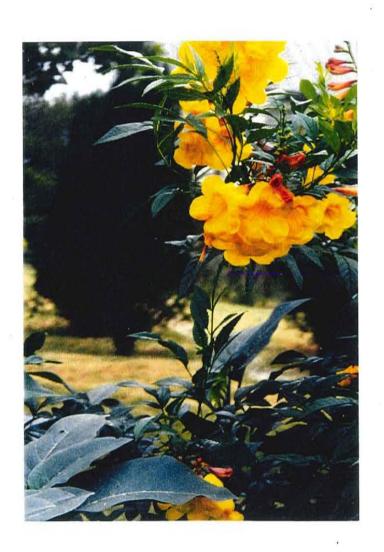


Tecoma hybrid

Sunrise

A daughter of Floribunda.

Bell shape flowers are yellow-orange and with some brown-red stripes inside the bell from the bottom to the throat. The diameter of the flowers is 5.5 cm. The leaves are long lanceolate.



Tecoma hybrid

Sunset

A daughter of Floribunda

The leaves are long ovate, deep green, the blade is rugate. The bell-shape flowers are reddish orange and have some brown-red stripes inside the bell from the bottom to the throat. The flowers have more red color, especially around the throat area. The diameter of the flower is 5.5 cm.



Dwarf Beauty

Carefree Beauty x Angel face

Strong dwarf bush, the height is 75 cm., the diameter of the bush is 85 cm.

It has a special character that is the flower which color according to the blooming stage is changed. In the primary stage the color is deep red, in full bloom it is charming red and then changes to deep pink, at last is pink, so there are many kinds of color in a bush, and it can have many flowers blooming at the same time, the bush is so beautiful. The medium-big double flowers are sweet fragrant. The shape of the flowers is like a toy-windmill, it is gorgeous.



Palace Pink

Carefree Beauty x Angel Face

It is a medium bush but grows very strong. The diameter of the bush is 90 cm. and the height is 90 cm. too, spread style, easy made branches and easy to grow, it doesn't need special care but grows well. The flower is large, its diameter is 11.0 cm., double flower, the color is pink, but the color of the external petals are lighter than the internal petals, from outside to the center, the color slowly changes deeper and deeper. The top of the petals are accisus, the edge always has some waves, the whole flower looks as beautiful as a peony flower, smell has a lovely sweet fragrant. It has many blooming flowers on one bush. It is a beautiful one.



Red Lotus

Carefree Beauty x Angel Face

Medium height, spreading style strong bush with long branches. The new green leaves have purple red spots.

The double, big and deep red flowers are sweet fragrant. It has a strong resistance to the powder mildew.



Shiny Wax

Carefree Beauty x R20

It is a strong growing bush having the long erect branches which is good for cut flowers. Its leaves are shiny, such as covered with wax, the edge and the veins of the leaves have some red color.

The double and big flowers are sweet fragrant, the color is pink and mixed with white, and the base of the petals are yellow-green. It is a beautiful one.



Advance

Interspecies. The parent is H. acetosella and H. brackenrid-gei

Evergreen perennial bush has a dense tree crown, the branches are long and soft, the bush is not high only 244 cm. but it is wide, the diameter is 396 cm. Its growing is strong and fast, it can be harvested 2 times a year for the fiber. All of the branches, leaves are light purple red color, the leaves are palm shape.

The flowers are yellow and got purple red in the center, medium size, the diameter is 11.5 cm.only. The anthesis is in April but if they are put in greenhouse they will start to bloom in January. They are easily frozen.



Charming

Interspecies. The parent is H. moscheutos and H. lasiocarpus Strong bush has a spread tree crown with lots of branches and lots of big flowers the flowers are single, deep pink color with deep red in the center, trumpet shape. Blooming season is June-August.



Grand Feauty

An interspecies, the parent is H. mutabilis and H. moscheutos Medium-tall bush, the height of the bush can grow up to 200 cm. This strong growing bush has more branches and leaves, it is a glorious one. The leaves are thick, deep green, as the weather changes to dry or cold, the old leaves will have some red color. The flowers in the morning are like a cup, later it fully opens. The single, medium flower has deep pink color and with a little purple in it. The diameter of the flower is 13.0 cm. Its blooming season is long, from early Summer until late Autumn every day, it blooms but because of sterility it never produces seeds or fruits.



Lamp Shade

Interspecies. There are series of Lamp Shade, Those are Lamp Shade 'deep red', Lamp Shade 'red', Lamp Shade 'deep pink', Lamp Shade 'pink', and Lamp Shade 'light Pink'. Their parent is H. militaris and H. moscheutos 'Southern Belle'. All of these are strong and taller bushes, the anthesis is long, from June to October continuously blooms every day, and the bush is slowly taller and taller, they are needed left about 3 feets to cut back in August, let them come back to be a lower one but not affect its blooming. The leaves are not big but thicker. Except the Lamp Shade 'deep pink', all of them are getting the hastate leaves.

They are single flowers, medium size, the diameter is 14-16 cm. but the Lamp Shade 'deep pink' is bigger, the diameter is 20 cm.



Little Suzy

It is the sister of New Baltimore.

This variety has a lower height, because its branches are spread out to four sides, so it performs a lower style. The flower is medium, the size almost is the same as her mother but is a little smaller than her sister - New Baltimore, and the color is lighter too.



Moy Grande

H. moscheutos x H. Grandiflorus

A strong bush has more strong branches and lots of flowers. The flower is big, its diameter is 30 cm., some times it grows up to 35 cm. Its blooming season is June-July, in the end of July prune it back at the leaf buds section, after one month the leaf buds will grow and flower again in September.



New Century

Interspecies. H. cannabinus purple blue' x H. brackenridgei Evergreen, perennial, tall and strong bush grows fast, with long branches and vegetable green leaves, thornless, the height is 325 cm. the diameter of the bush is 325 cm. too. Its cortex is tough and long, it is good to use for fiber which can be harvested two times a year. The palm shape leaves may be a food material for the cattle or animal. The flower is purple red, medium size, the diameter is 9.0 cm. the anthesis is April in the warm area.

This variety if the planting for flowers can be made by cutting in June-August, growing in the greenhouse in Winter, they will bloom in early Spring. If the planting for the fiber, it is better in the warm areas which are no freezing in Winter, they can stay more years for pick up the fiber and leaves.



New Baltimore

The parent is Lady Baltimore x Lamp Shade 'deep pink'

This variety not only the plant and also the flowers are very like the Lady Baltimore, but the plant is more strong than the Lady Baltimore under the alkaline soil in San Antonio area. The flowers are bigger than the mother variety and getting more pink color in the flower. The anthesis is July-September.



None Stop

A daughter of Moy Grande

It is very like her mother but has some special characters, its growth is stronger, has more trunk and more branches and continuously has a long time blooming from June to August. The flowers are big, pink color.



Star

The parents are (H. moscheutos x H. lasiocarpus) x H. grand-iflorus

Big flower varieties, the full open flowers are like a star, so call them stars. The diameter of the flowers is 26 cm. There are series of star, they are Deep Red Star, Deep Pink Star and Pink Star, all of them have littlebit pleasant odor.

Medium height bush, the height is 160 cm. The grey bark has some light brown red color with white powder, and has the small white hairs on it.

The leaves are heart shape or broad egg shape, the length is 19.0 cm., the width is 14.0 cm. The green leaves have small white hairs.

They are cold resistance and dry tolerance, fast growing but the anthesis is short, 1 month only.



All Gold

Single Orange x Single Red

Tall bush, strong plant.

Regular Chinese hibiscus leaves with medium, optuse serrate edge.

Medium, single flower is 10.8 cm. in diameter, the whole flower, including the center has the bright golden red color.



Beauty

Single Orange x Cite Tinney

It is a dwarf bush, the height is only 70.0 cm The branches are green.

The leaves are big, vegetable green, long palmate shape with big, obtuse finger-like incidence.

The flowers are double and big, orange color with a pink center. The outer calyx is very small, it is the special character of this variety.



Big Coat

Single Pink x New Buffles

Branches are green, as it goes older it will change to light brown, the branches are set at a higher place from the trunk.

The leaves are big, thick, heart shape, deep green color and have the big obtuse sawlike notches along the edge.

Big, single flower, 18.5 cm. in diameter. The petals are wide, they cover each other with part of the petals, the edge of the petals are corrugate, the color is bright red with some gold color, the center part is deep red.



Big Red

Cile Tinney x Single Red

Big body, tall bush has purple red branches. The hastate like leaves are deep green, big and thick, having big serrate edge. Big, double and red flower has 17.0 cm. diameter, many flowers in one day.



Champion Red

Single Orange x Cile Tinney

Tall bush, the height is up to 195.0 cm. including the branches the whole plant stands straight, looking as a terete post. The branches are brown.

The leaves are green, medium size chrysanthemum shape.

The double, medium size flowers have 11.0 cm. diameter. The outside petals are big, the inside petals are closed to the centre, no pistil, the color of the petals, filaments and stamens tube are orange red. The whole plant is gorgeous, it is good for the garden gate.



Child Face

Single Orange x New Buffles

Tall bush with soft branches that hang from the trunk.
The heart leaves are his and thick, deep green, having

The heart leaves are big and thick, deep green, having the obtuse serrate edge.

Single flower, the diameter of the flower is 13.0 cm. The blooming flowers in the primary stage have yellow orange color, and pink center, later, in the full blooming stage, it changes to orange pink, and the center part is extended and the pink color is deeper, at last is changed to the drunk red.



Chinese hibiscus nybrid
Coral

Cile Tinney x Single Red

Medium bush, the branches are light brown. The wide hastate like leaves are deep green having the big obtuse sawlike notches along the edge. The big double flowers have the pink color and deep pink center. The diameter of the flowers are 17.5 cm.



Country Girl

Single Orange x Cile Tinney

The bush is medium. The branches comes from the lower part of the trunk and grows upright. The color of the branches are light purple red.

The leaves are big, green and corpulense, regular hibiscus shaped leaves, having big and obtuse serrature edge.

Large single flower has the bright pink, corpulense petals and red center. The diameter of the flowers is 13.0 cm.



Delicacy

Cile Tinney x Single Deep Pink

Tall bush, the branches are upright having a purple red color.

The leaves are big and thick, hastate shape, having incised edge, the color is light green.

The flowers are single, medium, having the pink mixed with the white color. In the centre space, half is deep pink, half is white, the flower is beautiful.



Dwarf Chrysanthemum

Single Orange x Cile Tinney

Dwarf bush has many green branches and leaves, having a dense tree crown.

The chrysanthemum shaped leaves are big and thick having green or deep green color.

The flowers are medium, single, orange yellow color with pink veins in it. The center is deep pink.



Dwarf Princess

Sing Orange x Cile Tinney

Dwarf and strong bush has purple trunk and branches.

The leaves are big, wide heart shape having the obtuse sawlike notches along the edge, the color is light green, the veins are low down in the blade, and the other parts are swelling, so the leaf is rugged.

The flower is like the regular single Chinese Hibiscus, it is funnel shaped, medium size, the diameter is 10.0 cm. The flower has a charming deep pink color, the centre part is small with deep red color.



Evening Cloud

Cile Tinney x Single Red

A strong bush with purple red branches.

The green leaves are heart shape, big, wide and thick, with medium obtuse sawlike notches edge.

Single flower, the flowers are medium, with 12.5 cm. in diameter. The petals are wide and thick, orange color, have the rugate edge, the center part is pink, it is a beautiful one.



## Firework

Single Orange x New Buffles

Tall bush, the branches are dark green and covered with light purple.

The dark green leaves are big, ovate, with the big biserrate edge.

The flowers are medium, double petals, the diameter of the flower is 11.5 cm. The top of the petals is orange, lower part changes to pink, and have the red color at the bottom (centre).



Flowering Ball

Cile Tinney x Single Deep Pink

Medium height bush, the trunk and branches are light brown The leaves are small, wide ovate shape, having the serrate edge, the color is light green.

The double and bigger flowers have 19.5 cm. diameter, the color is white mixed with light pink. The centre part of the flower is pink.



Chinese hibiscus hybrid Fresh

Single Orange x Cile Tinney

This variety has the long branches but they are gew and they grow upright, having the green mixed with light brown color.

The flowers are double and big, having the resplendent golden pink color.



Frugal

Black Beauty x Cristi Brubaker

Tall bush with a narrow tree crown. The branches are short having light brown color.

The leaves are medium, heart shape, with the medium but very shallow serrature edge, deep green color and a shinning.

Single, big flower has light pink color with white stripes and small white spots, the centre is deep pink with many small white stripes. The diameter of the flower is 18.5 cm. petals are wide covered each other at their edge.



Ganjiang Sword

Elack Beauty x Cristi Brubaker

Tall bush. Trunk and branches are light grey brown.

The leaves are wide heart shaped, the edge is smooth waves, green.

Single flower. It is large being 15.0 cm. in diameter, the edge of the flower is light pink, lower, as close to the center the pink color is deeper, the center is dark red. The full blooming flower8s petals are flat spreading as a round shield, the pistil and its androecium grow straigt up in the center, it looks like a sword.



Glittering Blight

Single Orange x New Buffles

Tall bush, the branches grow from the lower part of the trunk.

The leaves are big, thick, wide egg to heart shape, deep green or vegetable green, with big obtuse sawlike notches along the edge.

The flower is medium, being 13.5 cm. in diameter, double flower, the orange flower has a orange red center end has the pink veins in the petals.



Golden Carp

Single Red &

It is a tall bush, having the shorter branches. The trunk and its branches are light purple brown.

The leaves are egg shape having the medium sawlike notches along the edge, vegetable green color.

The flowers are medium, having 11.5 cm. diameter, single flower. The color is egg yellow with the pink stripes in it. The center is pink.



Golden Dish

Single Orange x New Buffles

It is a tall bush, tower style.

The big, oval, thick leaves are vegetable green, as it gets older it changes to deep green, having the undulate or obtuse serrate edge, the blade is a little wrenched, the veins are low in the blade.

The diameter of the flower is 12.5 cm. medium size. It has a special flower structure, there are three circles of big petals around the stamens tube and has some extra smaller petals which are attached to the stamens tube, this looks like something on a dish. The color of the flower is the light orange red on the top of the petals, lower part is light pink, the bottom is red and has small pink veins in it, it is so beautiful.

Golden Light

Single Orange x New Buffles

Tall bush with few branches, it is looking as a tower.

The leaves are medium or large, egg shape, deep green, having the sallow, obtuse serrate edge.

Single flower, medium size has the yellow orange color and has the orange pink veins in it, the center is pink.



Golden Umbrella

Single Orange x Cile Tinney

Medium bush. The leaves are ovate, deep vegetable green and shiny, having big obtuse serrature edge.

Single, medium flowers have an orange yellow color with some small string like red stripe in the petals, the center is pink.



Good Luck

Single Orange x Cile Tinney

The trunk and branches are purple grey.

The leaves are big and thick, wide heart shape, having medium, obtuse or roundish sawlike notches along the edge, the color is deep green

The flowers are big, single, having wide petals that cover each other, pink color, red center.



Graceful Lady

Single Orange x Cile Tinney

dwarf bush, the height is 95.0 cm. only

The leaves are regular Chinese hibiscus leaves, with medium obtuse errature edge, leaves are big but thin, deep vegetable green color. The leaves are close to each other on the branches, so, the tree crown is dense.

The flowers are medium having 12.5 cm. in diameter. The petals are thin, pink color, the center is deep pink.

Hidden Star

Cristi Brubaker x Black Beauty

The bush is tall and skinny, with few short branches.

The leaves are regular Chinese Hibiscus leaves but they are corpulent and thick, with the bigger but irregular obtuse serrature edge.

Single, big flower has 20 cm. diameter, the color is purple red and with the white stripes on it. In the back of the petals there are some white color on their left side, as you are looking at the back, you will find out that is a white star on it.



Light Cloud

Cristi Brubaker x Calypso

A tall bush. Its branches are set in a higher space of the trunk, it is looking as a small tree, the trunk and the branches are light brown color.

The leaves are big, wide heart shape having big but obtuse serrature edge, deep green color, shiny.

The single, big flowers are 15.0 cm. in diameter, with the white color and with many pink stripes and spots in it, the centre is pink, the petals are wide and thick.



Lion King

Cristi Brubaker x Black Beauty

Taller bush. It is a weak bush. It has few branches and leaves. The branches are long and small, and always are hanging down, the color is light purple brown.

The leaves are big and thick, heart shape, with the medium, shallow and obtuse serrature edge, deeper green color.

Single flower, but it is a big one, the diameter is up to 25.5 cm. having the light pink color mixed with some purple. The centre is purple.



Lotus

Single Orange x Cile Tinney

Medium height, strong bush, the branches are pruple.

The big, thick and wide chrysanthemum shaped leaves have a deep green color.

The double and big flowers are pink with a deep pink center.



Mature Peach

Cristi Brubaker x Black Beauty

Tall bush, the branches are medium, it always has more flowers on the bush.

The leaves are small to medium, heart shape, and always twisted and curled.

The flower is large, being 16.5 cm. in diameter. Single flower, the flower is pink, the center is deep pink. As the flower opens, the petals roll under.



Mini Doll

Single Orange x Cile Tinney

Dwarf bush has fewer branches which are green with some purple.

The green leaves are hastate shape, medium size, with big, obtuse serrature edge.

The flowers are double but medium in size only. The whole flower including the centre part is light orange red.



Mini Pink

Single Orange x Cile Tinney

It is a dwarf small bush, the height is 80.0 cm. the diameter of the bush is 25.0 cm. The branches are short, purple red color. The internodes are close to each other.

The leaves are big, green or deep green, chrysanthemum leaves shape.

The flowers are small, single, being only 7.8 cm. in diameter, the pink flower has a deep pink center.



Morning Cloud

Cile Tinney x Single Red

Medium height bush has the up-right branches in the higher place of the trunk.

The leaves are big, thick and wide, maple shape and have the notched edge, the color is deep green.

The diameter of the flowers are 17.0 cm. it is a big flower which has the orange mixed with some red color, the centre part is deep pink, it is a beautiful one.



Moxie Sword

Black Beauty x Cristi Brubaker

The trunk and branches are light purple brown.

The leaves are wide heart shape having the big, wide apart, obtuse serrature edge, the quality of the leaf is a rough paper, deep green.

Single flower. The flower is big, being 17.0 cm. diameter, the petals are pink, with some white stripe on it. The center is shiny red.



Pink Cup

Cristi Brubaker x Calypso

Tall bush with long, hard branches, the trunk and branches are brown purple red.

The leaves are big, heart shape, the tip of the leaves are obtuse serrature edge, the color is vegetable green.

The flower is big, being 15.0 cm. in diameter, the color is bright deep pink, the center part is dark red.



Red Dragon

Cristi Brubaker x Black Beauty

Big and tall bush. The trunk and branches are brown with many spots in it.

The leaves are medium, heart shape, having sawlike notches along the edge.

The flowers are big, being 15.2 cm. in diameter. The petals have creases. The color of the flower is deep red with a dark red center.



Red Duster

Cristi Brubaker x Calypso

Higher bush, the branches are medium long but strong, tea

The leaves are heart shape having medium obtuse corrature edge, deep vegetable green color.

The flowers are big, single, having a deep red color with fresh red in the centre. The diameter is 18.0 cm. The petals are big and wide covering each other with their edge, the edge is corrugate.



Rising Sun

Single Pink x New Buffles

Tall and Strong bush, the leaves are big and thick, ovate shape, vegetable green or deeper.

The flowers are big having 12.7 cm. diameter, light orange pink color on the top of the petals, lower is pink, the center is deep pink, it is a beautiful color.



Rouge

Single Pink x New Buffles

Tall bush like a tower. The branches are long, strong and upright, tea color.

The shiny leaves are medium, narrow heart shape having the big, obtuse sawlike notches along the edge, the color is deep green.

Single, big flower has 17.5 cm. diameter. The petals are wide having the rouge color, the centre part is small having deep red color.



Shiny and shadow

Single Orange x New Buffles

This variety is a tall bush, having the longer but soft branches which always are hanging down from the trunk, this character is good for to made the hanging baskets.

The vegetable green leaves are bigger, long egg shape, having wavy edge or obtuse sawlike notches along the edge.

The flowers are big, double, having 12.5 cm. diameter, the color is orange red, the centre part is deep red, and theeir petals are corrugated. The special mark of this variety is getting a piece of yellow color in the back of the petal left side, as the flower opens the petals fold back, the yellow color will present in our eyes. Due to the branches are small and soft, and the pedicel is long and soft, so the flowers always are hanging down.



Silk Flower

Black Beauty x Cristi Brubaker

Medium bush. The branches are short, the color of the trunk and branches are grey brown.

The leaves are wide heart shape, smaller or medium, the color is green, with the medium incising edge.

The flowers are bigger, with 14.0 cm. in diameter, the color of the flower is orange pink with deep pink in the center. The petals are wide but thin such as the gauze.



Spider

Cile Tinney x Single Red

It is a low bush, the height is 100 cm. only

The branches stand erect, the old branches are grey, the new ones are green with some light purple red spots on it.

The leaves are medium size, heart shape, deep green with big, sallow, obtuse sawlike notches along the edge.

The flowers are big, double, the diameter is 16.5 cm. the top part of the petal is light pink, as lower, the pink color is deeper, the bottom is deep pink. It blooms many flowers at the same time.



Spring Sunshine

Single Orange x Cile Tinney

Medium bush, the branches are soft, low hanging, green color, as they get older they will change to grey yellow.

The leaves are chrysanthemum shape, vegetable green.

Big, double flower, the whole flower is orange pink, the center is pink.



Struggle

Cristi Brubaker x Calypso

A big and tall bush. The branches are long, brown color.

The leaves are big, heart shape with the obtuse serrature edge, deep green, a little shiny.

Medium flower, the diameter of the flower is 14.5 cm. the flower is very like the father, pink orange.



Tiger

Black Beauty x Cristi Brubaker

Straight bush with few branches which the color is purple brown.

The leaves are big, wide heart shaped, thick and fleshy, deep green and shiny.

The flower is big, single, 18.5 cm. in diameter, after fully blooming the top of the petals roll back, the thick, wide petals cover each other with their edge. The color of the petals are like tiger skin. The edge and the central place of the petal are orange pink mix with orange yellow, some orange pink on left side, some orange yellow on the right side, the lower part of the central place is white, the center of the flower is the beautiful deep pink color. All of the petals have the stripes which are light orange yellow, in the center they are changed to white color.



Trumpet Pink

Cristi brubaker x Black Beauty

Tall bush, has very long branches. The trunk and branches are light grey white color.

The leaves are big, wide heart or almost round shape, green color. The edge of the leaf is the bigger obtuse irregular serration.

The flower is single, medium size, the color is the beautiful pink. As the flower opens, the top of the petals roll in, it is the special character of this variety.



White face Monkey

Black Beauty x Cristi Brubaker

Tall bush, the trunk and branches are purple brown.

The leaves are heart shaped, the edges have waves or small irregular incisions, the color is vegetable green.

The flower is bigger having 14.0 cm. diameter, single flower, it has the reddish yellow color, close to the center, there is a white circle connected with the pink center.

This variety has a special character which is the color of the flowers according to the blooming stage is changed, in the early stage it is deep pink with some light orange, in the full blooming stage it changes to orange pink, at last is the orange mixed with the light pink. So there are multicolored flowers in a bush at the same time.



Windmill

Cristi Brubaker x Calypso

It has a spreading tree crown and has fewer but long branches, the bark is grey white.

The leaves are big, heart shaped, the edge is almost round, medium serrature, the color is vegetable green.

The flowers are big. The petals cover each over with the edge, the color is orange mixed with pink, the center part is small, light pink. The diameter of the flower is 17.0 cm.



### NEW VARIETIES

Developed by YING DOON MOY 1999 - 2006

SAN ANTONIO BOTANICAL SOCIETY
SAN ANTONIO BOTANICAL GARDEN

SAN ANTONIO, TEXAS
U. S. A.

# LIST OF NEW VARIETIES 1999—2006

Created by
Ying Doon Moy
San Antonio Botanical Society
San Antonio Botanical Garden

## THE LIST OF VARIETIES

Cottonrose hybrid	
Magic	1.
Tall Pink	2.
Rose hybrid	
Cheerful	3.
Comfort	4.
Floor Splendor	5.
Peach Pink	6.
Smile	7.
Citrus hybrid	
Flat Tangerine	8.
Moy's Pearl	9.
Big Moy	10.
Pomegranate hybrid	
Lovely	11.
Papaya hybrid	
Pretty	12.
Ginger hybrid (Tall kind)	
Chaste	13.
Early Autumn	14.
Golden Club	15.
Large Plant	16.
Snow Ball	17.
Strong	18.
Ginger hybrid (Medium kind)	
Big White Butterfly	19.
Brilliant	20.
Fairy Scattered Flower	21.
Flour Dough	22.
Golden Flower	23.

Ginger hybrid (Medium kind cont.)		
Graceful		24.
New Ball		25.
Ginger hybrid (Dwarf kind)		
After Rain		26.
Beauty Competition		27.
Small Flower Ball		28.
Dwarf Golden Butterfly	*	29.
Candle's Light		30.
Flying Butterfly		31.
Floating Cloud		32.
Golden Star		33.
Minibutterfly		34.
Morning Cloud		35.
Flashing Star		36.
Pomegranate hybrid		
Splendid		37.
Early Red		38.
Square		39.
Sweet Red		40.
Stand Straight		41.
Stone		42.



Cottonrose hybrid

Magic

Magic is an interspecific hybrid, a dwarf cottonrose variety. The height is 90 cm only. Palmate shape leaf is green or deep green color with some purple red spots. The flower is large, 16 cm. diameter, deep pink color. The flowers bloom in late Spring and in early Summer are the single flower. In Autumn they always change to produce the double flower. The flower is sterile.



Cottonrose hybrid
Tall Pink

It is an interspecific hybrid. The parent is F. mutabilis and H. moscheutos, created in 2000. It has a tall and stout body, and can grow up to 10 feet. Cold resistance, under 20°F still alive, easy grow, easy to take care. It has a long blooming season, from Summer to Autumn. The flower is medium sized, pink in color. It always has the double flower in Autumn and has the single flowers in Summer. Sterile.



## Rose hybrid Cheerful

Cheerful is a strong plant, 75 cm. height, spread tree crown, with medium long branches with the lightly deep green leaves. The bigger size deep red color double flowers are solitary on the tip of the branches, fragrant.



Rose hybrid

#### Comfort

It is a double petal big flower hybrid. The parent is Palace Pink and Chrysler Imperial.

It is a big and strong bush, 85 cm. height, 70 cm. in width, spreading tree crown. The leaf is lightly deep green, shining. The flower is big, 16 cm. in diameter, deep pink color. Because the flowers are big and heavy, they easily hang down, sometimes it is necessary to support with a stick.



Rose hybrid

Floor Splendor

It is a dwarf variety, 38 cm. in height, 60 cm. in width. The branches are short and small, 15 cm. in length only. The small double flower is 7.0 cm. in diameter, deep pink color. Because the branch and the flower pedicel are small, the blooming flowers always hang down.



Rose hybrid

Peach Pink

It is a higher bush, 95 cm. height, 60 cm. in width The branches are long and larger. The leaves are bigger, lightly deep green. The young one is purple red. The flower is medium size, 12 cm. in diameter, pink color, strong fragrance.



Rose hybrid

Smile

Smile is a high body strong variety, 80 cm. height, has long branches (22-30 cm.) The flower is big, double flower, light pink color, strong fragrance.



Citrus hybrid Flat Tangerine

This variety is a hybrid of Changsha, created in 2004.

The fruit is flat round shaped. The top and the bottom of the fruit are flat too. The small size fruit has an average weight of 60g. The surface of the pericarp is smooth, bright and clean, orange colored with some red. The pericarp is 2.5 mm. in thickness, soft. The Sarcocarp is tender, few dreg, juice, sweet, the soluble solidity material is 12. It has one seed in a fruit.

Hardy variety, under 20°F it has not any damage. The harvest season is at the end of November.



Citrus hybrid
Moy's Pearl

It is a dwarf variety, built up in 2004, easy growing in the garden and also good for potting. The fruit is a small size, higher oblate shape. The pericarp is deep orange with some red color, bright, clean and smooth, The structure of the fruit is solid. The thin pericarp is 2 mm. in thickness. The sarcocarp has a beautiful orange color, juice, few dreg, sweet with little bit sour, taste is strong. The soluble solidity material is 15, no seeds or only one.

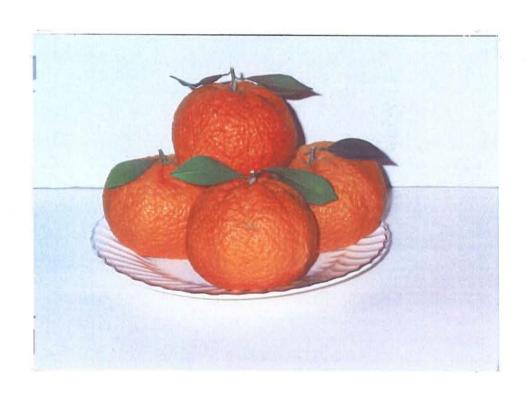
The harvest season is at the end of November.

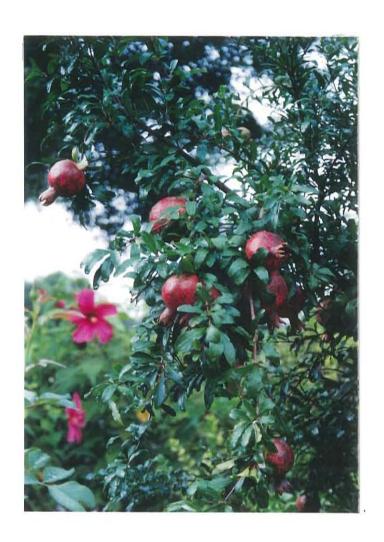
Citrus hybrid Big Moy

Big Moy is a triploid variety. It is a strong variety. Its growing is sturdy and vigorus. The branches and leaves are dense.

The fruit is a big sized, 250g in weight, high oblate shape, with an orange color pericarp with some red, 4mm. in thickness, coarse but easy to peel, The centre core of the fruit is hollow. The pulp is orange with some red color, The juice is plentiful and sweet; the soluble solidity material (basically is sugar) is 12, no acid feeling, almost seedless (0-2).

It is a hardy variety, under -8°C it doesn't has any damage, under the drought weather if having certain irrigation, it will successfully grow up and produce good fruit.





Pomegranate hybrid Lovely

Lovely is a medium high variety, having 2 M. height only. It has strong and vigorus growth, dense leaves and branches, fruitful. The fruit has a beautiful red peel. The seed grain is deep pink color, juice, sweet and sour. It is a good variety for home garden.



Papaya, hybrid

Pretty

It is a medium sized plant, setting fruit early. The primary fruits almost touch the ground. The fruit is medium size 900g.-1300g. each. Under good cultural environment the fruit's weight is higher than this. It has a long oval shape with a nipple, The pulp is tender, juicy and sweet, and yellow in color. The flower is yellow, unisexual, and has some fragrant smell.

It has no special disease, and is to easy take care and easy to grow. In alkaline soil which is deficient of Iron, add Iron fertilizer such as Ferrous Sulfate (FeSo<sub>4</sub>) to maintain green leaves before setting fruit. After the last frostbite in mid-March hurry to plant the papaya with good care, it will start to produce mature fruit in September and continuouly give the mature fruit until the primary freezing day.



Ginger hybrid Tall kind

Chaste

Chaste is a big and tall variety. The height is up to 1 M. 80 cm. Under semishade environment, its pesudostem is somewhat strong. The leaf is a big lanceolate, thick and soft, lightly deep green. The flower is big, and cream colored with some lightly orange red color in the center. The fresh and clean flowers are fragrant.



Ginger hybrid Tall kind

Early Autumn

Hedychium coccineum X H. coronarium F<sub>2</sub>
Early Autumn is a tall body variety. Growing in rull sun the height of the plant is 1 M. and 60 cm., and it belongs to the more branching kind of ginger. The pesudostem is medium strong. The leaves are pig, lanceolate, fat and thick.

The inflorescence is 20 cm. long; it looks like a big flower club, when it is in full bloom

The inflorescence is 20 cm. long; it looks like a big flower club, when it is in full bloom period. The flower is big, golden colored, and fragrant. The petals are yellowish orange with a deep orange color in the center. The anthers are

dark orange. The bract is long.



Ginger hybrid Tall kind Golden Club

This variety under dense planting will grow up to 1 M. and 60 cm. height. Its pesudostem is strong and will not fall over. It has a large plant group; plants enjoy growing together.

plant group; plants enjoy growing together.

The inflorescence is long, growing up to 30 cm. and has the specially long and sharp bracts

The flowers are medium size, have a lightly golden color with the golden color in the center. The anthers are deep orange.



Ginger hybrid Tall kind Large Plant

It is a tall and strong plant. Under the shade it can be grow up to 1 M. and 60 cm. It has the big and wide deep green lanceolate leaves.

The bracts are especially long, and the inflorescence is long too, growing up to 30 cm. or over. The big flower has a light orange color with the deep orange color in center. Strong fragrance.

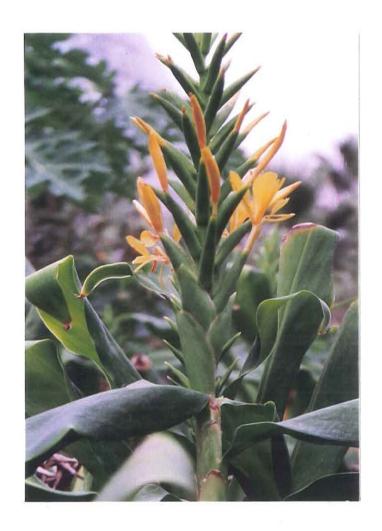


Ginger hybrid Tall kind

Snow Ball

It is a tall variety. Under semishade environment, the height is 1 M. and 50 cm. Snow Ball is a more branching variety. Plants cluster together. Growth is strong, with a long blooming season in the garden from July to October. The leaf is short and wide lanceolate.

The inflorescence is big, globular shape in full bloom time. The flowers are big, cream colored with some light lemon yellow in the centre. Fragrant.



Ginger hybrid Tall kind Strong

Strong is a tall variety, getting 1 M. and 50 cm. height. Its pesudostem is gross and has vigorous growth.

The inflorescence is long, always up to 30 cm. The medium size flowers have a golden yellow color.



Ginger hybrid Medium kind Big White Butterfly

It is a medium sized plant. Under full sun the height is 1 M. 10 cm. It has medium plant group. The strong pesudostem sometimes appeared oblique style but does not fall over The leaves are thick and solid lanceolate, deep green.

The inflorescence is 15 cm. in long, round post shape or spread. The flower is big, cream colored with some light yellow

in center. Fragrant.



Ginger hybrid Medium kind Brilliant

Brilliant is a medium height and medium branching variety. The growing is healthy and ro-bust. The leaf is wide lanceolate, thick and soft, lightly dark green in color.

The inflorescence is a giant one, 28 cm. in long, 18 cm. in wide. The flowers are big, light orange in color with the orange color in center. The blooming inflorescence is brilliant, especially in the last half blooming period when it is deeply in its orange color. Strong fragrance.



Ginger hybrid Medium kind Fairy Scattered Flower

It is a medium high plant. Under the shade the height is 1 M. and 35 cm. Robust plant. The leaf is wide lanceolate shape, deep

green, inclined upright.

The medium size inflorescence has big flowers. The bract is long, highly stretched out. The white colored petals have some yellow color in the center. Anther is orange red. The color of every part of the flower is vivid and clean. Fragrant.



Ginger hybrid Medium kind Flour Dough

Flour dough is a medium height plant. Growing under shade the height is 1 M. and 25 cm. It has a medium plant group(about 20 plants). The pesudostems are bigger and strong, and do not fall over. The leaves are wide lanceolate, short and thick, lightly deep green. Inflorescence is short but strong, 15 cm. in length only, and globular shaped. The big flower has lightly yellow color.



Ginger hybrid Medium kind Golden Flower

This slim body variety has height of 1 M. and 20 cm. The leaf is slightly narrow lance-olate shaped, lightly deep green.

The bract is long and leam. The flower is smallish, golden yellow colored.



Ginger hybrid Medium kind Graceful

Graceful is a medium sized plant. Under full sun the height is 1 M. and 20 cm. It has a large plant group; more plants grew together.

Its inflorescence is medium, global shaped. It has the big flower which is white in color with some light yellow in the center. Its petals are wider than most ginger varieties. The bract is long and thin.



Ginger hybrid

Medium kind

New Ball

New Ball is a medium height variety, about 1 M. 25 cm. in height. Strong pesudostem very few fall over. The leaf is solid, short and wide lanceolate, lightly deep green color.

The big inflorescence has a candlelight shape. The flower is cream colored with light yellow in the center. Brilliant bloom, fragrant.



Ginger hybrid
Dwarf kind (big flower)
After Rain

It is a dwarf variety. Under semishade the height is 1 M. and 5 cm. It has a thinner plant group. All of the pesudostems are strong and blooming. The leaf is short, fat and thick lanceolate shape, green color with some lightly

deep green.

The inflorescence is 15-20 cm. in length, candle light shape. The big flower has white petals which are decorated with some bright yellow in the centre. The anthers are deep orange. The whole flower is supported with the deep green bract. The color of flower's different parts are obvious, fresh and bright, it looks after the cleaning by the rain.



Ginger hybrid
Dwarf kind (big flower)
Beauty Competition

It is a dwarf variety. Under full sun the height of plant is 1 M. The pesudostem is big and strong. Its growth is healthy and robust; it does not fall over. The leaf is short lanceolate, fat and thick, deep green in color.

The inflorescence is the candle flame shape. The flower is big, cream colored with the light yellow in the center.



Ginger hybrid

Dwarf kind (big flower)

Small Flower Ball

It is a hybrid which comes from H. coccineum and H. coronarium. Small Flower Ball is a dwarf variety, with strong growth and plentiful blooms.

The inflorescence is 13-15 cm. long and has the long bracts. In full bloom the inflorescence is global shaped. The bigger flowers are cream colored with a lightly yellow center.



Ginger hybrid
Dwarf kind (medium flower)
Dwarf Golden Butterfly

This variety belongs to the dwarf ginger group. Under full sun the height of the plant is 80 cm.-90 cm. It is a medium branching kind in ginger, and its pesudostems are firm few to fall over. The leaf is lanceolate, flesh, flat and thick, deep green in color.

The inflorescence is medium size, with a ball shape The flowers are medium, lightly orange color with a deep orange color in the center, and the anthers are deep orange in color too. The whole inflorescence appeared a beautiful golden color. Fragrant.



Ginger hybrid
Dwarf kind (medium flower)
Candle's light

It is a dwarf variety. Under full sun the height is 90 cm. The short and strong pesudostem is very few to fall over. It has the shorter leaf node. The leaf is the wide, fat and thick lanceolate, green color.

The inflorescence is 13-15 cm. long, has many medium size flowers and presented an orderly obtuse pyramid shape in full bloom. The flowers are medium, lightly orange yellow colored and fragrant. The bract are long and sharp.



Ginger hybrid
Dwarf kind (medium flower)
Flying Butterfly

Flying Butterfly is a dwarf variety. Under full sun its height is 1 M. The pesudostem is strong and does not fall over. It belongs to the more branching kind of ginger. The color of the leaves is lightly deep green.

The inflorescence is medium sized and always has a globular shape at full bloom. The big flower is cream colored with orange yellow in center, fragrant. Anther's color

is deep orange.



Ginger hybrid
Dwarf kind (Small flower)
Floating Cloud

It is a dwarf body variety with many shoots, many inflorescences and more flowers. The flower is a bigger one in the dwarf varieties, cream in color with lightly orange yellow centre, fragrant. It is easy to grow. It is good for flower bed and also for potting culture.



Ginger hybrid Dwarf kind (small flower) Golden Star

Golden Star is a dwarf variety, 31 cm. height and has short, wide leaves. The flower is smaller, getting a beautiful red orange color, and its bracts are long, straight and sharp, fragrant.



Ginger hybrid
Dwarf kind (small flower)
Minibutterfly

Minibutterfly is a dwarf plant, 38 cm. height, good for ground culture and also good for potting culture. Medium size inflorescence has medium quantity flowers. Its flowers are small but its petals are wide. It looks like a butterfly stayed on the plant. The flower is white in color with a yellow centre, fragrant.



Ginger hybrid
Dwarf kind (small flower)
Morning Cloud

Morning Cloud is a dwarf variety, 35 cm. height, and a strong plant. Flower is a beautiful light orangered color with a deep orange red center. Fragrant. It is a good potting variety.



Ginger hybrid
Dwarf kind (small flower)
Flashing Star

It is a dwarf ginger variety, 90 cm. height. Its growth is vigorus. The short and wide leaves are light green in color. The flower's color is light red with a deep red center, fragrant. It is easy to grow in the ground and in the flower pot too, and has bunches of flower.



Pomegranate hybrid Splendid

Splendid is a higher plant, with height up to 7 feets. It has a good looking shape. The growing branches always stands straight. The leaves are short and wide. The flower is a bigger one, deep orange-red color. The dark red calyx is its speciality. The fruit is small size about 125g in weight, round shape, full and firm, red peel. Its pericarp is thin, 2 mm. in thickness. The seed's cover membrane is red, bright. At the end of July the fruit juice is sweet, no acid in feeling. The soluble solidity material is 17. We can start to pluck the fruit in hot Summer. It is the flower and fruit variety for the garden.

Pomegranate hybrid Early Red

Early Red is one of the dwarf kind.
The height is 153 cm having a dense tree crown and a stout growing. The leaf is short and wide, deep green. The flower is medium size having the lightly orange color. The medium size fruit is a narrow round shape, deep red. The pericarp is



smooth, clean, no scars, no burst, shining. But in the hot Summer it may got some sunburn in the top of the fruit.

The cover membrane of the seed is big, having plentiful light pink juice, which is sweet, no acid in feeling. The soluble solidity material is 18.5

The fruit can start to be harvested in mid of August.



Pomegranate hybrid Square

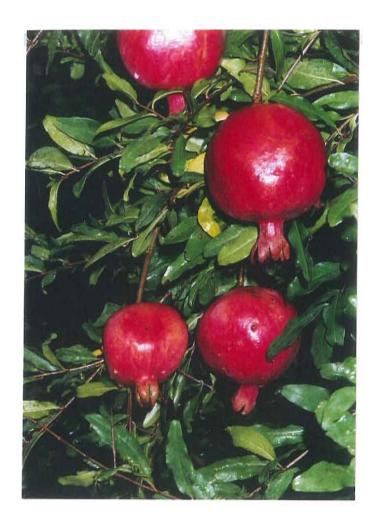
It is a medium high tree. Its growing is glorious, having a dense and almost round tree crown, The leaves are medium size and the flower is the smaller kind. Its fruit is medium 230 g. in weight, square shape with the acuminate base. The pericarp is thin, 2-3 mm. in thickness, smooth, shining, beautiful pink color.

It is an early maturity variety. The soluble solidity material is 18.5 at the end of August, it is sweet and juicy, no acidity in taste.



Pomegranate hybrid Sweet Red

Sweet Red is a dwarf kind. The medium size fruit is 290g. in weight. The fruit is round, deep red, shining, slick, no scars, beautiful. The pericarp is thick, 4 mm. in thickness, tough and firm no breakage. The cover membrane of the seed is big. The fruit juice is sweet, no acid in taste.



Pomegranate hybrid Stand Straight

The height of this one is 183 cm. It stands straight, has robust branches, and has long and wide leaves. Its growing is strong.

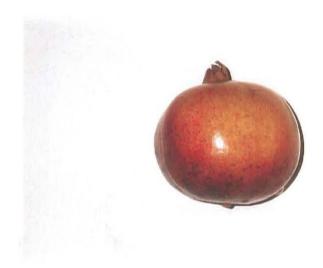
The fruit is medium size, round shape with some dull angle. The pericarp is deep pink color, clean and smooth, no scars, very few sunburn and no more dehiscent fruit, Its juice is sweet; the soluble solidity material is 17.

Pomegranate hybrid Stone

It is a taller plant, with the height up to 213 cm. having a strong growing and a dense tree crown. The leaves are big and wide. The flower is a bigger one but its petal is short. It has o kay fruit, diameter 8.0 cm, and the weight is 420g. The shape of the fruit is somewhat flat round. The color of the fruit in its growing period is green. As it matures, the color changes to light brown with some pink color. The peel is thick and not smooth.

It has very few dehiscent fruit and no more sunburnt fruit. The cover membrane of the seed is big, the fruit juice is sweet, no acid in taste.

It is easy to grow, has a strong hold fruit character, and tolerates drought.



8 -

After many years culturing the Citrus hybrid plants about 40% started to bloom and bore fruits in this year. Another 60% Citrus hybrid plants will bloom in next year.

Through the research and test year after year 5 kinds hybrid have good quality, high product and suit the environment and culture of San Antonio area. These were selected out in this year--2007, and they have been examined by the specialist group. About the special characters of all of these 5 new kinds I will report in following.

4 new hybrid ginger varieties were sold in this year: Flashing Star, Golden Star, Big Flower Ball and Dwarf Golden Butterfly. All of them belonged to the dwarf kinds.

The new Pomegranate varieties were propagated and kept in the cold frame for extension now and they are growing very well. After I came back to work in San Antonio Botanical Garden 4 years ago I also built up some kinks of new varieties. These are the new varieties of Roses Cheerful, Smile and Comfort. Now they are strongly growing in the test box for extension.

More than 40 new Ginger varieties are growing in the garer den and in the cold frame for extension too.

All of these successes were through hard work day after day and skillful arrangement. I must thank the project supporters—San Antonio Botanical Society and San Antonio Botanical Garden for their friendly support and material support in the whole.

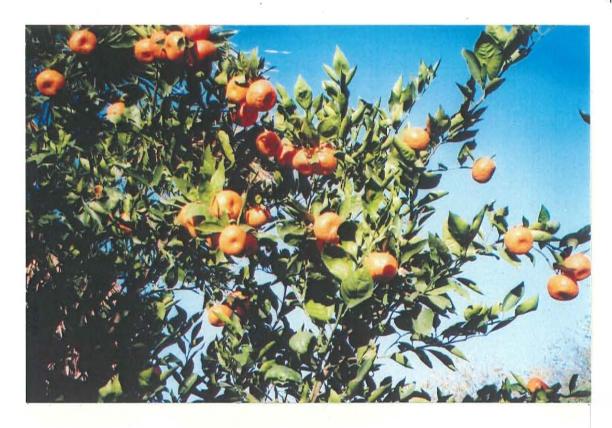
I have to thank to Ms. Candace Andrews--The managing director of San Antonio Botanical Society. She always gives encouragement and support to finish the annual report.

I have to thank Mr. Scott Litchke -- the horticulturist of

San Antonio Botanical Garden and Robert Reed, who always offer friendly support to finish the hard job any time any work is needed to finish in the research garden.

At last I deeply thank to all of the staffs of the San Antonio Botanical Garden and San Antonio Botanical Society for their friendship and support. I never forget that, they are deeply preserved in my heart.

Plant Researcher
Ying D. Moy





## Moy Flourishing

Flourishing is a strong and high body variety having a dense and spread tree crown. Its branches are medium long but stout and somewhat decline, thornless. The leaf is little bit big and thick and always has some waves on it, long oblate, deep green color.

The fruit is flat round, small, orange color and with some light red. The thickness of the peel is 3.5mm. The sponge layer is thin and loose. The pulp is orange color, juicy, tender, sweet, no acid felling, 0-2 seeds only. The soluble solidity material is 11.3.



Moy Sweet Bun

It is a medium height variety, having the stout growing and a spread tree crown. The branches are shorter but strong and with the big thorn on them. The leaves are green, medium size, ellipse shape, thick and hard, smooth but somewhat rolling up.

The fruit is big, 220g. in weight, higher oblate shape, full and firm body. Around the fruit stem space there are few concave and convex. The fruit bottom is shallow cavity. The peel is somewhat coarse, light orange red color with little bit green. The pulp is juicy, tender, sweet, no acid in taste, deep orange color. The soluble solidity material is 13.7 l seed.



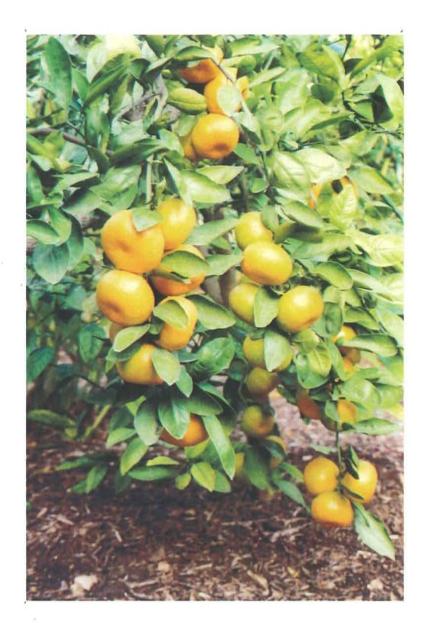
Moy Bumper

It is a hybrid of Changsha and Satsuma. It has a strong and dense tree crown. The medium or some long branches have some small thorns or thornless. The bigger leaves are long ellipse form and have somewhat waves on its mesophyll, deep green color.

The medium size fruit is 180g. in weight, oblate form, orange color, full development. The pericarp is 3-3.5 mm. in thickness, smooth and polished. The sarcocarp is full development, juicy, sweet with little bit sour taste. Seedless or has 1-2 seeds.

This variety always bore more fruits and needs to lighten some to avoid breaking the branch

Year end is the fruit mature season.



Moy Rich

It belongs to Satsuma series, has a spread tree crown, long branches always hang down. The leaf is long ellips shape, little bit thick and has a very small leaf wing, freshgreen color. It is fruitful. The medium size fruit is 190g. in weight, oblate shape. The thickness of the peel is 2 mm. and has a thin sponge layer, easy to peel. The pulp is tender, juicy, sweet, very few acid in taste, seedless.

This variety growing in San Antonio Botanical Garden demonstrated some drought resistance and warm tolerance. It doesn't has the dry and insipid fruits.



## Vigorous Marrs

It is a new strain of Marrs. It comes from the nucellar embryo of Marrs. It has a strong vitality, higher body, glorious and dense of branches and leaves, bigger fruit. It maintained the good characters of mother plant. It is a revival baby of a old variety.

The weight of the fruit is 330-350g. Its pulp is tender and juicy, sweet, no acid in taste, few seeds.

This Marrs grows with its own roots and is susceptible to root rot. We must avoid covering too deep with the mulch around the tree base, and not overwater. As planting a new tree, keep the stem base little bit higher than the ground to avoid over watering and excess rain.