Future of Tillandsia

Going Forward !!!

My Game is 'To Create' !

Presented by HIROYUKI TAKIZAWA

1996 Mexico **1997 Ecuador, Florida(The Everglades) 1998 Honduras**, El Salvador 1999 Panama, Costa Rica **1999** Mexico 2000 Mexico 2001 Mexico 2003 Brazil 2004 Venezuela 2005 Venezuela **2005 Ecuador**

Tehuacan Desert Mexico 2000

Adventure to discover new species. **WHAT'? Creative Imagination. Cultivar improvement** or hybridizing to create new plants. Seeding !!!

Sharing the new plants with plant lovers.



STATION NATURELLE DU SCHOURSHORTA UNDULATA.

1996 WBC Orlando Florida

T. chiapensis X T. xerographica

Created by Mark. A. Dimmitt

Now, there are so many of Tillandsia Hybrid all over the world.

But over 20 years ago, it was so rare to see a good Tillandsia Hybrid.

I was so impressed and decided to start hybridizing.

It was 1996.



Started hybridizing since 1996 and also started sterilized seeding

NEIGHBORNO

ASONE

Started Hybridizing of T/R. dyeriana with selected Racinaea group.

Over 20 years ago.



R/T. dyeriana

Step of R. dyeriana Crossing

start

Removal of Floral Bract

Sepals removed

Removal of 3 petals and 6 stamens

Stigma appears !

Pollination



Aim : try to transplant wavy, crispy, dark colored leaf to dyeriana.

Challenge

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When I started to create hybrid with dyeriana and crispa, dveriana was still in conve

dyeriana was still in genus Tillandsia.

I really tried, but 1st year, none of seed pod matured.

And I consulted several of specialists.

They all commented, such a strange combination maybe impossible.

But I never gave up.

1st year, · · · seed pods did not mature.

2nd year, I was so delighted to see one matured seed pod !

If you see closely, all the other parts were pollinated.

But no seed pod.

After the pollination , it took about 13 month to get fully matured seed pod.

..... Not an easy way.



Crispy, Wavy leaves with Brown Spots. pseudo-bulbous Folliage from R. crispa

4

-10



Birth of "La Mano Magica"

T. dyeriana was re-classified to Racinaea a few years ago.

But this is the first x Racindsia in the Bromeliad world.

Harry E. Luther advised the name of this new genera 1st time bloom was August 2002.

Mano = Hand Magica = Magic

La Mano Magica = Magic Hand

Close up of Racindsia La Mano Magica



Adapt very well in the terrarium culture. My friend is growing this in the Netherlands.



Over 500 plant boxes/bottles with over 10000 seedings

TIWIN



R. undulifolia AThen, What is the solution ? with beautiful inflorescens Hybrid Zing with heat tolerant species ! Not too different in shape, especially flower/inflorescence. Then, How about R. dyeriana

R. dyeriana X R. undulifolia

Very upright foliage

Stiff leaves with undulated margin

Heat tolerant !



Inflorescens/Spike will be branched in the next generation

Close up of side view

R. dyeriana X R. undulifolia Anatomy



Anatomy 2





Very rare high altitude Racinaea

from Ecuador-Peru boader

Heat Sensitive



R. pendulispica spike

I crossed this also with dyeriana.

Maybe, I love dyeriana too much.

I crossed dyeriana with; arequitae, barthlottii, brachyphylla, barfussii, cacticola, cyanea, gardneri v. rupicola, gerdae, gilliesii, grazielae, kautskyi, kirschnekii, peiranoi, peiranoi v. alba,

T. grazielae (grows downward)



T. grazielae



Tillandsia **'Mirai'**

'Mirai' is a Japanese word which means 'Future'

R. dyeriana x T. grazielae Original Hybrid

Side View of 'Mirai'. R. dyeriana grows upright.

T. grazielae grows downward. 'Mirai' grows sideways !


R. dyeriana X kautskyi (Jan. 2013)



T. dyeriana X **T. kautskyi**

Selected 'Large Clone'





About 28cm tall

Very densely branched inflorescence

> Each spike is like a dyeriana. But, ..., I was expecting a pendulous spikes.

T. brachyphylla

A COMPANY

First time bloom of dyeriana x brachyphylla.

I hope there will be a bigger inflorescence next time.

Tillandsia **'Mirai'**

'Mirai' Is a Japanese word which means 'Future'

R. dyeriana x T. grazielae Original Hybrid **T. 'BSJ'**

Seed Parent : T. flagellata 'Best Clone'

Pollen Parent : T. 'Silverado' grex sibling

Seeding: 2003

T. 'Red Claw'

Seed Parent : T. flagellata 'Best Clone'

Pollen Parent : T. 'Silverado' grex sibling

Seeding : 2003

Grex sibling is T. 'BSJ'



T. 'Half Century'

Seed Parent :

T. mooreana

Pollen Parent :

T. chiapensis

'Selected Clone'

Seeding : 2003 Bloomed : 2014 This plant bloomed in the year when I turned to 50. So I named this as 'Half Century'. Grex sibling of T. 'Half Century' This plant is a purple leaved type and I have been calling as Half Century Purple Clone.

Started to bloom

Also started to show variegation,

Seeding: 2003/

Tillandsia 'Lemon Ice'

Selected Original Hybrid BCR 13714

> Seed Parent : *supermexicana* var. *saxicola* Pollen Parent : *chiapensis* (large clone) Grex sibling = T. 'Key Lime' Seedling date : March 12th 2003

First Hybrid of

T. supermexicana v. saxicola

In Bromeliad Hystory

Tillandsia 'Lemon Ice'

Note: Creamy white Petals

Seed Parent: Green Petals Pollen Parent : purple Petals

Tillandsia (Key Lime)

Selected Original Clone BCR 14053

> Seed Parent : *supermexicana* var. *saxicola* Pollen Parent : *chiapensis* (large clone) Grex sibling = T. 'Lemon Ice' Seedling date : March 12th 2003

Tillandsia 'Key Lime'

Tillandsia 'GP 2016'

Selected Original Hybrid BCR 14057

Seed Parent : chiapensis (select, branched clone) Pollen Parent : xerographica (large, straight leaved clone) Grex sibling = T. 'Wild Swan' Seedling date : March 17th 2004

Tillandsia 'GP 2016'

Over 15 years ago, this plant was moved to *T. xerographica* from *T. tomasellii*.

However, morphorogically, looks different from *T. xerographica*. Inflorescence of '*T. tomasellii*. Each spike has long neck compared to *T. xerographica*.

BEST T. chiapensis in my Bromeliad History

Tillandsia 'Wild Swan'

Seed Parent : chiapensis (select, branched clone)

Pollen Parent : xerographica (large, straight leaf clone / tomasellii or kruseana type)

Seedling date : March 17th 2004

Selected Original Clone BCR 14055

Tillandsia 'Wild Swan'

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The souther is

Tillandsia 'Wild Swan

ZAT

Tillandsia 'Katana'

Selected Original Hybrid BCR 14054

> Seed Parent : *chiapensis* (pink clone) Pollen Parent : *copanensis*

Seedling date : October 5th 2004

Tillandsia 'Katana'

Traditional Japanese Sword ('Katana')

Tillandsia 'Katana'

TAN

Tillandsia 'Deep Impact'

Seed Parent : x bergiana Pollen Parent : kegeliana

Seedling date : January 3rd 2005

Selected Original Clone

Crex Stoling does not exist ! ONLY ONE plant survived from seeding batch.

Tillandsia 'Deep Impact'

T. reichenbachii 'White Flower'

T. peiranoi v. alba

Tillandsia 'Snow Flake'

Seed Parent : *peiranol* var. *alba* Pollen Parent : *reichenbachii* (white flower form) Seedling date : 2003 February 23rd

> Selected Original Hybrid BCR 12972

Tillandsia 'Snow Flake'

Really beautiful.

However, only ONE plant from the Grex has open petal with perfect shape ! T/Barfussia wagneriana Compact Deep Pink clone (Ecuador 2005)

Hybridyzing

Half size of T. Creation and 14 spikes !

Barfussia wagneriana : seed parent Wallisia cyanea : pollen parent

X Wallfussia 'Hana' 花(Flower) / 華

x Barcinaea 'Pink Feather'

Barfussia wagneriana (seed parent) Racinaea dyeriana (pollen parent)

Bromeliad Cultivar Register (15931)

xBARCINAEA 'Pink Feather'

Takizawa, Hiroyuki

Mature rosette to 40cm, diameter x 35cm, high. Arching, glossy, dark green, pliant leaves and the foliage reverse is purplish. The erect, multibranched inflorescence is 70cm tall with horizontal side branches (6-9) of segmented, pointed, narrow "paddles" of deep pink floral bracts and lavender flowers. The first x Barcinaea cultivar ever registered. Reg. Doc. 2/2020 Country of origin: Japan

Seed Parent: Barfussia wagneriana





Mature rosette to 40cm. diameter x 35cm. high. Arching, glossy, dark green, pliant leaves and the foliage reverse is purplish. The erect, multibranched inflorescence is 70cm tall with horizontal side branches (6-9) of segmented, pointed, narrow "paddles" of deep pink floral bracts and lavender flowers. The first x Barcinaea cultivar ever registered. Reg. Doc. 2/2020


Transplant : **very succulent folliage of peiranoi** to **T. dyeriana**.

Flower character is similar.



R. dyeriana X T.peiranoi

Very succulent folliage from *T. peiranoi*



T. neglecta (CaboFrio) 2 forms

Picking up good clone is important

T. neglecta 'Rubra'

. neglecta Green Form





Green Form T. complanata **Red Form Ecuador, 2005, they were growing side by side.**



Small Green Form T. disticha Large Red Form Ecuador 1997

Problems of Hybridising

- Ideal 2 species do not bloom at the same time.
- Blooming cycle is longer in some species.
- Even pollinated, very often, seed pod does not grow...
- Sometimes, elongated seed pod is empty
 or having only a few seeds

 After bloom, after 10 to 15 years, blooming plants differs from imagination Preserving pollen in freezer is possible. But the solution for the other problem is Maybe Effort and Passion.

Hybrid Breakdown

Sometimes, seedings die

all together.

One Lucky Exception from

Hybrid Breakdown

Reportarensis x streptophyth HYBRID:2017.2.11(seed)

T. cacticola

very selected clone from Harry E. Luther

variegated seeding happened Only Once in the last 20 years !







(Mediopicta type)

(Marginata type)

However Both did not make it Acclimation was too difficult.



Also died in 1 month after taking out from the culture box.

I consulted Harry E. Luther.

He commented ; cacticola prefers cool dry. dyeriana prefers wet warm.

They prefers extreme of opposite climate. Maybe that could be a key.

Anyway, I tried to propagate

Propagation of 15 Years !

Effort of 15 Years ! wever,all died !!! Acclimation was really difficult.

Finally ! Started to grow well outside of the plant box !





T. 'Kiseki'

Bloomed only twice in last 16 years.

Pure White Petals

Blooming NOW !

T. gardneri v. rupicola 'Lavender Petals'



T. brachyphylla

T. brachyphylla X T. gardneri v. rupicola 'Lavender Petals'

T.brachyphylla x gardi HVBRID:2014.12.27(seed







T. 'Strawberry Frost' BCR15928

Lavender Frost and <u>Strawberry Frost</u> are Grex siblings. Lavender color of the floral bracts came from rupicola as well as dense trichomes.

Strawberry color came from brachyphylla.

Tillandsia 'Lavender Frost'

Both hybrids has trichome on floral bracts like frosted.

Tillandsia 'Strawberry Frost'

T. grazielae

T. erici

T. grazielae X erici

T.grazielae/erici Seedling:2013.11.30

T. grazielae X erici



Summer of 2018

1	20 (金)	21 (土)	22 (日)	23 (月)	24 (火)	25 (水)	CH 12345 TXE
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Summer of 2018 was extremely hot I thought this unusual heat disturbed the bloom. So pity, but expected for next year !

T. grazielae X erici

Summer of 2019



Huge pity was Summer of 2019 was even more hot !!! Again, terrible heat disturbed the bloom.
This winter, unexpectedly, one inflorescence started to grow.

January to February is a blooming season of Brazilian Red Flower Tillandsia.

So, I've been really really praying to bloom Before my departure.

I took this photo Just before my departure.







Leaves are alternate

and

-looks flat

from the side view.



Even small pups are flat shape with alternate leave.



2015 April Dennis Cathcart visited me.











Wild Collected variegated *T. hondurensis* 1998



T. hondurensis 'Variegated'

2016

T. hondurensis 'variegated'

2018

T. hondurensis with 'Perfect variegation' 2019 T. flabellata

'Variegated'











A.

T. 'Solar Glow' = T. duratii with bright Yellow Variegation

Hechtia texensis 'variegated'

Variegation on Tillandsia

• Variegated plants are almost always attractive.

 But in case of Tillandsias, variegation on pups does not happen well.
sometimes green, sometimes albino,

I got one rare type variegated Tillandsia from hybridizing.

T. brachyphylla (pollen parent)

T. sprengeliana (seed parent)



Highly scurfed silvery grey succulent leaves

2013 March

Tillandsia 'Red Gem'

2019 March





Tillandsia 'Mother's Day'

Seed parent : T. carminea

Pollen parent : T. minasgeraisensis

Tillandsia 'Mother's Day'

Size comparison of inflorescence





T. 'Mother's Day'

T. carminea X T. minasgeraisensis as seed parent.

T. 'Red Gem'

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T. splengeliana X T. brachyphylla as pollen parent.

One seedling from Grex Siblings started to show

Special Color !

Pup is showing a proof of Speciality

6 cm tall

1005

5.1-

Miracle in Real Time

Tillandsia 'Mother's Day'

BCR 15844

Seed parent : *T. carminea* Pollen parent : *T. minasgeraisensis*

T. 'Red Gem'

T. spiengeliana X T. brachyphylia

Pups well under sterilized media.

> Of course, free from any kinds of hormones.

New leaves come out as albino, then get Pinkish with strong light.

> As leaves goes outside, slowly turns green.

Variegated Tillandsias are very

rare and not easy to get

But even if we get them, we need to worry about variegation of pups

This Tillandsia has new type of variegation on pups. But I worried. Is this phenomenon possible only in sterilized culture ?



I took them out from the culture box over 1 year ago. It was tough enough, even under very strong sunlight of last summer.

Rut Color was 222



Summer of 2019

New leaves come out as albino, then get **Pinkish** with strong light.

Amazing !!! New Type Tillandsia (!!

If you see closely, upper part is pinkish with strong light. Pups in lower position are whitish or even greenish because of less light.

In summer, this Tillandsia gets pinkish.

Then, in winter ???

September of 2019

Photo of 14th Feb. 2020

End of winter, not enough sunlight, pinkish color faded and very whitish. But incredibly beautiful.

And I will love to see this in bloom !!!



Muchas

Gracias !!!

