



# Hibiscus International

April May June 2010

Vol. 10 No. 2 - Supplement

## A WORLD **FIRST** FOR HIBISCUS (WE THINK)

By Rita Abreu (Brazil) & Kes Winwood (Canada)

A few months ago when Rita Abreu posted the pictures of her method of germinating seeds, I found the concept very intriguing and decided it was worth experimenting with the technique; I failed - twice and gave up on the idea. I know now that my problem was one of inadequate temperatures to get the seeds to germinate.

“Rita explains that she only germinates hibiscus seeds by this method. After 17 years growing hibiscus, in recent years we have tested all the methods that we knew existed, and we created this method for the following reasons:

1. This method had the lowest loss rate;
2. Everything is visible;
3. It occupies less space during germination and during the first days of life of the seedlings;
4. Containers with the seedlings can be placed anywhere in the house (usually I stack the containers inside a cardboard box);
5. Containers can be easily carried (almost every weekend I take a box of containers with seedlings to the country home);
6. But most important, the germination is very fast, in five days the seedlings can already be planted in pots.”

Then a few weeks ago she posted pictures of how one might send pre-germinated seeds to someone within a regional area such as Brazil, the U.S. or perhaps within Europe. That is when an idea formed in my mind that seemed, at the time, to be absolutely crazy. Would it be possible to send germinated seeds internationally and have them survive? As they are technically still seeds and are not in soil, there were no problems in sending them in the mail in the regular way with clear customs declarations that they were Rosa Sinensis seeds. So, I contacted Rita and asked if she wanted to try this method and ship pre-germinated seeds from Brazil to Canada.

Rita quickly agreed to the experiment. What I did not know at the time was

she had come up with the idea and had everything prepared for shipping germinated seeds BUT had never actually sent seeds this way. Not only was this to be a test of the concept but we were taking it a step further - into “international waters”, so to speak.

The one thing that we agreed upon immediately was that the package would have to be sent as registered mail as this option would allow us to track the package if necessary and the fact that registered mail gets priority over other mail.

Rita then offered me a choice of crosses she had available so that I could pick the cross that she would germinate for me. That done, all that was left was to send her the money to cover the registered mail and to sit back and wait to see what would transpire.

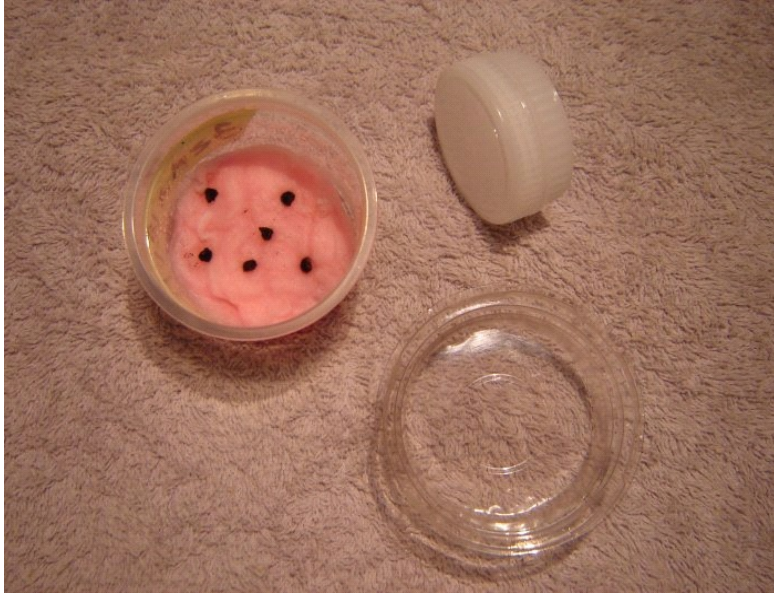
Below is a pictorial documentation of all the progress along the way from beginning to the arrival of the seeds in Canada. At the end of the pictorial section, we have listed our conclusion including the pros and cons of this method of shipping seeds.



Crossing: 32 Mystique (by Joe Ludick) X 121 Tylene (by Anna and Bernie Boss)



18/05/2010 - Seeds: 32 Mystique X 121 Tylene



**18/05/2010 - First day - Seeds are scarified (nicked) and placed on moist cotton.**



**18/05/2010 - First Day - The container was sealed to keep moisture uniformly throughout the environment.**



**19/05/2010 - Second day morning - The temperature dropped to 16 °C (61 °F), then the seeds were placed in a Styrofoam container with water heated on the bottom to keep the inside temperature between 23 and 27 °C.**





**19/05/2010 - Second Day - The seeds absorb water and are swollen.**



**19/05/2010 - Second day - The barks of the seeds were removed with fingernails. Two seeds were rotten. To restore the lost seeds, another crossing was chosen**



**Crossing: 320 Léa Izzo (by Rita and Izzo)**

**X 93 Old Medley (by Joe Ludick)**



**19/05/2010 - First day for these new seeds - Seeds are scarified (nicked) and placed on moist cotton.**



**19/05/2010 - First day for these new seeds - The new seeds were placed along with the other in a Styrofoam container with water heated on the bottom to keep the inside temperature between 23 and 27 ° C.**



**20/05/2010 - Third day for the seeds of 32 x 121 (pink cotton). Second day for the seeds of 320 x 93 (blue cotton). The barks were removed and one seed was rotten. The seeds remain in a Styrofoam container.**



**21/05/2010 Fourth day for the seeds of 32 x 121 (pink cotton). Third day for the seeds of 320 x 93 (blue cotton)**



**21/05/2010 Fourth day. Three seeds of the 32 x 121 were placed in the container on the pink cotton and two seeds of the 320 x 93 on the blue cotton.**

**Rita kept one of each to develop them in Brazil and compare the growth with the seedlings that were sent to Canada.**





**21/05/2010 Fourth day. Three seeds of the 32 x 121 were placed in the container on the pink cotton and two seeds of the 320 x 93 on the blue cotton.**



**21/05/2010 Fourth day. When removing the seedlings from the plastic container, please, do not pull the seedling, first remove the strip of white cotton with great care, the roots are fragile.**



**21/05/2010 Fourth day. Now they will travel. Bon voyage babies.**



**Coco Coir pots awaiting the arrival of the seeds**



**Fourteenth day. Package arrived at 10:45 am Monday May 31<sup>st</sup> with no signs of damage**



**31/05/2010. Seeds were all on one side of container. 2 seedling had very long roots and 3 had short roots**



**31/05/2010 Fourteenth day. One of the seedling before planting showing the long root.**



**31/05/2010 - Fourteenth day. All seedlings planted – 3 from pink cotton (Mystique X Tylene) on left, 2 from blue cotton (Léa Izzo X Old Medley) on right. They are in the bottom half of a plastic muffin tray from a bakery.**



**31/05/2010 - Fourteenth day. Plastic muffin tray in a seed starter tray before the humidity dome is put on.**



**31/05/2010 - Fourteenth day. Humidity dome in place and now we wait anxiously.**

**Other images from Brazil showing a sister seedling growing there**



**26/05/2010 - Ninth day of the sister of your babies. It is pale because it is locked in the dark as yours that are traveling**



**28/05/2010 - Eleventh day of the sister of your babies.**



**30/05/2010 - Thirteenth day of the sister of your babies. Interesting -** We traveled to the country house and stopped to keep the water inside a Styrofoam container heated, and the seedling has stopped growing.



**31/05/2010 - Fourteenth day of the sister of your babies.** I stopped to keep the water inside a Styrofoam container heated, and the seedling has stopped growing.



01/06/2010 - Fifteenth day of the sister of your babies.

To be continued.....

## CONCLUSIONS

In Rita's words.....

Despite of the mix of the seedlings, we can say that the experience **was a complete success**. What in principle someone could say that it was unlikely to succeed or "a crazy idea", now we know what it is real and simple to do.

This was the first time that seedlings with a few days of life traveled by mail by this way. Here in Brazil I had not sent to anyone yet. You believed in this idea and we made the first experiment, and with a long-distance travel.

### PROS

1. All seeds are germinated, there is no planting and waiting to see if they germinate or not. If you have viable seeds you have better value than losing some that do not germinate, particularly if you have purchased the seeds.
2. Seedlings are ready to plant and start their journey to maturity. For beginners this is an advantage over planting seeds. As they gain confidence, hopefully they will learn to nick their own seeds and try the "Rita Method" of germination.



## **CONS**

1. The procedure is time and labor intensive on the part of the person shipping the germinated seeds.
2. The cost of registered mail is far more costly than regular mail although they arrive faster. This cost can be offset somewhat by shipping more than one container of seeds per package.
3. This method works well when temperatures are optimal but I have reservations that it would work if you attempted to mail germinated seeds to Canada or any country in the northern hemisphere during winter when temperatures can be well below 0 C.

## **FINAL THOUGHTS (FOR NOW)**

In this trial the seeds took 10 days to go from Brazil to Canada and they were in perfect condition on arrival. What remains to be tested is how long the seedlings remain viable on a longer international journey, all of which hinges on the efficiency or lack of it among the various postal authorities around the world, over which we have absolutely no control.

For further information, contact either Rita Abreu - [ritamariabr@gmail.com](mailto:ritamariabr@gmail.com) or Kes Winwood - [hibiscus@wightman.ca](mailto:hibiscus@wightman.ca) .

