INTERNATIONAL ORGANIZATION OF CITRUS VIROLOGISTS

NEWSLETTER December, 2013



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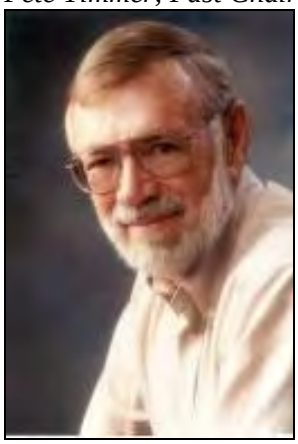
## From The Past and New Chairperson

*Pete Timmer, Past Chairman*



I have had the privilege of serving as your Chairman from the Brazil meeting in 2010 until the recent meeting in South Africa in 2013. IOCV continues to be interesting mix of investigators and runs the gamut from the most practical field-oriented people to the highly basic people conducting work on molecular mechanisms of pathogenicity. Over my career, it has provided me the opportunity to get to know and become friends with a lot of interesting and unique people. Few other organizations offer those kinds of possibilities. Where else could I have gotten to see Chet, Josy, Moshe, Garnsey, Nuria, Dawson and lots of others at the same meeting?

One of the things that was completed during my term was to move the website for the organization from IVIA in Spain to its current location at UCR. In the process, we updated many aspects of the site, added many old newsletters and made sure all the Fellows and award winners were included with the proper information. Georgios obtained permission to maintain our site on the UCR server. Andrew Persaud, the IT specialist at CREC, moved all the pertinent information from one server to the other and we updated and corrected everything from there. If you haven't looked at it lately, check it out at iocv.org. You'll find it can be very useful.

Our meeting in South Africa was very successful with participants from many different countries who presented valuable information for all. We were able to find the funds in the IOCV budget to support some of the travel costs of young investigators from Argentina, Uruguay, and Nigeria. We need some new young blood including some characters like those of the past.

The 19th meeting was very well-organized by the South African group and there were almost no problems at all. Lots of great science coupled with fantastic food and the opportunity to see many of the animals native to Kruger Park. What more could you ask for?

I've now turned over the responsibility for guiding IOCV to Juliana.

It has been a great trip; actually, lots of great trips.

Pete Timmer, Past Chair

*Juliana Astua, Chairwoman*

Dear IOCV friends

First of all, I would like to thank Pete Timmer for his effort as the IOCV chairperson during the last three years. He accepted this position when we had an unusual situation of a chair-elect who had just resigned his position. Pete accepted this challenge and did a very good job in front of the IOCV.

With a lot of excitement but also a great sense of responsibility, I accepted, during the 19th IOCV Conference in South Africa, to serve as the chairperson of our Organization until 2016. It is a great pleasure to become the 20th chairperson of the IOCV, an Organization that deals with important issues to the citrus growers and industry and has members who have made a difference over the years. Our Organization is formed by amazing scientists and good friends who inspire and drive me towards being a better scientist!

It is also time to have some changes in the IOCV Board of Directors, and the Advisory Council will now be formed by Juliana Freitas-Astúa (Embrapa Cassava and Fruits and Centro de Citricultura, Brazil, current Chair), Pete Timmer (Univ. Florida, USA, Past-chair), Changyong Zhou (Southwest Univ., China, Chair-elect), and Mike Melzer (University of Hawaii, Editor XIV IOCV Proceedings). Georgios Vidalakis (Univ. California, Riverside) and Robert Krueger (USDA) accepted to serve one more term as the secretary and the treasurer of our Organization, respectively, and we thank them for that extra contribution to the IOCV. We also thank Nuria Duran-Vila and Maria Laura Garcia and all those who devoted their time to the IOCV over the last three years as members of the Board.

A lot has been done over the last 56 years and we certainly acknowledge that. However, we need to concentrate our efforts on mitigating the new challenges faced by the citrus industry and the Organization itself. Of course, HLB has been an increasingly important threat to the crop, but other graft-transmissible diseases also threaten specific citrus producing areas and growers.

Additionally, some IOCV issues need to be addressed and the discussions have already begun. One of them relates to the decision on whether the Proceedings of the IOCV will change to a journal, and this newsletter brings an article on that subject. Please consider the aspects raised and let us know what you think on that. Also, the proceedings are in dire need of manuscripts. The new online publication system supported by the University of California provides an excellent publication venue. Please, send your manuscripts as soon as possible to the Editor Mike Melzer (melzer@hawaii.edu, see below for more information).

Obviously, the survival – but, mainly, the relevance - of our Organization depends on the involvement of each of us in maintaining it as a nice forum for collaboration and discussion on citrus graft-transmissible diseases, but also in bringing in new people, from more countries, to join us. Nuria Duran-Vila has addressed this issue in several opportunities during her term as IOCV chair, and it is certainly something we will need to address as well.

Another essential aspect is to maintain our main event as relevant as it should be. I believe I speak for all of the IOCV members when I say that the 19th Conference was excellent. The local organizing team, coordinated by Gerhard Pietersen, did a great job in putting together a superb meeting, with great scientific meaning and a wonderful life experience – I am sure no one will forget the special gala dinner in the woods (and the up-close experience with so many wild animals). All of the details were taken into consideration by the local committee and

contributed to make the Conference a great success... and I am already looking forward for the 20th IOCV Conference…

Finally, I wish you all a very special Holiday Season and a wonderful 2014!

Warmest regards,
Juliana

# IOCV

## From the 2016-2019Chairman Elect

*Changyong Zhou*

Dear IOCV friends,

It is my great honor to be in the position of Chairman Elect, I shall treasure this position and do my best to serve our IOCV community. Thank you all for the trust in me, special thanks to our friendly Secretary Dr. Georgios Vidalakis for his specific support.

The sustained growth of acreage and annual output over the latest half century makes citrus the most important fruit crop in the world, with a total production ca 131 million tons in 2011. In the last decade, the increase of citrus production is mainly from developing countries in Asia and Africa, which means that the citrus industry tends to gradually transfer from the developed countries and regions to the developing ones, both planting areas and outputs. Thus, the increasing costs of labor and land and technical renovation cause many more challenges to the citrus industry than ever before. Also, the development of industry poses many disease problems. Therefore, we need many young successors from the world to join IOCV to continue with the aging of academic foregoers.

During the period of 17-30, Oct. 2013, Prof. Josy Bove and Manager Juliano Ayres led a Brazilian delegation to China for investigating the HLB control status, Prof. Xueyuan Zhao was invited to join them for surveying in Chongqing, Guangxi, Jiangxi and Zhejiang provinces. When they stayed in Chongqing, we had an efficient communication, which gave us a good example of the elder supervisors leading the young scientists and entrepreneurs in getting access to the friends in the citrus industry abroad. Both Profs. Bove and Zhao are over 80 years old, and their professional dedication has impressed us very much. I personally think that we young generation should learn their professional spirit to continue to fight the challenges the citrus industry is facing.

As many of you have already know, during the business meeting of the 19th IOCV conference held in the Kruger National Park, South Africa, the final decision for the host country of the next one has not been made yet. We will continue the selection process via an electronic election between China and Argentina or Uruguay by IOCV members. We sincerely hope to host the next conference and shall work with great efforts on it. The final decision is up to most IOCV members. So no matter which country will host the next one, I am personally glad to accept the vote result. As always, IOCV friends are warmly welcome to visit us whenever you feel like doing so.

Once again, many thanks for your trust and support.

With warmest regards.
Changyong Zhou

## XIX IOCV Proceedings Instructions for Authors

*Mike Melzer, Editor*

Manuscripts should be submitted by email to

**melzer@hawaii.edu**

by February 15, 2013 (extended)

1. Manuscripts should be written in Word (Times New Roman, 12 pt font). Please type double spaced, following the format used in recent IOCV proceedings (iocv.org). Please ensure that there are no hidden codes which can create havoc for editors, especially in references. If there are problems, the file will be sent back to the authors for corrections.

2. Figures and Tables should be on separate pages. Table headings should be upper case.

3. Author addresses should be under the author names on the first page of the manuscript.

4. The Number System is used for referencing, not the "Author (date)" system. Please make sure you have used the correct one; this will save the editors a lot of time.

5. Check your references very carefully – many errors were detected in manuscripts for recent proceedings, including incorrect titles, missing authors, wrong dates, volumes, page numbers.

6. For journal abbreviations, please see the 16th - 18th Proceedings on the website (www.iocv.org)

7. For full manuscripts, divide the paper into: Abstract, Introduction (note: do not type INTRODUCTION as a heading), Materials and Methods, Results, and Discussion (the last two can be combined). These will be reviewed by two reviewers.

8. Short communications should not exceed 4 printed pages (1 page of full text in the Proceedings is approx. 500 words; make allowance for figures and tables). These will not be sent out for review – they will be edited by the editorial committee.

9. The abstracts of the papers not submitted by the deadline will be published after editing.

The Wallace award will be of $1000 will be presented for the best paper submitted as a full paper for the proceedings.

## XIX IOCV Proceedings Publication Proposal (for discussion see XIX IOCV Business Meeting Minutes & Summary below)

*Bill Dawson*

The International Organization of Citrus Virologists (IOCV), was established at the University of California (UC), Riverside in November 1957 during the first Conference on Citrus Virus Diseases held on the occasion of the 50th Anniversary of the Founding of the Riverside Citrus Experiment Station. As such the IOCV is physically affiliated with UC Riverside and more specifically has its base in the Department of Plant Pathology and Microbiology at UC Riverside.

Since 1957 and every three years thereafter the IOCV has been publishing hard copies of the proceedings of its international conferences. As it was decided in the business meeting of the 19th IOCV Conference in South Africa publication of the Proceedings of the International Organization of Citrus Virologists will not continue as it has in the past. It will move to an on-line-only format hosted by eScholarship (www.escholarship.org) powered by the California Digital Library (www.cdlib.org), which supports publications of groups and organizations affiliated with the University of California. The eScholarship publication will be at no cost to IOCV. There will be no paper copies distributed although books can be ordered and printed on demand via commercial vendors.

The change to the on-line format gives us an opportunity to create a peer reviewed journal style publication for IOCV that will be published in regular time intervals and it will host the proceedings as a special or supplementary issue every three years similarly to the journal *Phytopathology* and the American Phytopathological Society Conferences (http://apsjournals.apsnet.org/loi/phyto).

This was discussed at the last IOCV business meeting and it was decided to have a committee present some options to be voted upon by members of the organization. We have used e-mails to a large proportion of the members of the organization and conceived the following consensus questions to be put before the entire IOCV membership for voting:

- **Question 1 to be voted upon: Journal or Proceedings:**

( ) Should the Proceedings continue as previously other than only being electronic?

Types of articles: abstracts of the meeting, reviewed proceeding articles, non-reviewed short communications. One volume produced every 3 years.

**Advantages:** 50 years of history

**Disadvantages:** In some institutions the proceedings do not count very much for promotion or tenure; papers can be submitted and published only every 3 years.

( ) Should we change to a Journal format? – manuscripts submitted year around, articles published on-line as soon as they are accepted.

Suggested types of articles for a journal:
1. Abstracts of talks and posters presented at IOCV meetings – non-reviewed.
(No non-reviewed proceedings articles would be published. Authors who write up their articles for review can submit them as full papers or short papers.)
2. Invited reviews
3. Full papers – reviewed
4. Short papers – reviewed

Suggest 2-3 senior editors – have a senior editor specializing major types of pathogens; 12 or more members of editorial board (reviewers will be on the editorial board so that for career promotions they can list being on the editorial board rather that reviewing x number of manuscripts.)

What is required to have the journal included in the Science Citation Index will be done with the assistance of e-scholarship.

**Advantages:** Papers will count for promotion or tenure; will allow publishing results as soon as ready, not to have to wait for the next IOCV meeting; will provide an alternative outlet for citrus related papers; will be less costly than other journals.

**Disadvantages:** Will be a change in tradition; will be another competing journal probably with a low impact factor initially.

- **Question 2 for vote: Should there be a small cost for publishing?**

( ) Yes

**Advantages:** A small cost, probably in the range of $100-200 would allow paying a profession technical editor to correct English and standard formatting before publishing on-line.

**Disadvantages:** This work will have to be done by reviewers and editors.

( ) No
**Advantages:** Less cost to authors.

**Disadvantages:** Considerably more work for reviewers and editors.

If a journal is chosen in question 1;

- **Question 3 for vote: What should be the name and content of the journal?**

( ) Journal of the International Organization of Citrus Virologists

**Advantages:** 50 years of history; tied to the IOCV

**Disadvantages:** might not get enough articles for a good journal, might discourage people not members of IOCV to submit articles

Suggested scope: Journal of the International Organization of Citrus Virologists would publish contributions from all branches of research on viruses, virus-like, graft-transmissible, and systemic pathogens of citrus. Coverage spans a broad spectrum of topics:

newly discovered pathogens; pathogen interactions with hosts, vectors, and other organisms; sequence relationships and evolution; etiology of diseases; epidemiology; development of management strategies; diagnostic technologies.

( ) Journal of Citrus Pathology

**Advantages:** should pick up more papers; has a good focus; a limited survey of pathologists working on non-graft transmissible pathogens was enthusiastic interest in such a journal.

**Disadvantages:** might cause changes to the traditional IOCV meetings

The IOCV journal would publish contributions from all branches of research on citrus diseases including those caused by non-systemic bacteria and fungi.

The IOCV members will receive information and instructions for the voting procedure via email and the electionbuddy system.

## The XIX Conference of the International Organization of Citrus Virologists 28th July to 2nd August, 2013, Skukuza, South Africa

*Gerhard Pietersen, 19th IOCV Conference Chairman*


Dear delegates,

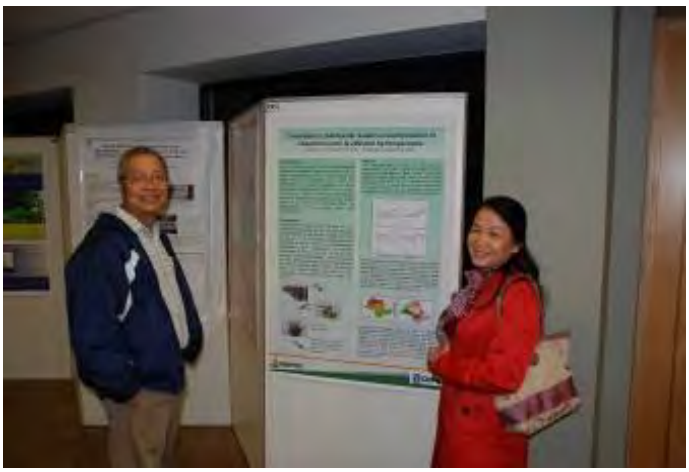
I would like to thank you all, on behalf of the organizing committee, for attending and participating in the XIX IOCV conference. From feedback received it would appear the conference was a success.

While small (79 delegates attended) the conference still reaffirmed the high standards and relevance of our society with 73 oral papers and posters presented in seven sessions covering a range of topics.


A total of 13 countries were represented (Argentina, Australia, Brazil, Chile, China, France, Italy, New Zealand, Nigeria, South Africa, Spain, Uruguay and USA), covering all major citrus producing countries.

It was not all work. Periods between sessions were utilized by most delegates to network and make re-acquaintance with colleagues and friends and their work. We also hope that delegates enjoyed the social events we scheduled as much as we did.






Many of the delegates made use of the early morning opportunities for game viewing and a number of delegates saw the “big five” (lion, leopard, rhino, buffalo, elephant). We enjoyed having you visit us and we invite you all to come and visit us and our country again.




During the 19th IOCV Conference we had the opportunity to visit the facilities of Citrus research International and honor Fanie van Vuuren, a veteran South African citrus researcher.



Gerhard Pietersen


Glynnis Cook


Barry Manicom


Hennie le Roux


Ethne Cameron


Henry Skinner


Fanie van Vuuren


Jean de Gaspari


Paul Fourie


MC Pretorius


Kobus Breytenbach

I also want to thank the organizing committee for their hard work and dedication to the conference, without them this conference would not have been possible. They include (in no specific order) Hennie Le Roux, Fanie van Vuuren, Barry Manicom, Glynnis Cook, Paul Fourie, MC Pretorius, Kobus Breytenbach, Ethne Cameron, Jean de Gaspari, and Henry Skinner.

Sincerely
Gerhard Pietersen


*Participants of the XIX IOCV Conference*

# XIX IOCV Business Meeting Minutes & Summary
# August 01, 2013

AGENDA

1. Welcome
2. Approval of minutes of the last IOCV Business meeting
3. Report from the Treasurer
4. Report of the Secretary
5. Amendment of the IOCV by laws
6. Membership
7. IOCV Fellows
8. Invitations to organize the next IOCV Congress
   a. Argentina
   b. China
9. Other business

BUSINESS MEETING MINUTES & SUMMARY


GVidalakis: Calls meeting to order at 5:03pm, gives an overview of the meeting agenda, and introduces Peter Timmer.

PTimmer: Welcomes meeting participants, thanks organizers for "a just phenomenal meeting". He enjoyed the scientific and social aspects.

GVidalakis: Introduces and summarizes the minutes of the previous meeting from the Brazil (as presented in the IOCV Newsletter April 2011). Notes that the previous IOCV Chair elect resigned, and we need bylaw amendments to accommodate this scenario should it occur again in the future; introduces the electronic format for the 19th IOCV meeting South Africa, the work to digitize slides, and the young scientist travel award(s). Asks for approval of the minutes.

GPietersen: Motion to approve minutes; PSieburth: Seconds motion; Motion passes and minutes are approved.

GVidalakis: RKrueger could not attend meeting, so he describes treasury report from slideshow. No questions from attendants about the report.

### 3. Report from the Treasurer: 11/2010-07/2013

- We sell few hard copies of the Proceedings.
- Most income is from membership dues.
- Expenses are limited to a few supplies and rental of a storage unit for the Proceedings.
- The largest actual expense is rental of the credit card processing machine.
- We are considering going to Pay Pal or Square on line systems to reduce this expense.

### 3. Report from the Treasurer: 11/2010-07/2013

| Account/Fund | 2010 ($) | 2013 ($) | Notes |
|---|---|---|---|
| Checking | 3,802 | 2,292 | This will increase upon receipt of dues for 2013-2016 |
| Wallace | 13,609 | 11,558 | |
| Schwartz | 7,447 | 6,325 | |
| Gumpf | 3,238 | 2,750 | |
| IOCV | 7,244 | 6,152 | |
| Dreyfus Fund | 31,538 | 26,785 | Decrease: US$ 9,000. Support travel of young phytopathologists for the 2013 Conference |
| **Total** | **35,340** | **29,077** | |

GVidalakis: Describes Secretary report from slideshow. New website demonstrated. Thanks to IVIA for hosting website over the years, the old website will soon be "taken down". All previous proceedings are being converted to an endnote reference library, should be done soon. Assembly applauds these efforts.

GVidalakis: Describes the University of California's (UC) eScholarship system from slideshow. This provides opportunity to peer-review process and 24/7 access. Asks assembly if okay to transition.

From assembly: Is it free?

GVidalakis: Free of charge. Since IOCV is based in the UC system (based in the Dept. of Plant Pathology and Microbiology at UC Riverside), eScholarship is available to the organization for free. Gives an overview of the submission system from slideshow. The system is similar to all online manuscript systems of popular scientific journals. eScholarship does not have DOI, but "easy ID system". Describes ability to print book, how the articles are indexed. We need to sign publishing agreement if we want to proceed. Asks if the assembly to allow the IOCV Board to sign the agreement?

PTimmer: Thinks eScholar is "no-brainer". Issue is whether we do journal of IOCV or Proceedings of IOCV. With a journal there are no deadlines, may take long to submit a paper, and would also need a permanent reviewer and editorial board. MMelzer has agreed to be editor for the current proceedings but maybe not permanent editor.

JBove: What is benefit of being a journal vs. proceedings?

PTimmer: Journal advantage: papers do not need to be presented at meeting, can be submitted at anytime. May make process move more quickly. Disadvantage: setting up journal, and all the aspects involved. Need to think about implications. Do we want to tackle this?

JBove: Some people submit presentations here, and then a peer review journal. Might be difficult to publish IOCV presentation in a journal such as Phytopathology. We would have low impact factor.

Several: We would have "zero" impact factor.

PTimmer: The submitter can decide if a manuscript goes in as an abstract that is not reviewed, or as reviewed article. There is a range of papers and options.

GVidalakis: Hopes to get papers of interest to the group, but maybe not applicable for other journals. We will not be able to compete with other big journals.

JBove: Would eScholarship allow to have a mini google (search tool) system?

GVidalakis: Yes, this can be done.

JBove: Can this be done with the current system/previous proceedings? Answers his own question "no".


GVidalakis: JBove is correct.

JBove: The search system would make it very convenient.

GVidalakis: Goes to eScholarship website, shows how to search on website. Attempts to make a motion

PSiebuth: Makes papers diluted

Motion to move the proceedings to eScholarship system passes.

GVidalakis: Asks whether we should submit manuscripts for the current proceedings by Nov 30, 2013 or submit at any time until next proceedings. Should we create a journal?

JdaGraca: Mentions how a print journal in Texas switched from printed to online, and how it worked very well.

BDawson: Wishes to express two points: 1) having proceedings every three years may not work well for tenure people who need publications 2) every other year there is HLB meeting with proceedings. If we establish a good journal, we may get some of these HLB papers.

GVidalakis: Asks assembly if they prefer a "hybrid" publication? For the 2016 volume, do we accept papers from tomorrow until the next conference?

NDuran-Vila: What about this conference?

GVidaklakis: The manuscripts from this conference will go into these proceedings.

PTimmer: Mentions disconnecting presentations at the meeting with the proceedings.

PSeiburth: Will manuscripts be published every three years?

GVidalakis: Accepted manuscripts will be published immediately.

BDawson: We need to think about what type of papers want to be published, how to review them.

NDuran-Vila: Wants to know what the young people think, since they will be the ones inheriting the system.

GVidalakis: Would like to have a journal available at anytime.

LPena: What is the cost of putting this onto the Web of Knowledge website?

GVidalakis: Not sure if money is involved, but the IOCV can likely cover the cost.

LPena: Do you know requirements?

GVidalakis: No.

JFreitas-Astua: Mentions that some journals do not accept proceeding papers, name of journal can be important.

GVidalakis: Do you want to see a proposal from the IOCV Board about creating an IOCV journal?

From assembly: Will the editor(s) of the journal will be IOCV member(s)?

GVidalakis: Yes, the editor(s) will be a three year appointment. Asks if we are against the hybrid option.

PSieburth: Recommends creating a committee of people willing to help

GVidalakis: We move forward to investigate the journal option. Suggests we put people together to put the needed information together.

JBove: Is in favor of the journal format, but contends that it will "kill" the organization.

EMirkov: Wants to know how a journal will "kill" the IOCV.

JBove: What is the point to meet if you can submit your research at anytime? The meeting will be diffused, and the interest to meet will be gone.

GVidalakis: Mentions American Phytopathological Society (APS) has many journals and meetings and this seems to work, although we do not have the numbers of the APS. Asks if we want to go ahead with a journal format or not.

Most people in favor of discussing journal.

GVidalakis: Asks who wants to be involved.

PSieburth: States here desire to be involved but not the chair of the committee.

BDawson: Thinks that some of the young people should be involved.

No volunteers from assembly.

BDawson: Volunteers to be on board, requests JFreitas-Astua also be involved.

After discussion, the committee is:
BDawson (chair)
PSieburth
EMirkov
JFreitas-Astua
JdaGraca
GVidalakis (advisory role)

GVidalakis: Discusses the options of publishing immediately online or in three years. The 19th proceedings will go ahead as planned.

BDawson: Asks what kind of papers does the group want? Proceedings/abstracts, review, full papers, etc.

Assembly: Yes.

JFreitas-Astua: We should be as inclusive as possible.

GVidalakis: Gives deadlines for the current proceedings from slideshow and proceeds with addressing issues from 2010 IOCV business meeting. First, citrus growing countries & Encyclopedia of Virology.

NDuran-Vila: She does not have any information. She states there is not enough publicity about the project. Asks how to make it more public.

GVidalakis: The project has been culled.

NDuran-Vila: She only received a reply from 5-6 countries. Most do not have time to put this information together.

GVidalakis: Suggests that we put what we have available online and conclude it.

NDuran-Vila: This suggestion may make more people willing to contribute.

GVidalakis: Continues with the "Leading Committee" that was formed to pursue companies to get money for young scientist awards. He suggests instead that we simply ask members to donate when they pay their membership fees. Asks if we should dismantle the committee.

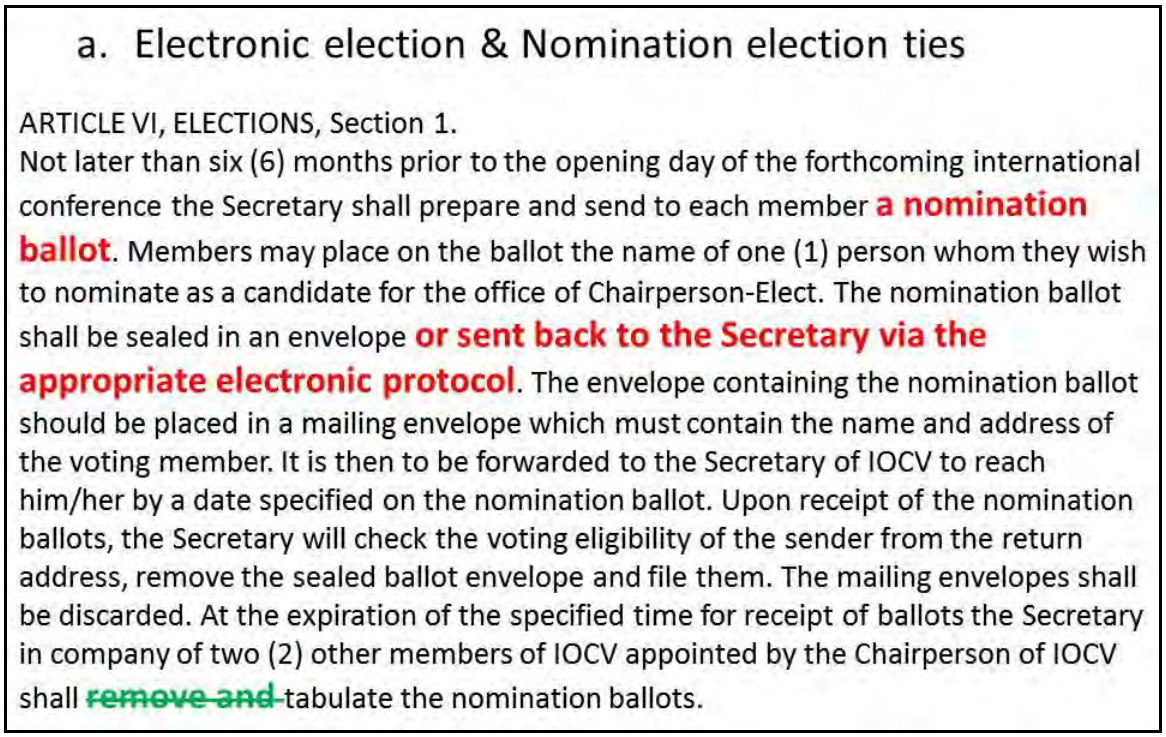
Assembly: Yes.

GVidalakis: The Schwarz fund is supported by IOCV members donations.

NDuran-Vila: We should make an effort to support the students more, what about private industry?

That is what the now defunct committee was for. Also, depending on each case and the organizing country the model may change . for example for teh 19th IOCV we funded students fully, because only half was not enough to get the students all the way to the meeting.

GVidalakis: Move to item 5 of the agenda the Amendment of the IOCV by laws. Describes Article VI, Elections, Section 1 on nomination/elections ballots from slideshow. Asks for motion to approve amendments.




GPietersen makes motion. MCambra: Seconds motion. Motion passes.

GVidalakis: Continues with Article VI Sec 1 modifications from slideshow. Describes scenarios, makes sense to the assembly.

a. Electronic election & Nomination election ties

ARTICLE VI, ELECTIONS, Section 1. continue

The ~~two (2)~~ persons receiving, the two (2) largest number of nomination~~s~~ **votes** shall then become candidates for office of Chairperson-elect. In case a nominated candidate is unavailable or has expressed unwillingness to become a candidate his name shall be replaced by that of the person receiving the next highest number of nomination votes.

If any tie exist in the nomination process to select the top two candidates a runoff election will occur.

NDuran-Vila: States that this happened when she was elected.

GVidalakis: Someone will likely walk away, but we may have to hold another election or two.

Duran-Vila: Do we have to have a second round of elections?

GVidalakis: Makes changes to the article with input from the assembly to reflect a second round of nomination elections in the case of tie. Final wording of addition to Article VI, Elections, Section 1: "If any tie exists in the nomination process to select the top two candidates a runoff election will occur." Asks for a motion to approve amendment.

MInes: Makes a motion. MPolek: Second the motion. Motion passes.

GVidalakis: Describes modifications to add section title "A. Non-Electronic Election" on slideshow (Article VI Sec. 2).

a. Electronic election & Nomination election ties

ARTICLE VI, ELECTIONS, Section 2.

**A. Non-Electronic Election.** The Secretary shall have ballots containing in alphabetical order the names of the two (2) persons nominated as described above to be candidates for the office of Chairperson-elect. Prior to the opening of the forthcoming international conference the Secretary shall send the election ballot to each member in good standing. After marking the election ballot, it shall be sent as instructed to reach the Secretary not later than two (2) weeks before the opening of the next international conference. He/She shall check voting eligibility, discard mailing envelope and file the unopened ballot envelopes. He/She shall bring these to the site of the conference or else provide that they are delivered to the Chairperson of IOCV by the opening day of the conference. At least forty-eight (48) hours before the official banquet, the delegates attending the conference will be allowed to deliver to the Secretary or acting person their ballot. Only those delegates that were active members when the election process started will have the right to vote.

BStein: makes a motion to approve. GVidalakis: Seconds motion. Motion passes.

a. Electronic election & Nomination election ties

ARTICLE VI, ELECTIONS, Section 2.

**B. Electronic Election. Prior to the opening of the forthcoming international conference the Secretary shall send the election ballot to each member in good standing. Only those delegates that were active members when the election process started will have the right to vote. After marking the election ballot, it shall be sent as instructed to reach the Secretary not later than two (2) weeks before the opening of the next international conference. He/She shall inform the Chairperson of IOCV at the conference or any other appropriate way for the result of the electronic election.**

PTimmer: makes a motion to approve the addition of section "B. Electronic Election". GPietersen: Seconds motion. Motion passes.

GVidalakis: Points out the unintended error with PTimmer election as IOCV Chair, which violated IOCV bylaws. Asks assembly why IOCV Fellows not allowed to hold elective offices.

**IOCV Chair and Fellow**

ARTICLE III, MEMBERSHIP, Section 3.

The Organization at its regular conferences or during official pre- or post conference tours may grant the honor of Fellow of the IOCV for lifetime achievement to persons who have contributed significantly to the growth, welfare, functions or activities of IOCV including service to the organization, sustained scientific contributions and otherwise furthering the objectives of IOCV. The Board of Directors and previous awardees shall constitute a committee to consider the granting of Fellowships. Members of IOCV may submit to the Chairperson names and supporting documents or information on the persons to be considered for this honor. Nomination of fellows of the IOCV shall be approved at a regularly convened business session of the Organization by a majority of the delegates. **Fellows** shall be exempt from payment of regular dues but if in attendance at conferences shall pay the established registration fees. **They shall not have the right to hold elective offices**. Fellows may serve on committees where because of their interest and qualifications they can contribute to aims and activities of IOCV.

Assembly: Suggests backdating the repeal of this policy.

GVidalakis: Asks for motion to amend by removing the section "They shall not have the right to hold elective offices" and resolve the conflict.

JFreitas-Astua: Makes motion. JdaGraca: Seconds motion. Motion passes with applause from assembly.

GVidalakis: Membership status and dues described on slideshow. The possibility of a dues increase is open for discussion.


Assembly: Agrees that increase is appropriate.

PSieburth: Asks what is additional money is for.

GVidalakis: The money is mostly for young scientists, show how fees go to checking account on slideshow. We can now add extra to our membership that go for the Schwarz Award. Is a $60 USD fee for three year period too steep?

EMirkov: Motion to accept increase in dues. NCosta: Seconds motion. Motion passes, but not unanimously.

ZDeng: Opposed to this increase, thinks $60 is too much. Suggests that $50 is better.

GVidalakis: Asks if we should revote, or are we okay as it stands. There is no revote/change.

JBove: Asks for the fees to be $20 per year or more.

NDuran-Vila: Replies that you can donate additional money if desired.

JBove: Suggests this should mentioned when collecting dues.

Assembly: Seems good with this new price.

PTimmer: If you cannot afford the increase, call him.

GVidalakis: Asks how to phrase for additional donation? 20/yr and donations to the organization?

NDurna-Vila: Should state that extra donations go to the Schwarz award. We should make sure the money to goes to the student.

MPolek: Suggests the option of adding a donation to award when paying member dues.

Motion: $20 (US) per year for membership with the option of additional donation to the Swartz award.

JBove: Motions to pass new language. NDuran-Vila: Seconds motion. Motion passes.

GVidalakis: Asks if any negative votes.

Assembly: silent.

GVidalakis: Should the discount for students continue?

Assembly: Yes.

PTimmer: Brings up agenda item of IOCV fellows. Mentions that CRoistacher nominated MBar-Joseph and that SGarnsey nominated BDawson. Neither of the nominators are present at the meeting to discuss their nominations, asks JBove for a few words on the nominees.

JBove: Discusses Mbar-Joseph's contributions to the IOCV, promotes his fellowship.

GVidalakis: Asks assembly if they approve the nomination of MBar-Joseph.

Assembly: Nominates MBar-Joseph unanimously as an IOCV Fellow.

JBove: Discusses BDawson's contributions to the IOCV, promotes his fellowship.

BDawson: Leaves room during JBove's tribute.

GVidalakis: Asks assembly if they approve the nomination of BDawson.

Assembly: Nominates BDawson unanimously as an IOCV Fellow.

PTimmer: These nominations will be in an upcoming IOCV Newsletter. Mentions that four young scientists were supported by the IOCV for this meeting. The committee evaluated many requests. He displays photos of awardees and a group photo of awardees. The student awardees come to collect their photos and are captured in a group photo.

*Young citrus phytopathologists supported to participate in the XIX IOCV*

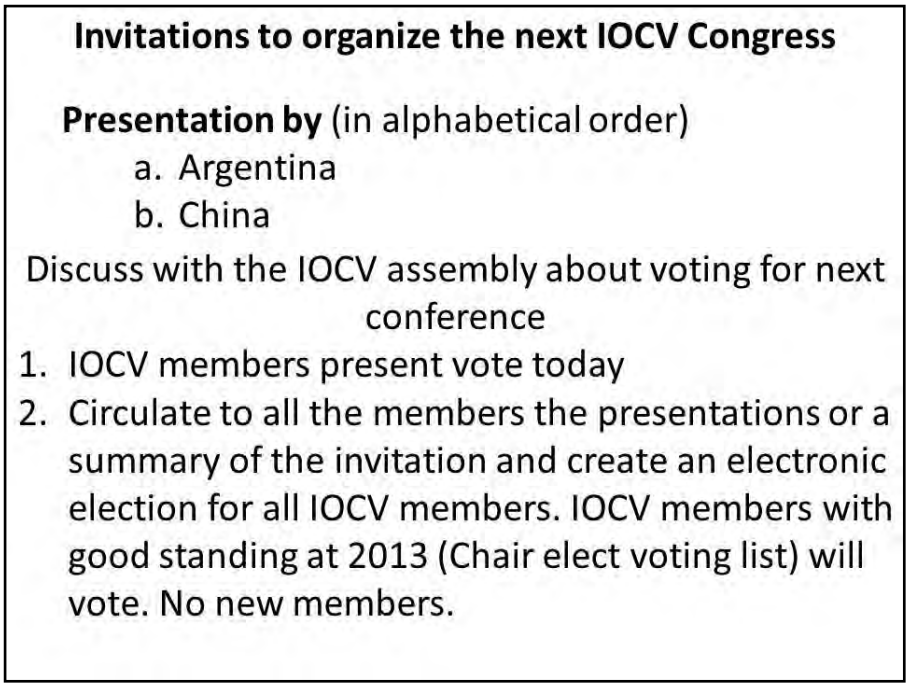
*Maria Jose Benitez*
*Uruguay*

*Adediji Adedapo Olutola*
*Nigeria*

*María Florencia Palacios*
*Argentina*

*Agustina De Francesco*
*Argentina*

Presentations begin for hosting the 20th IOCV. Argentina has a movie as a conference contender, followed by Uruguay for the post-conference tour. China is second with a slideshow by CZhou.




GVidalakis: Explains how presentations are to be put towards full membership vote. The Argentina/Uruguay presentation should be modified to show locations/logistics of the conference/post conference.

PTimmer: We need a written proposal from both groups to share with the committee. Suggests talking with GPietersen about the pitfalls of hosting.

MMachado: Mentions that China's proposed dates possibly overlap with another citrus conference.

JFreitas-Astua: Suggests that the IOCV dates should be adjusted accordingly.

CZhou: States that the proposed China dates are flexible.

PTimmer: Motion to adjourn the 19th IOCV Business Meeting. GVidalakis: Seconds the motion.

Adjournment at 7:12 pm.

## 2013 IOCV Fellows Nominations
## Bill Dawson

*S. M. Garnsey*
June 27, 2013
To: Members of the IOCV Board of Directors and the Advisory Council
Subject: Nomination of Professor William O. Dawson to become a Fellow of IOCV

*Bill Dawson*
*(http://www.crec.ifas.ufl.edu/academics/faculty/)*

It is a great pleasure to nominate Bill Dawson for election as a Fellow of IOCV. I think the IOCV fellow award would be fitting recognition for the outstanding contributions he has made toward during the past 20+ years and for a research program that reflects so well the spirit of IOCV in fostering research cooperation on an international scale and to develop new knowledge and information about citrus pathogens and diseases that ultimately contributes to new and practical solutions to citrus disease problems

In 1992, Bill accepted appointment to the Graves Endowed Chair Position at the Citrus Research and Education Center, University of Florida, Lake Alfred as an Eminent Scholar, and undertook the challenging task of defining the molecular and genetic properties of *Citrus tristeza virus* (CTV) and the molecular biology of the virus-host interactions that result in decline and stem pitting diseases that have killed millions of trees and reduced production in millions of others. Bill understood that molecular studies on CTV posed daunting technical challenges, but he believed that his background in studying virus-host interactions at U.C. Riverside, and new advances in molecular sciences presented fresh opportunities to improve the basic understanding of CTV.

Bill worked quickly to develop the diverse facilities needed for the new CTV studies he envisioned and assembled a talented team of scientists and support staff to carry out the work. He also developed interactions with scientists in different locations who had relevant experience with CTV or other closteroviruses. Progress was rapid, and by 1995, sequencing of the 19.3 kb genome of CTV had been completed. The next focus was to determine the functions of the 12 genes encoded by the CTV genome and to elucidate the mode of virus replication and virion assembly.

A big breakthrough occurred in 1999 with the development of an infectious full length cDNA clone of CTV and a replicon that was composed of the ORFs encoding replication proteins and the 3'and 5' termini of the virus. This work was facilitated by the discovery that N. benthamina protoplasts could be infected with CTV transcripts and used to amplify CTV clones enough to infect citrus via mechanical stem inoculation. By 2001, a full-length clone of the T36 isolate had been established in citrus hosts by mechanical stem inoculation and it induced the typical symptoms of the parent isolate.

The infectious cDNA clone system provided new opportunities for genetic studies and hundreds of constructs have now been produced and established in citrus. These include constructs with deletion of various genes, hybrids with exchanges made in various parts of the genome between T36 and other CTV genotypes, and constructs that express a green fluorescent pigment (GFP) marker. These constructs have been used to define gene functions, study host-virus interactions, including regulation of movement and symptom expression, and to elucidate the genotype specificity of cross protection. For additional details see Dawson, Molecular Genetics of CTV, in Karasev and Hilf, Citrus tristeza virus Complex and Tristeza Diseases, APS Press, 2010.

The cloned CTV construct with a GFP marker was originally built to study virus movement, virus-host interactions and cross-protection, but when it proved unexpectedly stable in citrus hosts, Bill realized that CTV vectors could also have potential practical applications by providing a means to rapidly express new genes in citrus to confer a variety of useful effects. One such potential application arose after Huanglongbing (HLB), a devastating citrus disease associated with the fastidious, phloem-limited prokaryote Ca Liberibacter asiaticus, was discovered

in Florida in 2005, and then spread rapidly throughout the state to threaten the very survival of the multibillion dollar Citrus Industry. Since preventing the spread of HLB in existing plantings is difficult, and sources of HLB resistant citrus germplasm for new plantings are lacking, Bill proposed that CTV constructs expressing antimicrobial peptides (AMP) in citrus trees might provide a rapid and practical near term solution for protecting trees from HLB infection or ameliorating symptoms once trees became infected. The potential benefits of this approach were quickly recognized. Numerous CTV-AMP expressing constructs were built and screened for activity and several of the most promising of these are now in the process of USDA-approved field testing and commercial licensing. For more information on the potential of virus systems in citrus and other woody plants see Dawson and Folimonova, Annu. Rev. Phytopath. 2013:51

The results of the research flowing from the Dawson Laboratory has been documented in over 50 research publications and several reviews. In addition it has formed the base for several recent patent applications including: 1) "Viral-based transient expression vector system for trees", filed July 16, 2008, 2) "Viral based transient-expression vector system that allows multiple applications", filed April 8, 2010, 3)"Viral based transient-expression vector system that ameliorates super infection exclusion", filed February 8, 2011, and 4) "Citrus tristeza virus based vectors for foreign gene/s expression", filed September 21, 2011.

In addition to all the technical accomplishments, The Dawson Lab has earned an international reputation and has been a home over the years to numerous visiting scientists, post doctoral scientists and research associates from many different countries including, Brazil, China, the Dominican Republic, India, Israel, Japan, Lebanon, New Zealand, Russia and Turkey. The cooperative and innovative laboratory atmosphere with a blending of independent projects has been conducive to solving the many difficult technical problems encountered. Ongoing cooperative interactions have been formed with many other laboratories in the US and other countries with extensive exchanges of information and ideas. Bill has been an invited speaker at IOCV Conferences and many other national and international meetings to share information.

As a practical measure of program value, since 1993, the Dawson Lab has received more than 40 research grants for CTV and associated research totaling more than $5.4 million. These include international sources (BARD), federal sources (including USDA Competitive, National Research Initiative and USDA Special Grant programs), and state/citrus industry sources (Florida Dept. of Agric.; Citrus Production Research Council Advisory Council; now Citrus Research and Development Foundation).

In summary, I hope this brief overview presented here will convince the IOCV membership that the IOCV Fellow Award would a fitting recognition for Bill's outstanding contributions to citrus pathology.

## Moshe Bar-Joseph

*Chet Roistacher*
August 1, 2013
To: Dr. Pete Timmer, Chairman IOCV
Re: Nomination of Dr. Moshe Bar-Joseph as fellow of IOCV

*Moshe Bar-Joseph*
*http://www.21food.com/news/detail27282.html*

It is my honor and privilege to put into nomination Dr. Moshe Bar-Joseph as a Fellow in IOCV.

Not only is he a world renown and outstanding scientist, but he is a devoted friend to so many of us in our organization. To those of us who have had the pleasure of knowing Moshe, we also know him as a teacher, consultant, scholar, historian, humorist and prophet. For those of us who had visited Israel we shall never forget the warmth and hospitality shown to us in his home and laboratory.

I believe that IOCV is unique, not only as a scientific society where we periodically meet or correspond on citrus diseases, but as a source for developing lifelong friendships. Moshe has been an integral part of these relationships and those of us privileged to know him have found him not only to

be a source of incredible scientific knowledge but to be a warm and passionate friend.

Moshe has been a member of IOCV for over 40 years and his contributions have been legion! Foremost has been his contribution on the development of the enzyme linked immunosorbent assay (ELISA) for the rapid detection of tristeza which opened a new and powerful door for studies on this debilitating virus. With unparalleled efforts, a team of scientists purified the citrus tristeza closterovirus and then successfully developed the ELISA. This was a momentous breakthrough (Bar-Joseph et al., 1979). In 1982 the members of this team of M. Bar-Joseph, S. Garnsey, D. Gonsalves, M. Moskovitz, D.E. Purcival, M.F. Clark and G. Loebenstein were given the coveted Lee M. Hutchins award by the American Phytopathological Society for this outstanding contribution (Phytopathology 72:29, 1982). As just one example of the worldwide and widespread use of ELISA for field testing for the presence of CTV, in 1983, Moshe and his team tested over 1 million trees for the distribution of CTV throughout Israel .
Moshe received his Ph.D. from the Hebrew University in Jerusalem in 1972 and in that same year published on the `Purification and Characterization of threadlike particles associated with the Citrus Tristeza Disease' (Virology 50:821—28). I had the pleasure of first meeting Moshe in 1975 at the 7th conference of IOCV in Athens, Greece and have enjoyed a close association and friendship with him to this day.

In 1984 he was a full professor in the Department of Virology at the Volcani Research Center, Bet Dagan, Israel where he headed the Department of Plant Pathology. In 1995 he was head of the Department of Plant Virology at the Volcani Center.Between1994and 2004 he was Professor (Adjunct) in the Department of Life Sciences, Ben-Gurion University, Beer Sheva. In 1996-1997 he was Scientific Director of the Gilat Experiment Station, Northern Negev and between 1986-2004 he was founder and head of the S. Tolkowsky Laboratory for Citrus Disease Research at the Volcani Research Center, Bet Dagan. Since 1982, he served as an independent supervisor of PhD students from the Faculty of Agriculture Rehovot, the Hebrew University , Jerusalem. In total, 11 M.Sc. and 9 Ph.D. Students completed their degrees under his supervision.On September.1, 2004 he was officially retired after almost 40 years of service. Moshe has served on the International Committee on Taxonomy of Viruses (ICTV) as a member of the Closteroviridae Study Group. He has over 100 publications in the reviewed Journals of Virology, J.Virology, Arch. Virology, Phytopathology, Virus Genes and Phytoparasitica, He has also published more than 15 review chapters in books plus over 150 articles in local and International popular Agricultural Journals. He has published in every issue of the IOCV Proceedings since 1976, not only on tristeza, but on exocortis, other citrus viroids, citrus certification, impietratura and stubborn disease.

His activities extended far beyond the scientific and into the esoteric. Who else but a Moshe Bar-Joseph would think that goats might be a vector in the spread of viroids. In a publication by Cohen et al. (2005) on the spread of viroids to fruit trees in the middle east which were normally attributed to infected budwood or mechanical transmission in the field, a team of scientists led by Moshe showed that viroids may be distributed long distances by goats. They purified viroids from goat horns and suggested that long range spread of viroids among cultivated or wild trees may be done by goats which have the habit of repeatedly rubbing their horns against tree trunks and branches.

Finally, on the esoteric, while Moshe was collaborating in Dr. Gumpf's laboratory at UCR in the 1990's, Dr. Calavan, then retired, was undergoing a heart transplant. While Moshe, Richard Blue and myself contributed blood Moshe had the chutzpa (nerve) to ask the nurse to fill a small vial of his blood so he could test it for the presence of CTV. He then went back to the laboratory and tested his blood using ELISA. I leave it to you to inquire of him whether he found tristeza virus in his blood ? The list of accomplishments and honors received by Dr. Bar-Joseph would fill volumes. Suffice to say that Moshe Bar-Joseph deserves the honor of the award of Fellowship in our International Organization of Citrus Virologists.

Chester N. Roistacher

# AROUND THE WORLD

## California ACP & HLB Quick Update

*Georgios Vidalakis & Robert Krueger*

Unfortunately the spread of Asian citrus psyllid (ACP) continues in California. The most recent finds were in the heart of California citrus production in the San Joaquin Valley. In November 2012, ACP were identified in traps in groves near Lindsay, Strathmore, and Terra Bella in southeast Tulare County. This resulted in the establishment of eradication areas around the detection sites, surveys to delimit the area of establishment, and restrictions on the movement of fruit outside the area. The ACP tested negative for HLB. In May 2013, restrictions were lifted but less than a month later, six ACP were found in traps south of Porterville, also in southern Tulare County. This resulted in a new quarantine on citrus nursery stock and fruit being established. In September 2013, additional finds were made in Tulare County (Dinuba) and Kern County (Wasco). October 2013 found additional ACP finds in Tulare County (Lindsay, Ducor, and Terra Bella) and the first report from Fresno County (Orange Cove), while in November 2013, additional reports from Richgrove, Exeter, and Lemon Cove (all Tulare County) reported ACP finds.

These trap catches have resulted in quarantines being established in Kern and Fresno Counties and, most importantly, a large area of the main citrus producing area in Tulare County. These quarantines restrict movement of citrus propagative material and fruit unless specific conditions are met. In addition, thirteen 800 m eradication areas have been established, twelve of these being associated with commercial orchards. On a more positive note, no breeding populations of ACP have been detected in the San Joaquin Valley and no ACP trapped there have tested positive for HLB.

Movement of ACP-free bulk fruit out of the ACP quarantine area is permitted under a special permit (3150) if certain conditions are met:

1. Sign a compliance agreement and exhibit provided by ACP project;
2. Complete the ACP-Free Declaration form and include the form with each shipment;
3. Deliver bulk citrus fruit only to an ACP-Project approved packing house or processor. Please, contact the local County Agricultural Commissioner for a list of approved receivers.
4. Provide ACP-Free Declaration form to the receiving packing house or processor upon delivery;
5. Ensure pallets or field bins are completely tarped or moved in a conveyance with solid walls.
6. The "ACP-Free Declaration Form" must be provided to the ACP Project at least 72 hours in advance of choosing the method that will ensure the shipment is free from ACP. Please note, the acceptance of new methods may take substantially more time to review.

"Freedom from ACP" basically involves the fruit shipments and containers being free of all vegetative parts of citrus (stems and leaves) or specific pesticide treatments within 14 day prior to harvest. Additional ad hoc methods to establish ACP-free status will be considered by the authorities. This program is a cooperative program between the California Department of Food & Agriculture (CDFA) and USDA-APHIS.

USDA-APHIS has also established regulations for the interstate movement of citrus nursery stock and propagative materials from ACP/HLB quarantine areas under compliance agreeements. These basically mandate the maintenance of pathogen-tested stock under protective screen, with specific pesticide treatments and inspections being necessary prior to shipment. Development of these regulations is ongoing as specific nursery conditions are quite variable and regulatory personnel seek to maximize phyto-security while preserving economic viability of the citrus nursery industry.

The APHIS regulations have directly affected both the Citrus Clonal Protection Program (CCPP) and the National Clonal Germplasm Repository for Citrus & Dates (NCGRCD). All Counties in southern California are now in the ACP quarantine zone. CCPP and NCGRCD facilities in Riverside have been under compliance agreements for citrus nursery stock since 2012. This has allowed CCPP to move material to the CCPP Lindcove Research and Extension Center (LREC) facilities in Tulare County for maintenance and distribution to the California citrus industry and the NCGRCD to distribute materials domestically to fulfill its mission. Unfortunately, the current quarantine area in the San Joaquin Valley encompasses LREC, so CCPP

facilities there must establish a separate compliance agreement.

The discovery of the second HLB positive tree remains elusive. Much effort has been focused in the Los Angeles areas where the ACP populations have been well established for several years. New experimental detection technologies based on secreted proteins, small RNAs, and volatiles have highlighted a number of HLB suspect trees and experimentation is ongoing for verification of results. Since only PCR testing can currently result in regulatory actions, the results of these tests has not so far resulted in any additional "findings" or regulatory actions.

ACP and HLB funded research continues in all fronts and ACP trapping and treatment as well as HLB testing continues in collaborative efforts with the industry, state and federal agencies.

The establishment of ACP and possibly HLB in California has emphasized the need for long-term preservation of citrus germplasm and clean stock. CCPP and NCGRCD have partnered with Dr Gayle Volk, USDA-ARS National Center for Genetic Resource Preservation (NCGRP) in Fort Collins, Colorado, in the development of a cryopreservation protocol for citrus buds. The research aspects of this project have been presented in various venues, including the International Citrus Congress in Valencia, Spain in 2012. Efforts are ongoing to cryopreserve citrus genotypes, with the priority being the commercial clean source varieties most widely distributed by CCPP. To date, nearly 100 varieties have been sent to Fort Collins for cryopreservation. Materials at NCGRP are highly secure and represent an important safeguard for citrus germplasm if a catastrophic event occurs in Riverside or Lindcove. Materials preserved as clean source would also emerge from cryopreservation as clean and so would not have to be resanitized.

*Icicles formed on ACP yellow sticky trap photo by Roger Smith*

In December 2013 an Arctic cold front produced freezing temperatures in citrus producing areas of the state. It not yet sure how much damage occurred but it is expected to have impact on production since a lot of immature fruit, especially mandarins, where on the trees at that time. A second Arctic front is expected during the production season.

Portal websites for additional information on the above topics:

USDA-APHIS HLB page:
http://www.aphis.usda.gov/plant_health/plant_pest_info/citrus_greening/index.shtml

CDFA ACP/HLB page:
http://www.cdfa.ca.gov/plant/acp/index.html

Citrus Pest & Disease Prevention Program:
http://citrusinsider.org/

University of California ACP/HLB page:
http://ucanr.edu/sites/ACP/

## Unforbidden Fruits: Preventing Citrus Smuggling by Introducing Varieties Culturally Significant to Ethnic Communities

*David Karp, Tracy Kahn, Toni Siebert, Robert Krueger, Richard Lee, and Georgios Vidalakis*

Illicit imports of prohibited plant commodities or parts pose a grave danger of introducing and spreading exotic pests and diseases. In the case of citrus, these are most notably Huanglongbing (HLB)

and its vector, the Asian citrus psyllid (ACP). For example, in July 2009 a specially trained dog found curry leaves (Bergera koenigii) carrying ACPs, which tested positive for the bacterium associated with HLB, in a package at a Fresno FedEx facility. The problem is far-reaching: according to a recent study by the USDA's Economic Research Service, citrus and citrus relatives accounted for eight of the top 14 categories of fruits smuggled into the United States from 2002 to 2006 (Peyton Ferrier, The Economics of Agricultural and Wildlife Smuggling, USDA-ERS, 2009).

Federal and state agencies strive mightily to stop smugglers, but it's impossible for them to catch them all. Only a small percentage of agricultural cargo is inspected, and in any case many of those who smuggle citrus do so for religious and cultural purposes, not fully understanding the potential impact, are unlikely to be deterred by conventional interdiction strategies. Complementary to interdiction there's another approach, reducing demand, that can play a crucial role in suppressing smuggling. The concept is simple: if a product is readily available in California, smugglers won't bother to bring it in. The implementation is trickier, however, because in many cases there's no pathogen-tested budwood in the system, as is mandated by state and federal regulations, for nurseries to start with to propagate trees.

The scientists at the University of California, Riverside (UCR) and the USDA who are responsible for securing California's citrus germplasm resources have long been aware of this and have made an effort to release varieties and species that were smuggled or illicitly propagated, like yuzu and sudachi, two forms of Japanese acid citrus, or kaffir lime (Citrus hystrix), whose leaves are indispensable in Southeast Asian cooking. All were processed at the California Citrus Clonal Protection Program (CCPP), and their budwood was made available to nurseries.

As the pressure from new citrus pests and diseases has increased in recent years, it has become apparent that efforts were needed to determine which types of citrus were being smuggled, and what could be done about it from a germplasm standpoint. Thus was born, in spring 2010, a three-year project with the ungainly name "Unforbidden Fruits: Preventing Citrus Smuggling by Introducing Varieties Culturally Significant to Ethnic Communities" – UFF for short. Funded by the California Citrus Research Board (CRB), it draws on the expertise of Tracy Kahn (principal investigator), Toni Siebert, and David Karp, Department of Botany and Plant Sciences at the University of California, Riverside; Richard Lee and Robert Krueger, USDA-ARS National Clonal Germplasm Repository for Citrus and Dates (NCGRCD); and Georgios Vidalakis, Department of Plant Pathology, UCR.

The first task was to determine which species and varieties were being smuggled, and why. We learned that there is a little-known database compiled by the USDA/APHIS Smuggling Interdiction and Trade Compliance (SITC) program listing seizures of citrus and citrus relatives being smuggled from foreign countries, including the plant parts concerned, quantities, countries of origin, and the states where the items were seized. Securing access to this information was difficult, but we received it in November, 2010.

Interpreting the data proved more problematic. In many cases seizures were described simply as "citrus leaves" or "citrus plants," although in some cases we could assume the possible identity based on country of origin as in the case of kaffir lime leaves from Thailand. The most-smuggled citrus commodity was listed as limes from Colombia, which were probably sweet limes illicitly shipped at a season when the fruit was not in season here.

Meanwhile, by reviewing the scientific literature and interviewing interdiction specialists, specialty produce purveyors, and end users, we researched the background of the most-smuggled species and varieties in order to understand the context in which smuggling takes place: their traditional uses, the availability of germplasm here, their HLB and ACP host status, the current quarantine situation, economic demand, and the prospects for their cultivation in California.

Based on this information, we decided to focus first on two Citrus relatives which are important for their leaves, curry leaf and bael (Aegle marmelos), since their leaves are prime host material for ACP and HLB and can easily transmit them in smuggled shipments.

The most high-profile of the two, curry leaf, is native to the Indian subcontinent, and is commonly used in many dishes as an aromatic ingredient, like bay leaf. Curry leaf trees flourish in citrus-friendly parts of California, although they may grow slowly at first, and many Indian-origin Americans cultivate them in their gardens, and share leaves and cuttings with relatives and friends. There are several different kinds, differing considerably in vigor, the size of the leaves, and their aromatic properties; some users strongly prefer one kind over another. Most significantly for California's citrus growers, there's substantial demand for curry leaf that's unmet, from those who don't have direct access to trees, or from commercial users like restaurants and food processors.

Shipments from plantings in Florida and Hawaii previously were the primary sources for curry leaf in California. However, Florida is no longer allowed to ship curry leaves to other states, because of federal quarantines imposed after the discovery of HLB in 2005. Hawaii, which has ACP but is not known to have HLB, is now the main source of supply, with several growers on the island of Oahu who cultivate perhaps 20 acres. Much of the harvest is flown to an irradiation facility on the island of Hawaii, where the dose that is administered, 400 gy, is sufficient to sterilize most insect pests, but not always to kill them. That's good enough that the USDA allows irradiated curry leaves to be shipped to non-citrus producing states, but for not sufficient for California, because even one live ACP could do incalculable damage if it harbored or spread HLB. Curry leaf intended for shipment from Hawaii to citrus states must be fumigated with methyl bromide, a process that is expensive and drastically shortens the product's shelf life, from a few weeks to roughly five days. Understandably, retailers and customers are less than enthusiastic about fumigated leaves. In addition, in the winter and early spring the supply from Hawaii is insufficient to meet demand, and buyers without good connections can find themselves cut off.

The CRB asked us to develop a protocol for distributing curry leaf propagating material to California citrus nurseries. However, conventional vegetative methods of distributing mother germplasm, such as air layering and grafting, are not readily available, because curry leaf is not in the genus Citrus or closely allied genera, so no rootstocks or disease indexing procedures have been developed. To get material out as quickly and as phytosanitary as possible, we chose to pursue distribution via seed, one of the standard methods used in India.

Seed transmission of pathogens has been reported for a limited number of citrus pathogens: Citrus psorosis virus, Citrus leaf blotch virus, Xylella fastidiosa, and possibly Candidatus Liberibacter asiaticus, the pathogen associated with HLB. To make sure that the original seed material did not carry any known seed-transmissible pathogen of citrus or any graft-transmissible pathogen of regulatory significance such as Citrus tristeza virus or citrus viroids, in late 2011 and early 2012 NCGRCD and CCPP scientists tested curry leaf seed mother trees in the Riverside collections; the results were negative for all tested pathogens and trees. In addition, we established six curry leaf trees in an insect-resistant screenhouse at the NCGRCD facilities, to serve as seed trees in the future. These measures, and the whole protocol underlying safe seed distribution for curry and other citrus relatives, were described in a comprehensive document, "Standard Operating Procedures for Nursery Owned Source Plants of Citrus Relatives," that we submitted to federal and state regulators in January, 2012.

These phytosanitary authorities agreed with the science supporting the pathogen testing and distribution protocols, but regulatory obstacles remained at both the state and federal levels. Citrus nurseries interested in propagating curry trees had to keep them in the insect-resistant structures mandated for their commercial citrus mother and increase trees by the CDFA's Citrus Nursery Stock Pest Cleanliness Program; but this program is limited to the genus Citrus and allied genera, and curry leaf trees were not allowed to be present (unless in an approved compartment) in a State-approved facility. UFF team members and interested nurserymen conferred with CDFA, and on March 30, 2012, an interdepartmental permit, No. QC 1334, was issued which authorizes "seeds of bael and curry plants to be planted inside departmentally approved insect-resistant structures," according to the protocol proposed by the UFF team. On June 14, the Citrus Nursery Stock Pest Cleanliness Program circulated the permit to California citrus nurseries.

The problem from the USDA regulatory standpoint was slightly different: Commingling curry leaf and bael with pathogen tested and therapied citrus mother and increase trees is prohibited by the current regulations for the "Interstate Movement of Citrus and other Rutaceous Plants for Planting from Areas Quarantined for Citrus Canker, Citrus Greening, or Asian Citrus Psyllid". After much discussion, on July 11 USDA replied to the UFF team inquiries that "Based on the current status of citrus greening in California, the Subject Matter Experts would be ok with the conditions you outlined."

We have sent curry leaf seeds to four nurseries that have submitted requests, and will distribute additional seeds upon request and availability. Once nurseries establish a clean source in their insect-resistant structures, they will be allowed to propagate by root cuttings, air layering, or whatever works. It will be up to California farmers to decide whether and how to grow curry leaf, but at least two issues remain if commercialization is to be viable. Growers in ACP quarantine zones, which include most of Southern California and could easily expand to new areas if and when the insect is found there, are not allowed to ship leaves outside those zones, unless they are fumigated with methyl bromide. An alternative protocol that calls for washing the leaves with a surfactant is under study by USDA scientists, but it is not clear if or when it will be approved.

The other of the two citrus relatives on which we are focusing is bael, native to the Indian subcontinent. The hard-shelled fruits are exquisitely aromatic, and are used in India for the making of juice and preserves, but its trifoliate leaves are the primary concern. Known in Hindi as "bilva," they are used for rites of the Hindu deity Shiva, particularly in the Maha Shivaratri festival held annually in February or March, and to a lesser extent weekly. In India virtually every Hindu temple has a garden with one or more bael trees, and priests in California say they'd like to do the same thing here. The trees flourish in Riverside, so there seems to be no reason why they could not be grown here, but because no disease-tested propagating material is available to California nurseries, the trees are difficult if not impossible to find here. Therefore, as for curry leaf, bael seeds from disease-tested trees at the CVC/NCGRCD in Riverside are being made available to California nurseries.

Our third focus is citron (Citrus medica), one of the three original species of cultivated Citrus, along with pummelo and mandarin. Native to southwestern China and Northeastern India, it was brought more than 2,300 years ago to the Middle East, where it was adopted by the Jews for a crucial role in their autumn harvest festival, Sukkot. For a fruit to be suitable for Jewish ritual use, it must be of certain traditional cultivars, and meet many requirements including size, shape, color, and freedom from cosmetic blemishes; $50 is a typical price in the United States, and perfect specimens can fetch $500 or more from exigent Ultra-Orthodox Jews. Most citrons for Jewish use, called etrogs, are imported from Israel, Italy, or Morocco, but there is one commercial grower in California, and in recent years a number of others have started plantings here. There is also a moderate but increasing demand from observant Jews and synagogue gardeners who wish to grow their own trees, and want the particular cultivars, which have not been publicly available in California in suitable form.

The tricky part is that for an etrog to be valid for Jewish ritual use, it must be harvested from a tree that grows on its own roots, rather than being grafted, as are virtually all other commercial citrus trees. Not just that, but all of the parents of the tree, dating back centuries, are supposed to have been own-rooted. Therefore only certain traditional cultivars, whose non-grafted pedigree has been attested by generations of rabbinical authorities, are acceptable. But if a tree and all its ancestors must be grown from seeds or cuttings rather than grafted, that rules out using micro-shoot-tip grafting, the standard technique to eliminate pathogens; the Etrog accession currently in the CCPP is disqualified by this criterion, and indeed, the whole concept of budwood doesn't work for citrons intended for Jewish ritual use.

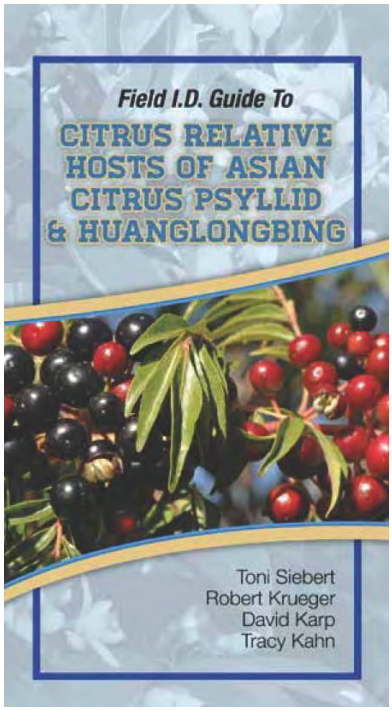
However, despite the seeds being momoembryonic and strictly sexual, because of certain reproductive peculiarities, etrogs generally come true to type from seed. It is possible, with the proper permit, to import seed of citron from the countries in the Mediterranean where they are grown. In 2008 David Karp ventured to a remote region in the Anti-Atlas Mountains of southern Morocco, where the prized 'Assads' citron has been grown for centuries for Jewish ritual use, and sent back seeds with a permit to the USDA. Trees derived from these seeds,

growing at UC Riverside, started fruiting last season, and seeds were harvested and distributed to interested nurseries. Trees derived from another elite ritually valid strain, 'Morning Song Temoni,' were recently planted in the field; since citron typically fruits just a year or two after planting, we hope to be able to offer seeds of this accession before too long. It is unlikely that these germplasm lines will be used by commercial growers aiming at an Ultra-Orthodox clientele, but less exacting Jews should be pleased to have access to ritually valid etrog trees for the first time.

Acknowledgements
We would like to thank the Citrus Research Board for funding this research (CRB Project 5100-129). We also sincerely thank all the individuals from USDA APHIS/PPQ, USDA APHIS/PPQ SITC and the CDFA for all their support toward making this project possible.

## Flip Book' provides information on HLB/ACP hosts

*Robert Krueger*




In keeping with the purpose of the Unforbidden Fruits project, four members of the UFF team (Siebert, Krueger, Karp and Kahn) compiled a flip-book, *Field ID Guide to Citrus Relative Hosts of Asian Citrus Psyllid and Huanglongbing*, which is published by the CRB. This publication consists of 54 pages of text and photographs documenting those species and types of citrus relatives most likely to be present in California that could serve as hosts of ACP and HLB. The trees, leaves, fruit and flowers of these genotypes; the text includes scientific and common names, descriptions, uses, what is known about the ACP and HLB host status (derived both from a review of the scientific literature and research conducted by UFF team member Lee and his colleagues), and an estimate of the danger presented to California citrus. It is distributed by CRB as a laminated flip-book, a convenient format for use by phytosanitary professionals, citrus growers and laypersons. Several hundreds of these flip books are currently in use by Federal and State regulatory personnel. For additional information, contact the Citrus Research Board <http://citrusresearch.com/> or view a PDF at <http://californiacitrusthreat.org/pdf/CRB-FlipBookV2.pdf>.

# CONFERENCES / MEETINGS / PUBLICATIONS / ANNOUNCEMENTS

## 3rd International Workshop on Citrus Quarantine Pests August 27-30, Manzanillo, Colima, Mexico

*Rebecca Lee*

Once again, this workshop met with overwhelming success: it attracted upwards of 660 attendees from 16 countries (Argentina, Belize, Bolivia, Brazil, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Taiwan and the United States). Enrique Sanchez Cruz, Director of SENASICA, Javier Trujillo, Director General of Plant Health, as well as representatives from the State of Colima and town of Manzanillo, the State plant health committee, USDA, IICA and NAPPO attended the opening ceremony. Speakers from Mexico (16), the US (3) and Brazil (3) provided updates on country status and scientific progress for citrus tristeza virus, citrus leprosis, citrus black spot, citrus canker, and citrus variegated chlorosis. Due to its importance worldwide, Huanglongbing was given two full days which covered aspects dealing with the vector, **Diaphorina citri,** as well as methods for disease and vector management. Area wide

*Citrus Panel of NAPPO*
*From left to right: Jim Reynolds, US industry; Hector Sanchez, SAGARPA; Luis Angel Villareal, SAGARPA; Juan Lorenxo Palau, Mexican Industry; Jose Hernandez, USDA-APHIS; Robert Krueger, USDA-ARS; Pedro Robles, SAGARPA; Stuart Kuehn, USDA-APHIS.*
*Front row, from left to right: Elena Iobana Alanis, SAGARPA;Rebecca Lee, NAPPO.*

management was seen as the only viable solution and emphasis was given to the need for producer organizations to ensure success.

The numbers of attendees, both Mexican and international, underscore the usefulness of this type of events which provide a space in which to exchange experiences and update the scientists, regulators, extension agents and producers on new developments or methodologies. The workshop was organized by the panel of citrus NAPPO.

## 2013 Annual Conference of the California Citrus Nursery Society

*Tom Delfino*

California Citrus Nursery Society, the industry association for California's citrus nurseries, held its 2013 Annual Conference November 4th through 6th in La Quinta, California. Presentations at the Conference included reports on:

- The 4th Annual Citrus Health Research Forum (Tia Russell of Duarte Nursery and Karen Suslow of the National Ornamental Research Site at Dominican University of California)
- Efforts to develop industry best management practices (Karen Suslow)
- A hearing by committees of the California Assembly on bee colony collapse disorder (with the possibility of California legislating new restrictions on the use of neonicotinoid pesticides) (Tom Delfino of California Citrus Nursery Society)
- The latest developments with respect to quarantines for Asian citrus psyllid and Huanglongbing (Victoria Hornbaker of California Department of Food and Agriculture and Louise Fisher of the Citrus Research Board)
- The effectiveness of Imidacloprid for controlling Asian citrus psyllid in residential gardens, at retail nurseries, and in containerized citrus nursery stock (Matt Daugherty and Frank Byrne of University of California, Riverside)

Conference attendees participated in a workshop on airflow in double-door entry vestibules for protective structures (screenhouses and screened greenhouses). The US Department of Agriculture uses an acceptance criterion of outward flow everywhere in the door opening when the outer door is open. Many existing vestibules have been unable to meet this criterion—the typical installation having strong outward over part of the opening, but inward flow over other regions of the opening.

Presenters at the workshop were Jim Bergantz of AgraTech, Inc. and David Chelf of Airstream Innovations, Inc. The key messages from the workshop were:

- If it blows it sucks (i.e., if air flows out of a fan, an equal amount must flow into the fan)
- The most effective means of achieving outward flow over the entire door opening is to pressurize the vestibule and only a very low pressure is needed to overcome an external wind blowing directly into the opening (e.g., a pressure of approximately 0.4 inch of water can overcome an external wind of 30 miles per hour)
- The fan must be capable of moving enough air to achieve the desired average velocity through the door opening (e.g., for an average outward velocity of 2 miles per hour through a 3 feet by 7 feet personnel door, an air flow of approximately 3,700 cubic feet per minute is required)
- The fan pressurizing the vestibule should be directed away from the door opening—creating a jet flowing out the door induces inward flow over those regions of the opening not subject to the jet (e.g., if, thanks to a jet, the average velocity out the door 10 miles per hour over half of the opening, but the fan provides only enough air flow to attain an average velocity of 2 miles per hour over the entire opening, the velocity in the other half of the opening must have average 6 miles per hour *inward*)

The Banquet speaker was Ken Keck, the new President of the Citrus Research Board. He spoke about his vision for the Citrus Research Board. Participants also visited Colorama Nursery and Young's Nursery in Thermal, where they saw the measures these nurseries have had to take to deal with Asian citrus psyllid. They also visited University of California, Riverside's Coachella Valley Agriculture Research Station in Thermal. There they learned about the desert lemon trials under the direction of Glenn Wright of University of Arizona and Tracy Kahn of University of California, Riverside.

## The Xth International Society of Citrus Nurserymen Congress

*Roger Smith*

The Xth International Society of Citrus Nurserymen Congress consists of three individual sections. First you must register for the congress in Mexico. The Pre and Post tours are optional and you can choose one or both. To be eligible for the pre and/or post tours you must first register for the Xth Congress (you cannot register for pre or post separately from the Congress at this time. You must register for each section individually. The charts at the bottom of this document are a helpful guide to understand the details.

**Section 1:** Pre-Congress tour in Florida February 11th and 12th 2014 is comprised of two days. We will tour Southern Gardens Citrus Nursery, Brite Leaf Citrus Nursery, and Southern Citrus Nursery and visit the University of Florida Citrus Research and Education Center in Lake Alfred FL for afternoon session and discussion. Transportation to and from Hotel and lunches are included in the registration fee. Hotel and night time meals are not included in the registration fee.

February 13th is a travel day from Florida to Mexico. See details below for travel arrangements.

**Section 2:** Events in Mazatlán Mexico are February 14th through 19th. The Congress will be held in the EL CID hotel in Mazatlán February 16-19 and all the sessions and workshops will be in the same hotel. The list of speakers and sessions can be found by viewing the congress tab of the www.congress.iscn.co web site. There will also be other opportunities for attending an HLB workshop and the Sinaloa agricultural equipment show on February 14-15 while in Mexico. These events require you make separate arrangements at http://en.cytrusmex.com , the web site of the Mexican organizers.

February 20th is a travel day from Mexico to California. See details below for travel arrangements.

**Section 3:** Post-Congress tour in California February 21st through 26th. This section includes tours of 4 Winds Citrus Nursery, Duarte Nursery, Tree Source Citrus Nursery, Mulholland Citrus Nursery, B & Z Citrus Nursery, Willit's & Newcomb Citrus Nursery as well some opportunities

to visit Yosemite National Park, wine country and more. See Post-Congress tab for more details. Transportation to and from Hotel and lunches are included in the registration fees.
February 27th is a travel day to return home. See details below for travel arrangements.

**How to Register**

1. To register for the Xth Congress, go to www.congress.iscn.co. The home page will guide you to Instructions. The site needs someone from your company to first register your organization. Once that is done, all affiliated attendees will be able to find the organization from the drop down menu.
2. To get a 10% discount on Congress Fees, become an ISCN member at www.iscn.co. You will need to use your ISCN username and password for the Congress site to give the discounted rate. Go through the membership fee process and wait for confirmation by email. Everyone must renew their membership to get the discount, even if you are currently a member. Discounts only apply to ISCN members, not to affiliates.
3. Register for the Xth Congress on the www.congress.iscn.co site. Once you've paid the Congress Fees and registered, you will be able to gain access to the pre-Congress and post-Congress under Tours & Packages. Please note that the ISCN Congress log-in is not the same as the www.iscn.co log in. They are separate, so you if you register as a member at www.iscn.co , you also have to register as a Congress attendee at www.congress.iscn.co .
4. Congress fees cover all transportation, translation services, meeting rooms, many of your meals, and support services. You must pay fees for all 3 legs of the Congress. Companions must also register for pre and post Congress, but need not register for the Congress. (there are many companion programs offered on all 3 parts of the Congress. Some will be covered by the registration fees, some will cost extra. These tours will be booked upon arrival, not in advance.)
5. Hotel accommodations are a bit complicated if you intend to attend all 3 parts of the congress in Florida-Mexico-California. Please reference the Congress Calendar (Excel file) to verify the nights you need to book accommodation. Go to accommodation page on www.congress.iscn.co for links to the hotels with discounted rooms.

Here's some additional details:
a. For Orlando, FL and the pre-Congress. Arrive either 9Feb13 or 10Feb13. Tours are 11Feb-12Feb. Depart 13Feb from Orlando to Mazatlan, Mexico. Link for discounted rates: http://hamptoninn.hilton.com/en/hp/groups/personalized/M/MCOGWHX-INT-20140210/index.jhtml
b. Besides at www.congress.iscn.co, reservations for Mazatlan can also be made directly to the El Cid hotel through toll free phone 01 800 7169800, by email reserve@elcid.com.mx and mentioning the code "viveri." All meals are covered by an El Cid reservation. Congress begins with a welcome 16Feb for those not attending Pre-Congress. Events are planned 14Feb-15Feb for those arriving early. Depart Mexico 20Feb for California.
c. In California we're visiting 3 cities, Monterey-Visalia-Bakersfield. Monterey is 20Feb-22Feb. Visalia is 22Feb-25Feb. Bakersfield in 25Feb-27Feb. Use links below to book rooms in the host hotels (same links on www.congress.iscn.co )
Monterey Book Deluxe Room at Monterey Marriott for $179 USD per night
Visalia Book (1) Single or (2) Double at Visalia Marriott at the Convention Center for $109.00 per night
Bakersfield Book your group rate: Society of Citrus Nurseryman >>
6. Flights to N. America are up to you. For a round-trip destination, if you are coming over the Pacific, book into Los Angeles (LAX). If coming over the Atlantic, Orlando (MCO). congresodecitricos@gmail.com is the official travel agent of the Congress and can help with flights. They have special group rates for connecting flights between the congress venues of Orlando-Mazatlan-San Jose, so contact them to handle your connecting flights. They can also get you back to your departure airport once your Congress attendance is over.
7. Tourism options. congresodecitricos@gmail.com will help you with any Mexico tourism. www.hansentravelideas.com will connect you with a California agency if you desire to do some California tourism. Make sure you state "ISCN Congress Tourism" when contacting them.
8. Tour opportunities during Free Days will be coming to you as soon as they are finalized. You would go back to the www.congress.iscn.co to book as directed by an email announcement.
9. 14Feb & 15Feb the Mexicans are hosting an HLB Conference. This is not a part of the ISCN Congress, but is available if you register at http://en.cytrusmex.com.
There is also opportunity to visit the Sinaloa Equipment Show on 14Feb. .

# Organizational Charts and Links

## IF ATTENDING PreCongress, Congress, and PostCongress

| | Pre-Congress | Congress | Post-Congress |
|---|---|---|---|
| Arrival Airport | Orlando, FL, USA | Mazatlan, MX | San Jose, CA, USA |
| Arrival dates | 9th or 10th Feb | 13th Feb | 20th Feb |
| Departure dates | 13th Feb | 20th Feb | 27th Feb |
| Departure Airport | Orlando, FL, USA | Mazatlan, MX | Bakersfield, CA, USA ( a bus to LAX can be arranged) |
| Accommodations | Book at www.congress.iscn.co | Book at www.congress.iscn.co | Book 3 hotels at www.congress.iscn.co |
| Accommodation Dates | 10Feb-14Feb | 14Feb-20Feb | 20Feb-22Feb<br>22Feb-25Feb<br>25Feb-27Feb |
| Connecting Flights (special rates) | Book with congresodecitricos@gmail.com | Book with congresodecitricos@gmail.com | Book with congresodecitricos@gmail.com |
| Suggested International Arrival/Departure Airport | LAX- from Pacific<br>MCO- from Atlantic | | LAX- from Pacific<br>MCO- from Atlantic |
| Register Attendee & Companion | www.congress.iscn.co | www.congress.iscn.co | www.congress.iscn.co |
| Tourism (optional) | www.visitorlando.com | congresodecitricos@gmail.com | www.hansentravelideas.com |

## IF ATTENDING Congress, and PostCongress

| | Congress | Post-Congress |
|---|---|---|
| Arrival Airport | Mazatlan, MX | San Jose, CA, USA |
| Arrival dates | 16th Feb | 20th Feb |
| Departure dates | 20th Feb | 27th Feb |
| Departure Airport | Mazatlan, MX | Bakersfield, CA, USA ( a bus to LAX can be arranged) |
| Accommodations | Book at www.congress.iscn.co | Book 3 hotels at www.congress.iscn.co |
| Accommodation Dates | 16Feb-20Feb | 20Feb-22Feb<br>22Feb-25Feb<br>25Feb-27Feb |
| Connecting Flights (special rates) | Book with congresodecitricos@gmail.com | Book with congresodecitricos@gmail.com |
| Suggested International Arrival/Departure Airport | LAX | LAX |
| Register Attendee & Companion | www.congress.iscn.co | www.congress.iscn.co |
| Tourism (optional) | congresodecitricos@gmail.com | www.hansentravelideas.com |

## IF ATTENDING Congress, http://en.cytrusmex.com

| | Congress |
|---|---|
| Arrival Airport | Mazatlan, MX |
| Arrival dates | 16th Feb |
| Departure dates | 20th Feb |
| Departure Airport | Mazatlan, MX |
| Accommodations | Book at www.congress.iscn.co |
| Accommodation Dates | 16Feb-20Feb |
| Connecting Flights (special rates) | Book with congresodecitricos@gmail.com |
| Suggested International Arrival/Departure Airport | Mexico City |
| Register Attendee & Companion | www.congress.iscn.co |
| Tourism (optional) | congresodecitricos@gmail.com |

## Obituary
## Dr. Ary Apparecido Salibe
## September 1, 1934–November 19, 2013

*Juliana Freitas-Astúa, Jorgino Pompeu Jr., and Pedro Moreno*

With deep sadness, we report the recent death of Dr. Ary Apparecido Salibe in November 19th at 79 years old.

*Ary Apparecido Salibe*
*http://www.fruticultura.org/personalidades/42-ary-apparecido-salibe*

Dr. Salibe graduated in Agronomy in 1957 at the Universidade de Sao Paulo (Esalq/USP), in Piracicaba, Brazil. He then specialized in Virology/ Citriculture at the University of Florida (1959), getting his PhD in Agronomy from the Esalq/USP in 1961 and a post-doctoral position at the Centre National de Recherche Agronomique (1963). He attended short trainings in Spain, France, Italy, Israel and the USA. Dr. Salibe worked as research scientist for the Citrus Section of the Instituto Agronômico de Campinas and then became professor of Horticulture at the Universidade Estadual Paulista (Unesp) in Botucatu, where he worked from 1968 to 1998. In these years he was also a consultant for FAO/ UN and thus he had the opportunity to visit more than 30 countries in the five continents to help the local governments with projects on citrus pathology and breeding. After his retirement from the Unesp, he still worked for a few years at the Centro de Citricultura Sylvio Moreira in Cordeiropolis, SP.

Dr. Salibe devoted his career and his life to the citrus industry, particularly to graft transmissible diseases. The subject of his PhD dissertation, under the guidance of Dr. Sylvio Moreira, was citrus exocortis. Dr. Jorgino Pompeu Jr., an old friend since the college years, recalls: “Ary’s work addressed the damage of exocortis, xyloporosis and psorosis on the growth and yield of citrus trees. Dr. Alvaro Santos Costa, one of the main plant virologists in Brazil at that time, did not like the idea of someone from the Citrus Section studying viruses (or virus-like diseases) and mentioned that the study of viruses should be performed in the Virology Section of the Institute. However, Dr. Sylvio Moreira argued that Ary did not study the “color and form” of the viruses but their effects on citrus trees. Cordial enemies.”

Dr. Pompeu Jr. also remembers that, together with Victoria Rossetti, Dr. Salibe performed surveys for virus and viroid incidence in Sao Paulo orchards that demonstrated the prevalence of exocortis and xyloporosis and led to the program for obtaining high quality/ high sanity citrus mother plants using nucellar seedling clones. He also selected the Peruvian Tahiti lime clone introduced by Dr. Dalmo Giacometti from Peru and expanded the citrus germplasm collection from the Centro de Citricultura with almost 120 new accessions, including the Volkamer lemon that became important to the Brazilian citrus industry.

Moreover, Dr. Pompeu Jr. remembers the discussion with Drs. Salibe and Orlando Passos (from Embrapa Cassava and Fruits), in a rainy morning, inside a jeep in the Centro de

Citricultura, about the foundation of the Brazilian Society of Fruticulture (BSF). In 1970, such Society became a reality and he was involved in the BSF life since the beginning.

However, Dr. Salibe was active mainly in the IOCV. He, Dr. Victoria Rossetti and other colleagues organized the 3rd IOCV Conference in Brazil (Campinas and São Paulo) in 1963. Later, in the 1980s, he became the 10th chairperson of the IOCV, and in 2010, during the 18th IOCV Conference in Campinas, Dr. Salibe was honored by the Organization in a special ceremony.

He also popularized agricultural science and technology by writing weekly articles, during the 1970s and 1980s, in the Agricultural Supplement of "O Estado de Sao Paulo", one of the most important newspapers in Brazil. More recently, he wrote asiduously in the Gazeta de Limeira, a local newspaper,on the different trips he made around the world while still active in his research career. His last text, published only few days before his death, was entitled "Lorelei, the German mermaid" about a trip to Germany.

His contributions to the Brazilian citrus industry are unquestionable, and the words of Dr. Pedro Moreno (IVIA, Spain) probably define well Dr. Salibe: "He was a pioneer of citrus virology that made many interesting observations on several citrus diseases, and particularly he set up the first test to diagnose exocortis. But over all this, I remember Ary as a friendly, open and generous persons that liked to share his observations and results with all IOCV collegues. Indeed he was a good representative of the exchange and cooperation spirit that has characterized IOCV since its foundation."
Dr. Salibe is survived by his wife Terezinha, his daughters Ariane and Adriane, and two granddaughters.