

**BIC Genetics Committee Minutes**  
During the 2013 BIC Meeting

**Meeting location:** DoubleTree Hotel, Portland, Oregon  
**Date:** Oct. 30, 2013  
**Time:** 7:30 to 9 PM

**Committee Members – all present:**

**Kirstin Bett**  
**Paul Gepts**  
**James Kelly**  
**Phillip McClean**  
**Tim Porch**                   **Chairperson**  
**Carlos Urrea**  
**Phil Miklas**               **BIC president**

Additional guests:

M.-C. Goncalves-Vidigal, Peter Pauls, Ali Navabi, Steve Beebe, Juan Osorno, Steve Noffsinger, Jim Beaver, Juan Jose Ferreira, Shree Singh, Marilda Cainceta, Giseli Vanentini, Sandra Lima Castro, Danielle Nanamim Maria de Souza, Vanusa Martins, Ted Kisha, Julie Thayer, Jeff Parker, Weidong Chen, Clarice Coyne

**Old Business**

**1. Approval of the Genetics Committee meeting minutes at the Niagara Falls Marriott Gateway Hotel, Niagara, Canada on Nov. 5, 2012.**

JK/PG - AIF

**2. Gene symbols approved between meetings:**

*bc-3*<sup>2</sup>           Conditions resistance to BCMV and allelic with *bc-3*, *cyv*, and *desc*;  
Located on Pv06 and linked to PveIF4E.  
*Co-3*<sup>4</sup>           Renaming of anthracnose locus on Pv04; Acceptance of *Co-10* as an  
additional allele of the *Co-3* locus and its renaming as *Co-3*<sup>4</sup>.  
*Pse-6*           Resistance to halo blight identified in BelNeb-RR1; Located to Pv04 in  
gene cluster and linked to SB10.550 SCAR marker.

**3. *Xap-1* gene symbol:** Single dominant gene resistance from PR0313-58; Co-segregated with SAP6 on Pv10.

Discussed a recommendation to add strain super-script (e.g. *Xap-1*<sup>3353</sup>).

Since there are no systematic collections of strains of Xap, it was decided to leave the symbol as published and without the superscript. The strain information will be included in the gene symbol description.

TP/KB – passed

## **New Business**

### **1. Updated “List of Genes- *Phaseolus vulgaris*”**

Motion: Move that we add the new sections [b iii and iv] to the guidelines.

- b. The evidence must include:
  - i. data from one generation to formulate an hypothesis
  - ii. data from subsequent generations to test that hypothesis
  - iii. for hyper-variable pathogens: family mean testing, and use of multiple, specific races of the pathogen to separate effects of individual genes in gene clusters**
  - iv. molecular marker data and map position when available**

JK/PM - passed

Also, move the guidelines to top of the document after the editorial paragraph and include in the editorial paragraph a note about where the SCARs and maps can be found on the BIC website.

### **2. Use of new genomic tools with the genetic map (Phil McClean)**

Discussion:

- How does having physical map affect our genetic map?
- Where is this “living map”? The one on BIC site is good and needs to continue to be updated.
- Physical map is based on Stampede x Redhawk so it is not fixed – this is important to keep in mind when making comparisons.
- Would be good to have a physical location for markers – but how to define the location? Group of linked SNPs - use peak? Trouble with AFLPs.
- Could be challenging in R-gene rich regions.
- Phaseolus Genes where CMAP feature has markers placed on map and most link out to genome browser - good for now.
- In future it would be highly preferable to have physical locations for markers.

### **3. Presentation on the *Co-16* gene symbol (Maria Celeste): *Co-16* confers anthracnose resistance from cultivar ‘Crioulo 159’ to multiple races including 2047. It is located on Pv04 and linked to g2685.**

Paper received by committee members this morning.

Jim Kelly: note that most of the differentials are not segregating for just one gene as was originally thought. Need to put the race tested next to the gene symbol otherwise we don’t know. Concerned that these should be added as part of a cluster rather than as another Co-gene.

Discussion to continue after the meeting. Find out what is being done in other species.

### **4. Membership:**

Motion to add: Juan Osorno, Kal Kalavacharla, Juan Jose Ferreira and Celeste Gonçalves-Vidigal

TP/PMc - passed

New Chairperson: Tim Porch stepping down as Chair – thanks for many years of dedication to the position. Kirstin Bett nominated as new Chair.

PM/JK - passed

5. **Next meeting**

Puerto Rico, Feb. 2015 during the W2150 meeting.