

# Planteome Ontology Group Meeting Notes

date	about	Links on wiki	Gdoc notes	Moved to wiki
2-27	Noctua, INCA table	yes		
3-16	Avocado + Cherimoya	yes		
4-10	Phenoscape	yes		
4-13		yes		
5-1	Sanmita	yes		
10-30	Website refresh	yes		

## Feb 27th, 2018 Ontology Meeting

Attending: LC, CM, Dan Keith, JE, MAL, AM, unknown tech guy

Issues with Noctua and INCA tools

Catalog file for Noctua

Docker pipeline for Noctua

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## March 16th, 2018 Ontology Meeting-Avocado + Cherimoya

- Alicia Talavera Júdez, Ph.D.Student  
Department of Subtropical and mediterranean fruit crops.  
Estación Experimental IHSM La Mayora (CSIC-UMA)  
29750 Algarrobo-Costa, Málaga (Spain)
  - PI, Dr Antonio Matas Arroyo,
  - Marie-Angelique, Laurel
- Developing an avocado and cherimoya trait ontology, would like to submit it to the Crop Ontology

Whatever became of this?

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## April 10th, 2018

Ideas for Renewal:

- Plant Phenoscape
- Environment phenopackets

From Chris:

The ontology should be in the service of the other aims of the grant for traits, I think coverage of more species, and better integration of quantitative info, e.g. from germplasm databases, high throughput phenotyping

More PECO development, we can do a lot more here

What about making maps more of a central theme?

What if we could visualize germplasm, traits, environments and data on what crops and grown where on maps, e.g.

<https://agro.biodiver.se/2018/04/stressed-rice-in-nigeria/>

From EA, MAL:

- Passport data for sorghum, mapped cultivars
- find outliers, identify issues
- Quality check of trait values,
- Prototype tool CIRAD

For the traits:

Integration of the ENVO and Food Ontology?

INCA Tool- for term submission

- Relies on the design patterns
- MAL with Simon Jupp EBI OLS- resolve issue of the multiple replies of the API
- Posted on the INCA tracker
- Dan Keith- tool to fix the configuration files,
- Prototype by Phenoharmonis ?

Need to have a concrete plan- what are the top priorities?

- Major aim- ontology dev and annotations
- Plant Stress Ontology

AM: question

- Can a user enter a gene and discover homologs, pathways, etc?
- What is the function of the gene of interest?
- Planteome Interactive Gene Function and Interaction Catalog
- [http://planteome.cgrb.oregonstate.edu/heatmap/gene\\_entry](http://planteome.cgrb.oregonstate.edu/heatmap/gene_entry)
- Can we run BLAST on here?
- JE check with Chris at CGRB about the ETA tool- is it still working?
- Consensus sequences for the gene families

Develop an outline laying out what the priorities are:

- What ontologies are needed?
- Germplasm information - GRIN database, Genesys- Bonn Germany
- [matija.obreza@croptrust.org](mailto:matija.obreza@croptrust.org)

Arrange a call with the Genesys folks in the next few weeks?

- Contact the Buckler group- NAM population, 5000 lines being sequences
- James Polland group- wheat population,
- Seth Murray - Texas A+M- Sorghum populations

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## April 13th, 2018 Plant Phenoscape Group Meeting

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## May 1st, 2018 Sanmita Demo

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October 30th, 2018

## Ontology Working Group Meeting--Website Refresh

Attended: Laurel, Justin E, Justin P, Marie-Angelique, Pankaj

PJ: Website pages are stale and need to be updated. Need to have a snappy front page with more visual interest, has not been updated since grant started

Need to update:

- Landing site page- needs attractive user-engagement options
- 'About' page: <http://planteome.org/about>
- Collaborations page: <http://planteome.org/node/6>
- License page

JE- make the search smaller?

JP- Demo of Joomla (<https://www.joomla.org/>) page created for Plant Reactome  
<http://plantreactome.gramene.org/index.php?lang=en>

- Highlight principle points of engagement
- Large icons for each main area of site
- Needs to be usable on all devices and types of browsers
- Joomla vs Drupal- very similar, has lots of modules and may have fewer clicks to complete tasks (compared to what?)
- Joomla isnt good on Internet Explorer
- Icons are from <https://fontawesome.com/icons?d=gallery>
- "sitemap"
- <https://fontawesome.com/icons?d=gallery&q=sitemap>
- <https://fontawesome.com/icons/sitemap?style=solid&from=io> (scaled)

Other comments:

- Drupal 6 is outdated- should be comparing to Drupal 7 or 8
- Drupal 7 is a "long term" release,
- Gramene website (<http://www.gramene.org/>) is pretty nice, but built outside of drupal or Joomla

- Search bar is at the top and then a panel of icons below
- SGN site (<https://solgenomics.net/>) has a lot of stuff on it but it's quite engaging- photo carousel, image of the day, links to social media etc
- NOt done in drupal - use their
- Need a "Citing the Planteome" link
- Do we need a GDPR compliance statement? Probably not if we are not collecting cookies

More JP Comments:

Main topics:

- Explore ontologies
- View annotations
- Noctua
- Ontology Enrichment
- Curate

LC- publication list is useful, room to have a list of the links on the left hand side

PJ:

- Need a clear message about what we are trying to achieve- standard vocabularies, descriptions,
- Types of data, browse links easily -
- Graphical representation to browse the ontologies - CO is somewhat hidden
- Lead them to the ontology browser
- LC: imagery of the crops- where can we get them? Google images, ask DWS?

## Gene Enrichment tool

- <http://planteome.org/oat/>
- needs to be working better
- fix name on front page
- Review manual is blank- BQ is working on it and will send it to JE and I to review
- need to change EO to PECO- on a couple of the visualization tools
- "Categories" could be renamed "Ontology Source" - same as browser
- ~~Type on "Query Type"~~
- Results can be downloaded from the analysis page or you can capture image of the visualization

<https://github.com/Planteome/planteome-data-visualization/issues>

Rename “Ambiguous terms”

Change “Toggle” → hide

After pressing “Submit”, you get a screen of the results

Message is confusing:

**“Please select from ambiguous terms to target the gene product...”**

- It's not clear which ones the user should choose....
  - Perhaps we could list more information about the gene, besides the database Id, such as the gene name. If you had a large number of genes, it would be quite time consuming to go through each one and click them

Duplicates show up if the gene is represented more than 1x in Planteome database, but also seem to be displaying more than one copy of the info

- Where do the results come from ?

Relationship are not shown in the correct color- eg part\_of relationships should be purple

- What about other relationships such as develops\_from ?
  - Eg: *flower develops\_from some 'flower meristem'*
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- LC: Suggest putting gene input box at top

- ~~Tool is not working even with the example gene ids or names~~

PJ: Write a ‘quick paper’ about the tools- LC, JE, BQ

\* Need to push him a bit to get it working and completed

What is the target journal and date?

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Sanmita tool:

- <http://curate.planteome.org/>
- Taxonomy tree not working

PJ: Presentations, YouTube Channel, tools to engage users

JE: Glossary is a useful to engage users, needs work to port over from SQL

Marie: Likes Plant Reactome site,

LC- News/blog would be good to have on the front page, need better colors,

JP: Tweets can be more interesting with images- compare the twitter feed on Plant Reactome

Can copy icons from PR site- pathway icon can represent ontologies

PJ: focus on mocking up the landing page before the PAG meeting

- Need to update GO annotations on our site- out of date
- Annotate option in Zoom
- Explore other options and themes
- Report in weekly....
- Marie- can we integrate the Circos (<http://circos.ca/>) tool?