

I. Barley panache browser tutorials

1. The barley panache browser can be accessed using the following link

http://database.barleypangenome.com/barley_panache/

2. Additional documentation on Panache can be found here

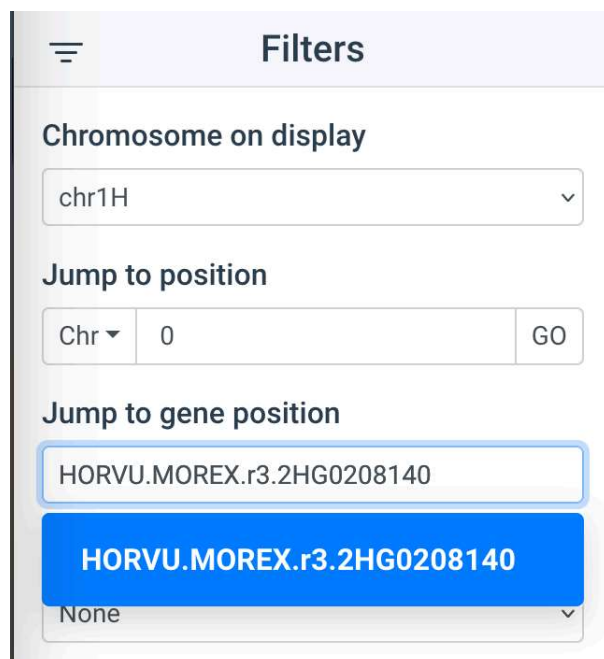
Wiki home: <https://github.com/SouthGreenPlatform/panache/wiki>

Functionality: <https://github.com/SouthGreenPlatform/panache/wiki/Functionalities-tour>

PAV Sorting: <https://github.com/SouthGreenPlatform/panache/wiki/Sorting-options>

3. Open Barley Panache and wait for the tracks to load in (can take a while depending on server load and data size).

4. Using the gene HTP2 as a use case, from the menu go to 'Jump to gene position' and load up the HPT2 gene using gene ID HORVU.MOREX.r3.2HG0208140:



Filters

Chromosome on display

chr1H

Jump to position

Chr 0 GO

Jump to gene position

HORVU.MOREX.r3.2HG0208140

HORVU.MOREX.r3.2HG0208140

None

5. Locate the HPT2 gene.



6. From the menu select 'gene presence status'. Note: if selecting 'Phylogenetic tree' the genomes are sorted based on the phylogenetic tree, as determined by mashtree (mash distance).

Filters

Chromosome on display

chr2H

Jump to position

Chr 0 GO

Jump to gene position

HORVU.MOREX.r3.2HG0208140

Sort the tracks

✓ None

Alphanumeric

Reverse alphanumeric

Local presence/absence pattern

Gene presence status

Phylogenetic tree

Minimal Presence ratio to be part of Core

85%

Zoom Level

-

+

7. Put the HTP2 gene ID into the annotation search (multiple genes can be added).

Filters

Chromosome on display

chr2H

Jump to position

Chr0GO

Jump to gene position

HORVU.MOREX.r3.2HG0208140

Sort the tracks

Gene presence status

Filter annotation presence statuses

Select annotation(s)

Search annotations

HORVU.MOREX.r3.2HG0208140

HORVU.MOREX.r3.2HG0208140

85%

8. From the menu select 'Sort with tags'

Filters

Chromosome on display

chr2H

Jump to position

Chr0GO

Jump to gene position

HORVU.MOREX.r3.2HG0208140

Sort the tracks

Gene presence status

Filter annotation presence statuses

Select annotation(s)

Sort with tags

PresenceHORVU.MOREX.r3.2HG0208140X

Display parameters

Shape type

Minimal Presence ratio to be part of Core

85%

9. The genomes are now sorted by the HPT2 gene's presence/absence status

	WBDC_103 (100%)	
	WBDC_199 (100%)	
Ch	WBDC_348 (100%)	
	WBDC_349 (100%)	
	10TJ18 (80%)	▼
	Aizu6 (80%)	
Jur	Akashinriki (80%)	
	Chiba (80%)	GO
	Chikurin (80%)	
Jur	FT286 (80%)	
	FT333 (80%)	
H	FT628 (80%)	
	HID101 (80%)	
Sol	HID249 (80%)	
	HID380 (80%)	▼
	HOR_10350 (80%)	
	HOR_13663 (80%)	
Filt	HOR_1702 (80%)	
	HOR_21256 (80%)	
	HOR_21322 (80%)	
	HOR_21599 (80%)	
	HOR_2779 (80%)	
	HOR_2830 (80%)	
	HOR_3081 (80%)	
Pr	HOR_4224 (80%)	X
	HOR_7385 (80%)	
Dis	HOR_7552 (80%)	
	HOR_8148 (80%)	
	HOR_9972 (80%)	
	Huang (80%)	
	Maximus (80%)	
	OUN333 (80%)	
	RGT_Planet (80%)	
	WBDC_078 (80%)	
Zo	WBDC_207 (80%)	
	WBDC_184 (40%)	
	HID357 (20%)	+
	Barke (0%)	
Do	FT262 (0%)	
	GoldenMelon (0%)	
	Golden_Promise (0%)	
	HID055 (0%)	
Ho	HOR_10096 (0%)	+
	HOR_10892 (0%)	
	HOR_1168 (0%)	
Leg	HOR_13594 (0%)	
	HOR_13821 (0%)	
	HOR_13942 (0%)	
	HOR_14273 (0%)	
	HOR_19184 (0%)	
	HOR_3365 (0%)	

Mo HOR_3474 (0%)

Ch HOR_495 (0%)

HOR_6220 (0%)

HOR_8117 (0%)

HOR_9043 (0%)

Igri (0%)

WBDC_133 (0%)

WBDC_237 (0%)