

New ePlant 2

P. trichocarpa Tissues data for [POPTR_0001s00410](#) gene.

id	sample	log2	log2fc
POPTR_0001s00410	internodes	12.6388012931404	0.351658890709977
POPTR_0001s00410	mature-leaves	6.14349546175707	-6.14364694067333
POPTR_0001s00410	nodes	12.2871424024304	0
POPTR_0001s00410	roots	13.2011506256482	0.914008223217783
POPTR_0001s00410	young-leaves	7.38963994270884	-4.89750245972157

ABSOLUTE mode

1. Get the max value for Log2

We use max([13.201150](#)) value to scale and populate legends.

2. Calculate data signal

Ratio($=\log_2 * 256.0 / \text{maxvalue}$) to **scale** the color intensity level.

When $\log_2 > 0$

paintColour = (255, 255 - Ratio, 0);

When $\log_2 < 0$

paintColour = (255 + Ratio, Ratio, - Ratio);

Then paint the objects by using paintColour.

Samples	Log2*256/maxvalue	Color
internodes	245	#ff0a00
mature-leaves	119	#ff8800
nodes	238	#ff1100
roots	256	#ff0000
young-leaves	143	#ff7000

3. Populate legends

Populate legends using maximum value ([13.201150](#)) and log2 value. Same logic as above but we can change the number of legend items.

We use maximum value only to scale the color range and match with the legend colors. This will not affect the final results as you see [here](#).

RELATIVE mode

1. Get the max value for Log2fc

We use max([6.143646](#)) value to scale and populate legends.

2. Calculate data signal

Ratio($=\log_2 \text{fc} / \text{maxvalue}$) to **scale** the color intensity which can be plus or minus.

When $\log_2 \text{fc} > 0$

paintColour = (255, 255 - Ratio, 0);

When $\log_2 \text{fc} < 0$

paintColour = (255 + Ratio, 255 + Ratio, - Ratio)

Then paint the objects by using paintColour.

Samples	Log2fc/maxvalue	Color
internodes	0.057	#fff100
mature-leaves	-1	#0000ff
nodes	0	#ffff00
roots	0.14	#ffd900
young-leaves	-0.79	#3232cd

3. Populate legends

Populate legends using maximum value ([6.143646](#)) and log2fc values. Same logic as above but we can change the number of legend items.