

BUSCO bonus extra exercise

Here we will use the BUSCO plotting tool to build a visualisation of the results from the first exercise (#1 BUSCO genomes)

[1] First navigate to the directory you created for the first exercise, i.e. `rmw1`
* Call the help on BUSCO's `generate_plot.py` script to find out what is needed
`$ python3 ~/software/busco/scripts/generate_plot.py --help`
* You can also look at the userguide for usage information

[2] So we need to create a directory and fill it with the `short_summary` files from each of our assessments
* You could call it something like:
`$ mkdir mysummaries`
* Then copy the short summary files for the assemblies you wish to plot (all or just some) into this newly created directory
* E.g. this would copy ALL summary files from any BUSCO assessment runs in this current directory
`$ cp run_*/short_summary_* mysummaries/`
* Make sure it worked by checking the contents of 'mysummaries'
`$ ls -l mysummaries/`

[3] And now you can run the plotting script
* simply point it to the directory where you summaries are located
`$ python3 ~/software/busco/scripts/generate_plot.py -wd mysummaries/`
* In the 'mysummaries' directory there should now be the output `busco_figure.png` (and the R code executed to make the plot)

*Required

1. Managed to plot the results? *

Mark only one oval.

- Yes *Skip to "BUSCO plotting tool results."*
- No *Skip to "We're here to help!"*

BUSCO plotting tool results

* Please note that due to a bug in the latest `ggplot2` package (this is the R package used to build the plot), the categories displayed may be in the opposite orientation than intended, i.e. from left to right they display Missing (red), Fragmented (Yellow), Complete and Duplicated (Dark Blue), Complete and Single-Copy (Light Blue) whereas it would be more intuitive to have those categories going from right to left - nevertheless, the results should still be easy to interpret!

* If you are so inclined you can edit the R script to fix the order of the categories

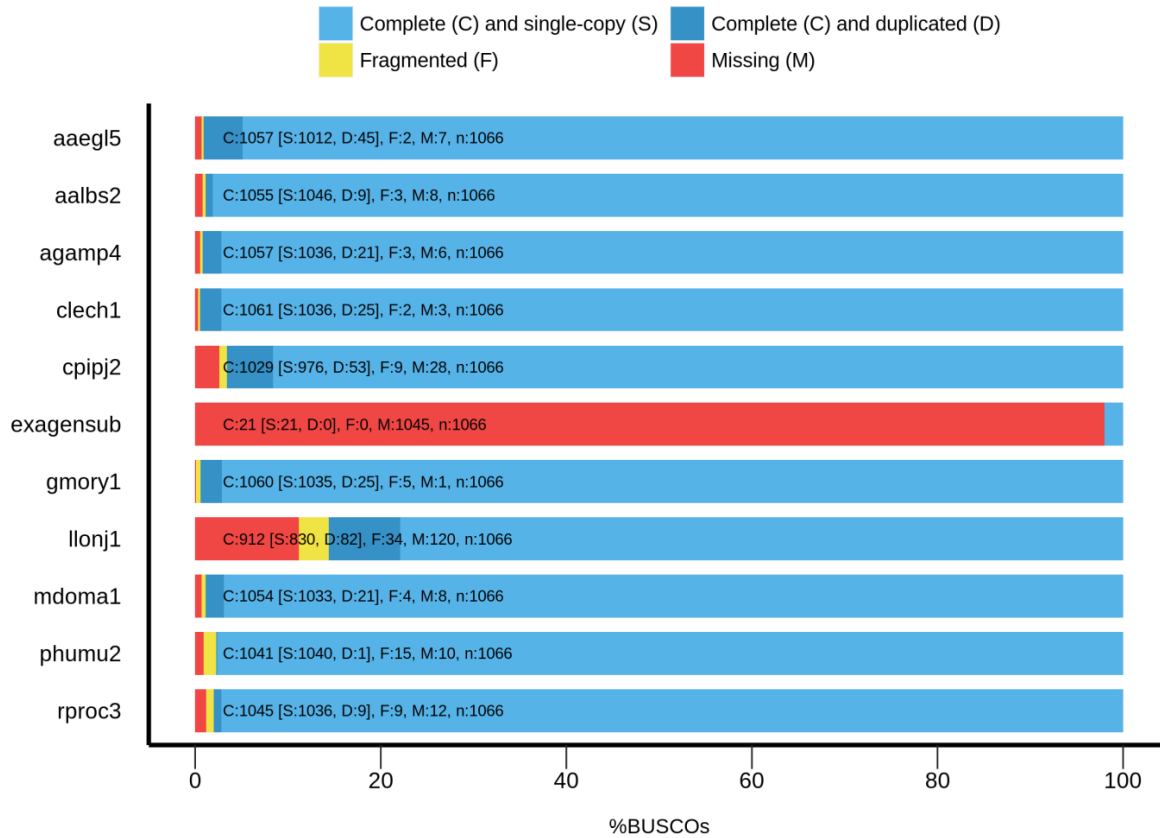
* See here for hints: <https://gitlab.com/ezlab/busco/issues/12>

* See the BUSCO plotting tool in action ...

=> Figure 2B. <http://science.sciencemag.org/content/361/6403/eaar7191>

Click SUBMIT below to finish this bonus exercise

BUSCO Assessment Results



Stop filling out this form.

We're here to help!

If you're stuck, please raise your hand and hopefully one of us will be able to help you.

Hit **BACK** below to return to the practical.

