buttRflyfish: reproduction of figure 2b from Nowicki et al. 2020

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Text of abstract

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Keywords: keyword 1; keyword 2; keyword 3

Highlights: These are the highlights.

# 1 Introduction

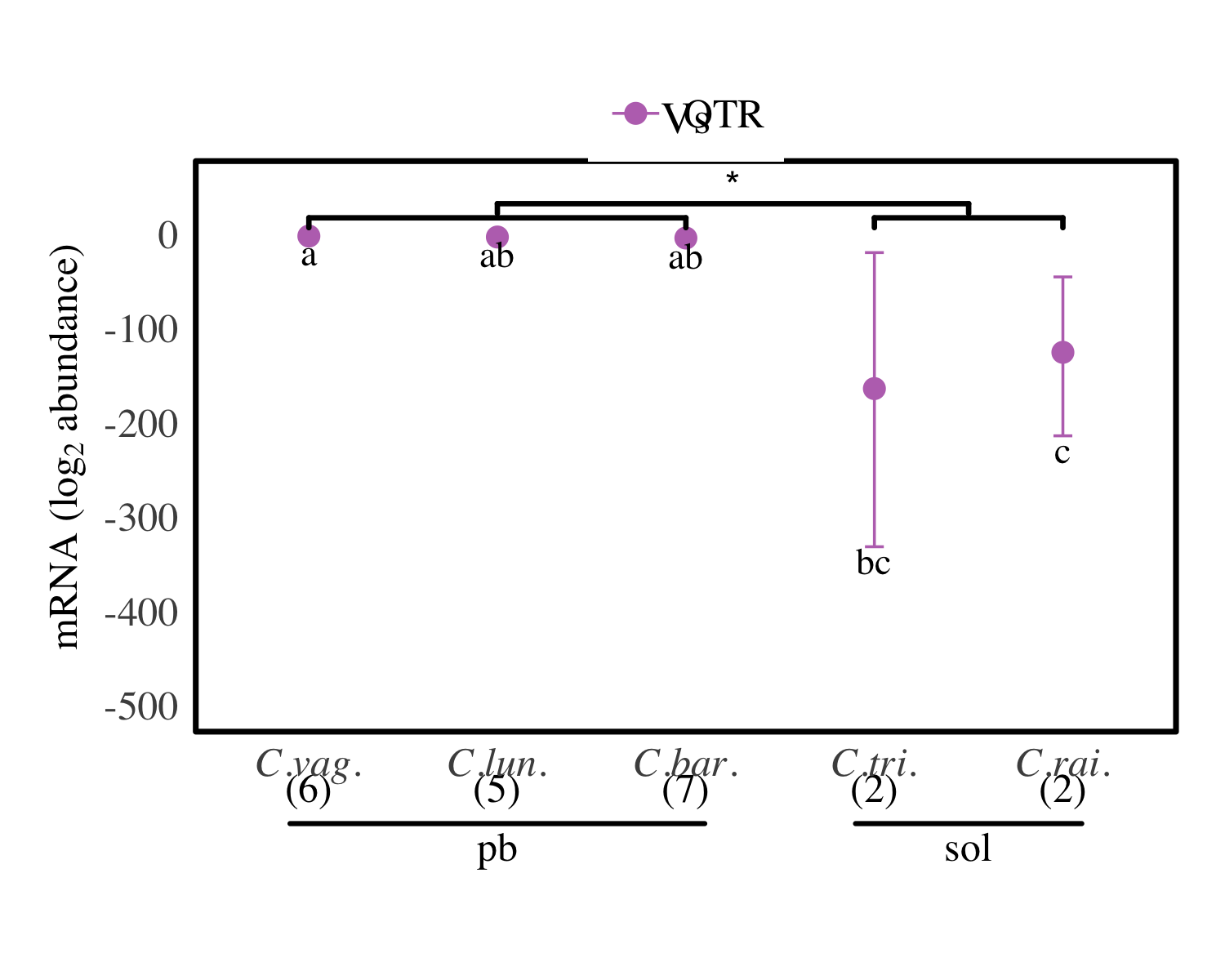
This is a replication of figure 2A from (Nowicki et al., 2020)

# 2 Background

# 3 Methods

# 4 Results

library(buttRflyfish)  
  
data = load\_data() # load data  
model = run\_model(data) # run MCMC model  
p = otr\_expression\_plot(model,data) # plot differential expression results

 Figure ?? shows how we can have a caption and cross-reference for a plot

Here is an example of inline code 3.14 in the middle of a sentence.

# 5 Discussion

# 6 Conclusion

# 7 Acknowledgements

# 8 References

Nowicki, J.P., Pratchett, M.S., Walker, S.P.W., Coker, D.J., O’Connell, L.A., 2020. Gene expression correlates of social evolution in coral reef butterflyfishes. Proceedings of the Royal Society B: Biological Sciences 287, 20200239. <https://doi.org/10.1098/rspb.2020.0239>

### 8.0.1 Colophon

This report was generated on 2021-12-10 09:41:20 using the following computational environment and dependencies:

#> ─ Session info 🥭 😺 🤦🏿 ─────────────────────────────────────────────────  
#> hash: mango, grinning cat, person facepalming: dark skin tone  
#>   
#> setting value  
#> version R version 4.1.1 (2021-08-10)  
#> os macOS Big Sur 10.16  
#> system x86\_64, darwin17.0  
#> ui X11  
#> language (EN)  
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#> ctype en\_US.UTF-8  
#> tz America/Los\_Angeles  
#> date 2021-12-10  
#> pandoc 2.11.4 @ /Applications/RStudio.app/Contents/MacOS/pandoc/ (via rmarkdown)  
#>   
#> ─ Packages ───────────────────────────────────────────────────────────────────  
#> package \* version date (UTC) lib source  
#> ape 5.5 2021-04-25 [1] CRAN (R 4.1.0)  
#> assertthat 0.2.1 2019-03-21 [1] CRAN (R 4.1.0)  
#> bookdown 0.24 2021-09-02 [1] CRAN (R 4.1.0)  
#> buttRflyfish \* 0.0.0.9000 2021-12-10 [1] local  
#> cachem 1.0.6 2021-08-19 [1] CRAN (R 4.1.0)  
#> callr 3.7.0 2021-04-20 [1] CRAN (R 4.1.0)  
#> cli 3.1.0 2021-10-27 [1] CRAN (R 4.1.0)  
#> coda 0.19-4 2020-09-30 [1] CRAN (R 4.1.0)  
#> colorspace 2.0-2 2021-06-24 [1] CRAN (R 4.1.0)  
#> corpcor 1.6.10 2021-09-16 [1] CRAN (R 4.1.0)  
#> crayon 1.4.2 2021-10-29 [1] CRAN (R 4.1.0)  
#> cubature 2.0.4.2 2021-05-13 [1] CRAN (R 4.1.0)  
#> DBI 1.1.1 2021-01-15 [1] CRAN (R 4.1.0)  
#> desc 1.4.0 2021-09-28 [1] CRAN (R 4.1.0)  
#> devtools 2.4.2 2021-06-07 [1] CRAN (R 4.1.0)  
#> digest 0.6.28 2021-09-23 [1] CRAN (R 4.1.0)  
#> dplyr 1.0.7 2021-06-18 [1] CRAN (R 4.1.0)  
#> ellipsis 0.3.2 2021-04-29 [1] CRAN (R 4.1.0)  
#> evaluate 0.14 2019-05-28 [1] CRAN (R 4.1.0)  
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#> fs 1.5.0 2020-07-31 [1] CRAN (R 4.1.0)  
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#> glue 1.5.1 2021-11-30 [1] CRAN (R 4.1.0)  
#> gtable 0.3.0 2019-03-25 [1] CRAN (R 4.1.0)  
#> highr 0.9 2021-04-16 [1] CRAN (R 4.1.0)  
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#> labeling 0.4.2 2020-10-20 [1] CRAN (R 4.1.0)  
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#> magrittr 2.0.1 2020-11-17 [1] CRAN (R 4.1.0)  
#> Matrix 1.3-4 2021-06-01 [1] CRAN (R 4.1.1)  
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#> MCMCglmm 2.32 2021-03-12 [1] CRAN (R 4.1.0)  
#> memoise 2.0.1 2021-11-26 [1] CRAN (R 4.1.0)  
#> munsell 0.5.0 2018-06-12 [1] CRAN (R 4.1.0)  
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#> pillar 1.6.4 2021-10-18 [1] CRAN (R 4.1.1)  
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#> pkgconfig 2.0.3 2019-09-22 [1] CRAN (R 4.1.0)  
#> pkgload 1.2.3 2021-10-13 [1] CRAN (R 4.1.0)  
#> prettyunits 1.1.1 2020-01-24 [1] CRAN (R 4.1.0)  
#> processx 3.5.2 2021-04-30 [1] CRAN (R 4.1.0)  
#> ps 1.6.0 2021-02-28 [1] CRAN (R 4.1.0)  
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#> R6 2.5.1 2021-08-19 [1] CRAN (R 4.1.0)  
#> Rcpp 1.0.7 2021-07-07 [1] CRAN (R 4.1.0)  
#> remotes 2.4.1 2021-09-29 [1] CRAN (R 4.1.0)  
#> rlang 0.4.12 2021-10-18 [1] CRAN (R 4.1.0)  
#> rmarkdown 2.11 2021-09-14 [1] CRAN (R 4.1.0)  
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#> sessioninfo 1.2.1 2021-11-02 [1] CRAN (R 4.1.0)  
#> stringi 1.7.6 2021-11-29 [1] CRAN (R 4.1.1)  
#> stringr 1.4.0 2019-02-10 [1] CRAN (R 4.1.0)  
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#> tibble 3.1.6 2021-11-07 [1] CRAN (R 4.1.0)  
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#> vctrs 0.3.8 2021-04-29 [1] CRAN (R 4.1.0)  
#> withr 2.4.2 2021-04-18 [1] CRAN (R 4.1.0)  
#> xfun 0.28 2021-11-04 [1] CRAN (R 4.1.0)  
#> yaml 2.2.1 2020-02-01 [1] CRAN (R 4.1.0)  
#>   
#> [1] /Library/Frameworks/R.framework/Versions/4.1/Resources/library  
#>   
#> ──────────────────────────────────────────────────────────────────────────────

The current Git commit details are:

#> Local: main /Users/tbellagio/Documents/soft\_e\_forbio/buttRflyfish  
#> Remote: main @ origin (https://github.com/Tatianabellagio/buttRflyfish)  
#> Head: [ff2ec55] 2021-12-10: Merge branch 'main' of https://github.com/Tatianabellagio/SE4B\_finalproj