Establishing a **community** for **supporting** and **fostering adoption** of **reproducible research** using **R**

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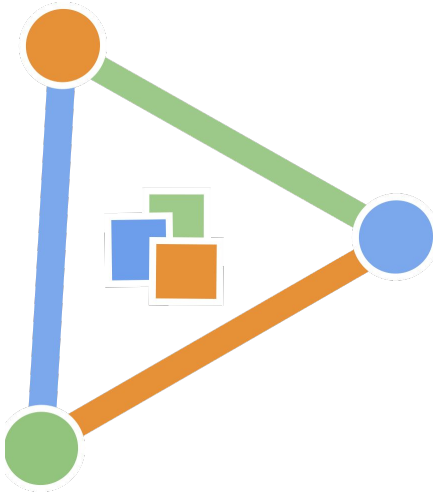
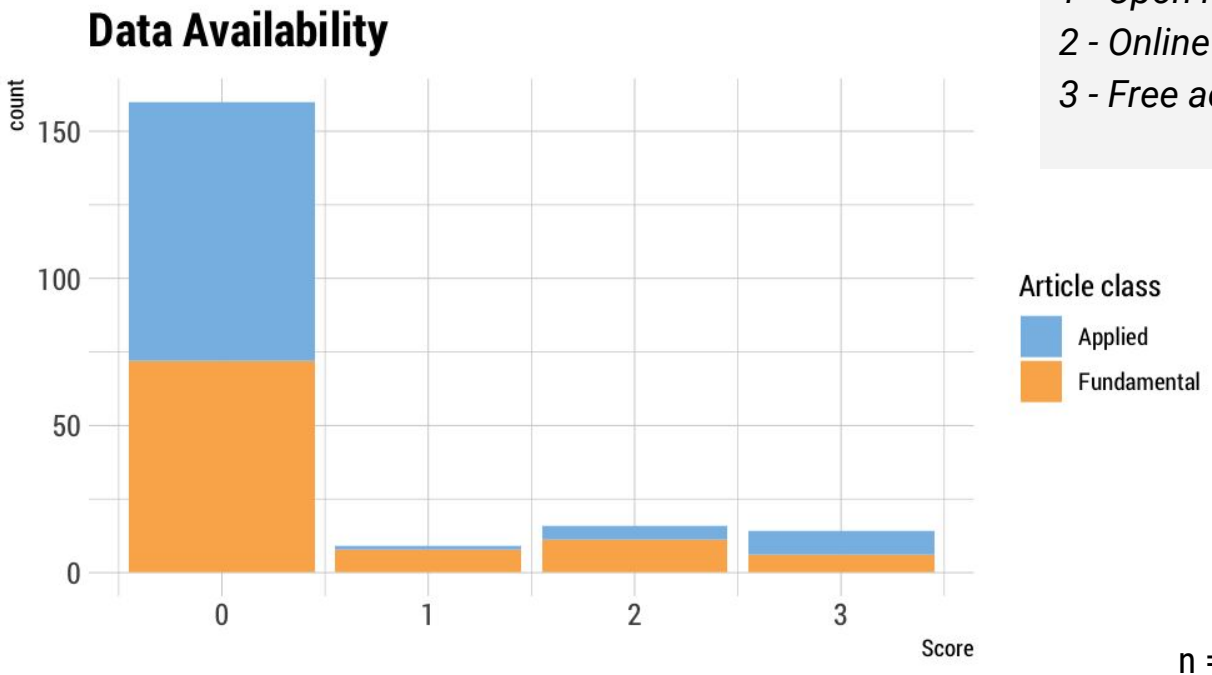
Supported by GRDC Grains Research & Development Corporation

UFV Universidade Federal de Viçosa



Data available?



0 - Not available

1 - Upon request to authors

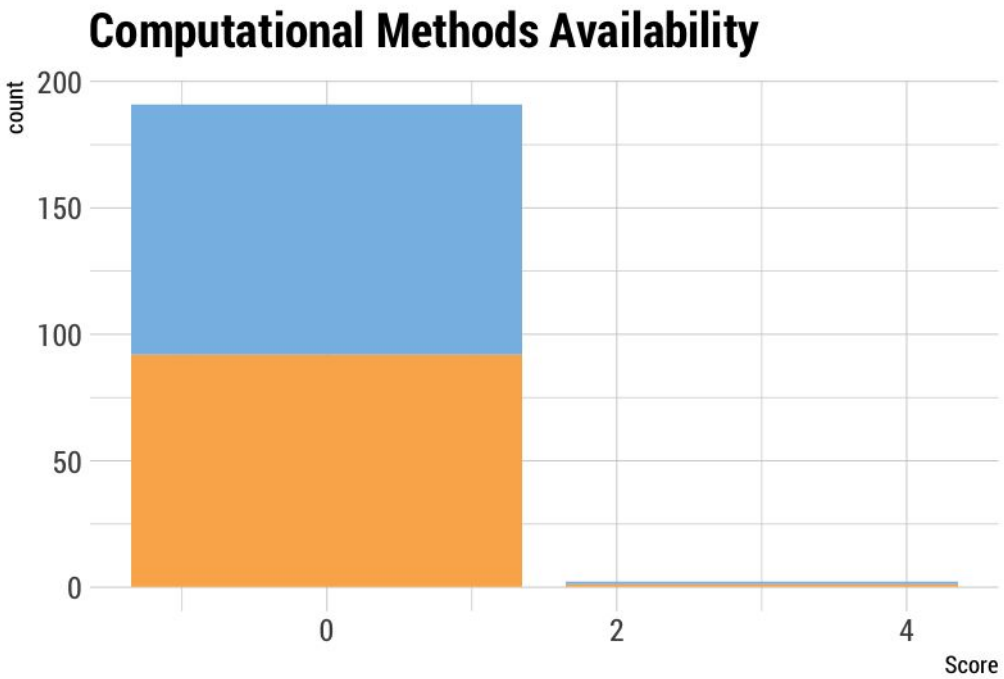
2 - Online behind paywall

3 - Free access

n = 200

Sparks et al (unpublished)

Code available?



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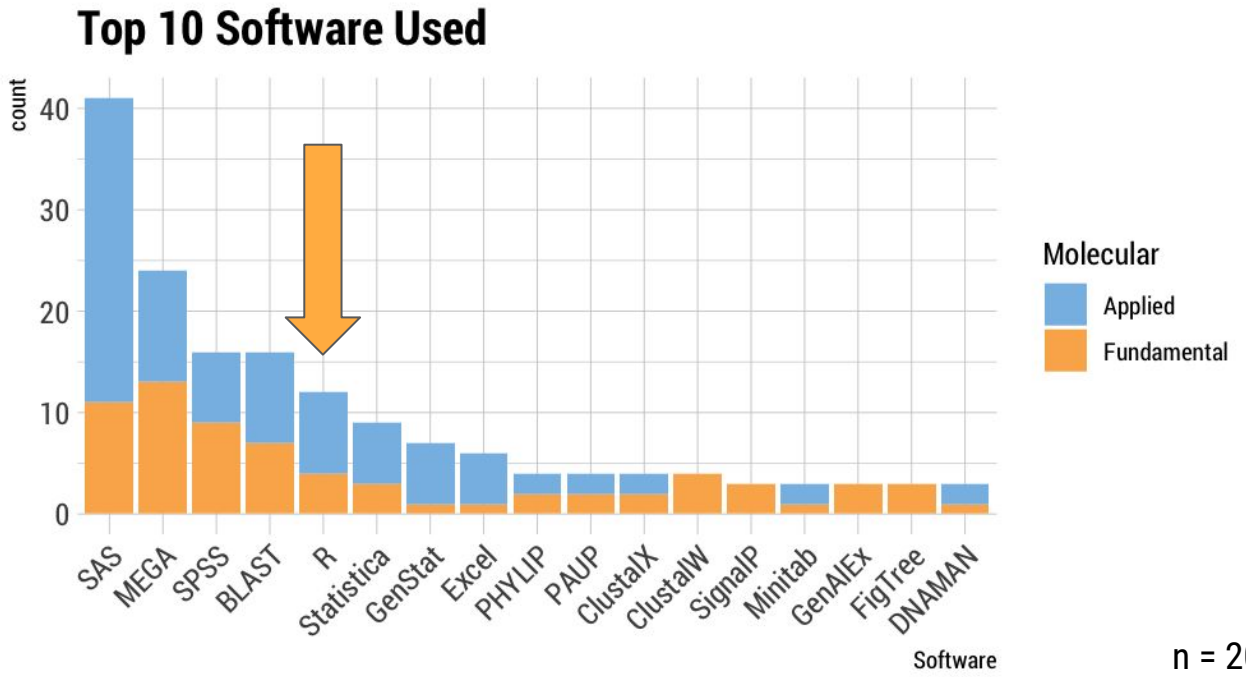
n = 200

Sparks et al (unpublished)

Software used?



n = 200

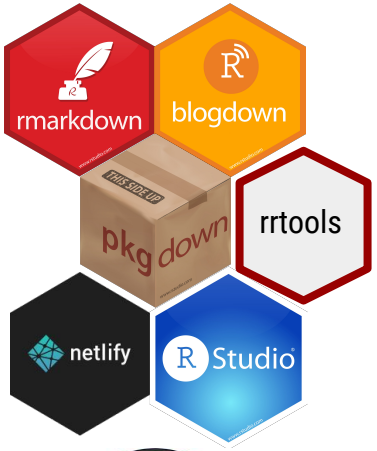
Sparks et al (unpublished)

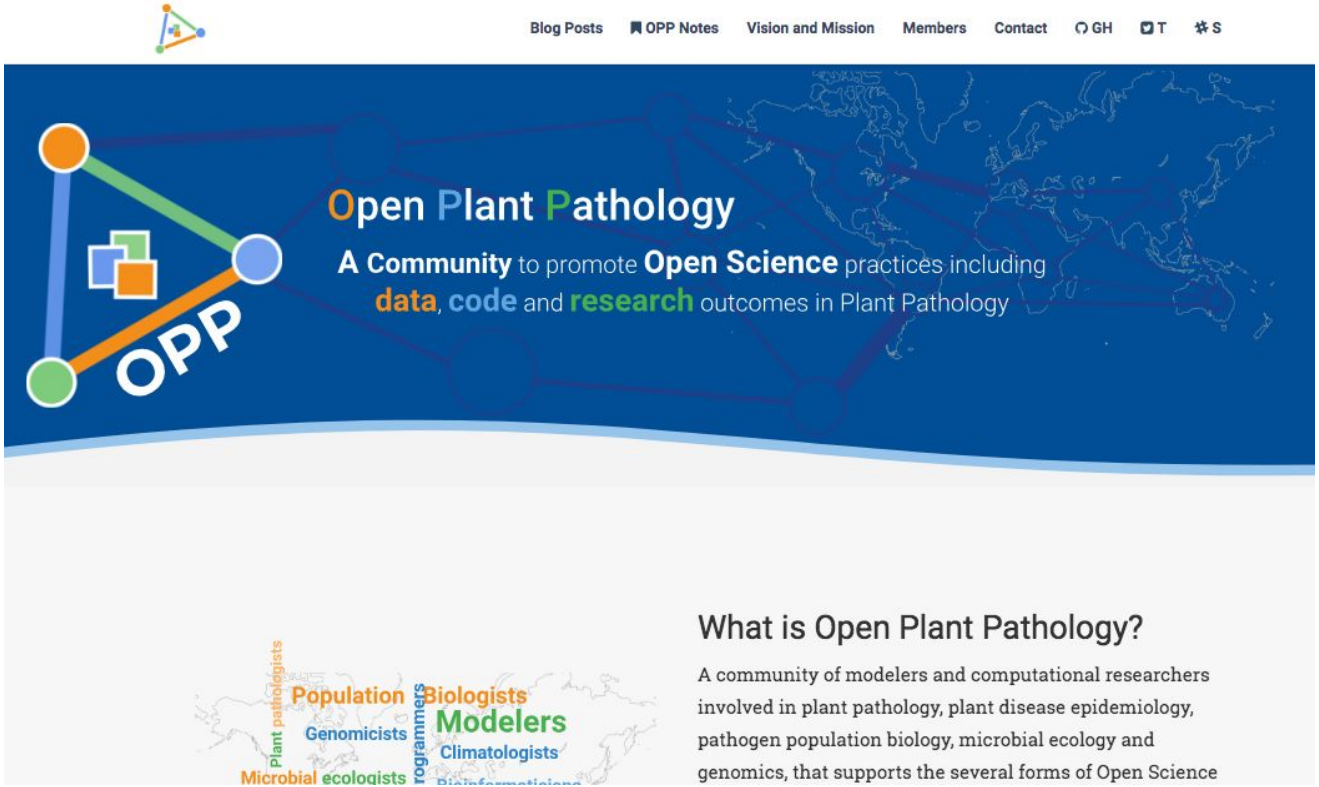
How can we change that?

www.openplantpathology.org

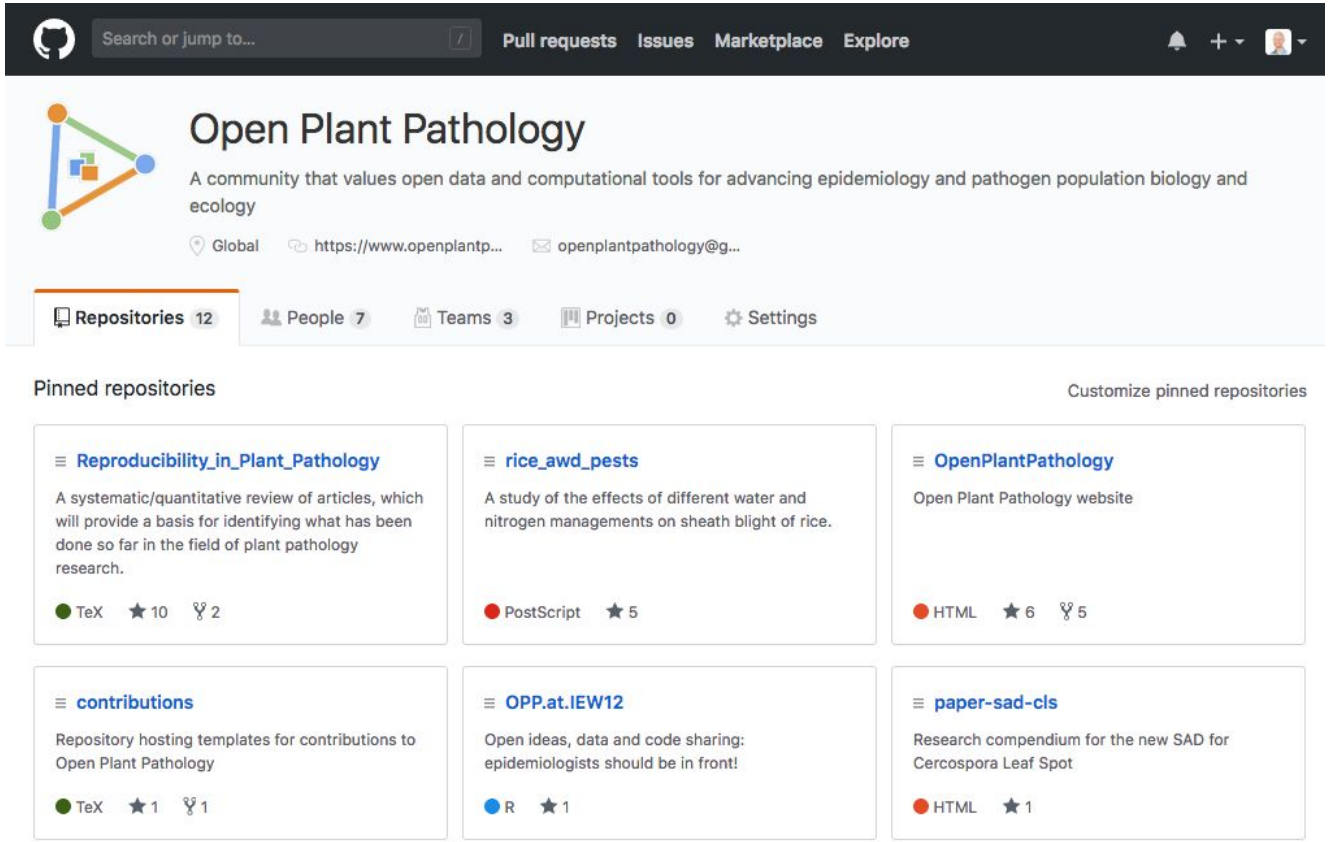
Website

Tools





Collaborative coding: GitHub



Outreach: workshops

ICPP BOSTON
Plant Health in a Global Economy
JULY 29 - AUGUST 3 2018

Nik Grunwald

Sydney Everhart

Neil McRoberts

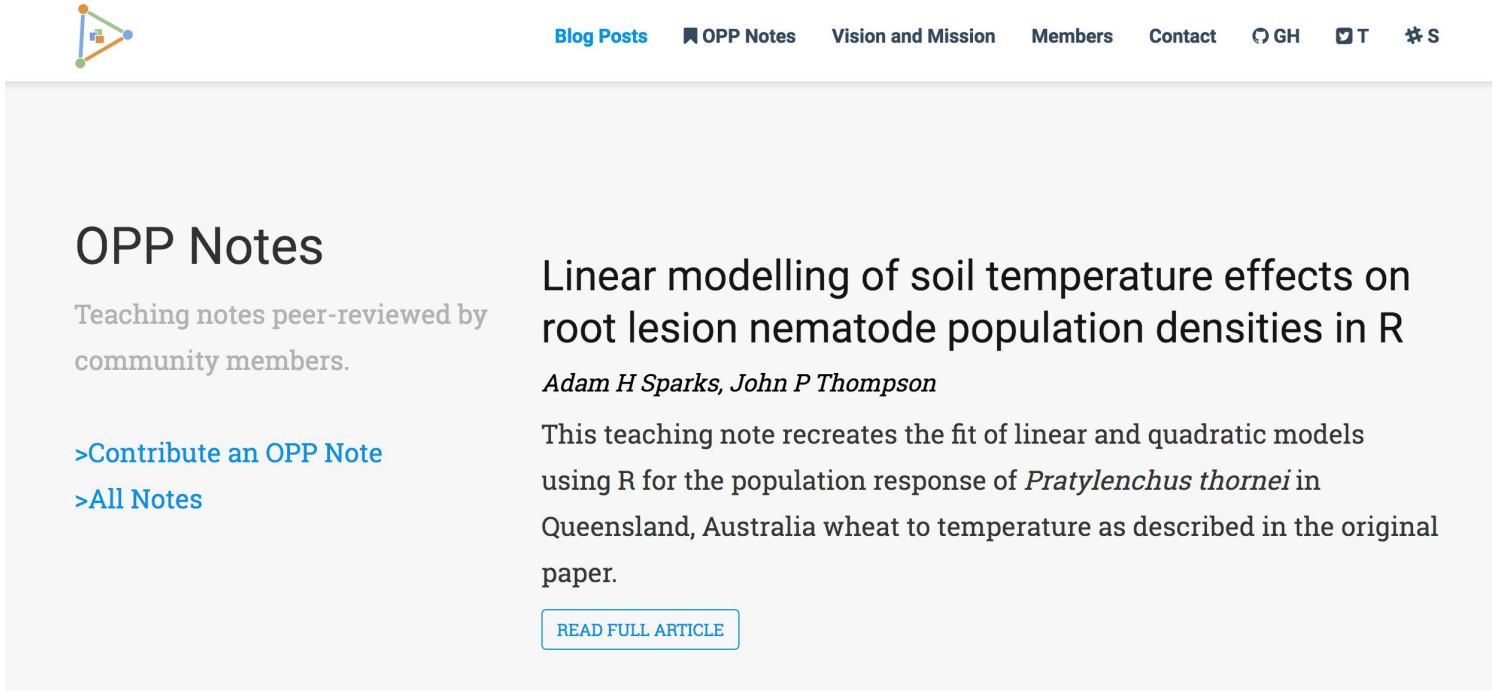
Population Genomics in **R**

Introduction to **R** for Plant Pathologists

Introduction to Multivariate Statistics Using **R**

Where we've struggled

slack



Where we've succeeded

@openplantpath

Posts | OPP Notes | Vision and Mission | Members | Contact | GH | T | S

near modelling of soil temperature effects on
ot lesion nematode population densities in R

m H Sparks, John P Thompson

s teaching note recreates the fit of linear and quadratic models
ng R for the population response of *Pratylenchus thornei* in
ensland, Australia wheat to temperature as described in the original
per.

READ FULL ARTICLE

Citations

JJ Allaire, Yihui Xie, Jonathan McPherson, Javier Luraschi, Kevin Ushey, Aron Atkins, Hadley Wickham, Joe Cheng and Winston Chang (2018). rmarkdown: Dynamic Documents for R. R package version 1.10. https://CRAN.R-project.org/package=rmarkdown

Ben Marwick (2018). rrtools: Creates a reproducible research compendium. R package version 0.1.0. https://github.com/benmarwick/rrtools

RStudio Team (2016). RStudio: Integrated Development for R. RStudio, Inc., Boston, MA. http://www.rstudio.com/

Yihui Xie (2018). blogdown: Create Blogs and Websites with R Markdown. R package version 0.6.

Yihui Xie, Alison Presmanes Hill, and Amber Thomas (2017). blogdown: Creating Websites with R Markdown. Chapman and Hall/CRC. ISBN 978-0815363729

Hadley Wickham and Jay Hesselberth (2018). pkgdown: Make Static HTML Documentation for a Package. R package version 1.1.0. https://CRAN.R-project.org/package=pkgdown

Data and slide availability

Del Ponte, E.M. and Sparks, A.H. (2018). *Compendium of R code and data for 'Open ideas, data and code sharing: epidemiologists should be in front!'*. Accessed 04 Jul 2018. Online at https://doi.org/10.5281/zenodo.1304483

https://github.com/openplantpathology/OPP.at.IEW12

Sparks, A.H., Del Ponte, E.M., Everhart, S., Foster, Z.S.L., Grünwald, N., (2018). *Compendium of R code and data for 'Status and Best Practices for Reproducible Research In Plant Pathology'*. Accessed 04 Jul 2018. Online at https://doi.org/10.5281/zenodo.1250665

https://openplantpathology.github.io/Reproducibility_in_Plant_Pathology

Sparks, A.H. and Del Ponte, E.M. (2018). *Establishing a community for supporting and fostering adoption of reproducible research using R*. Accessed 10 Jul 2018. Online at https://zenodo.org/badge/latestdoi/140354306

https://github.com/openplantpathology/OPP.at.useR-2018