

Introduction to Markdown

Lizel Potgieter, Adam Flöhr



Who we are

SLU bioinformatics Infrastructure

Weekly online drop-in (Wednesdays at 13.00)

slubi@slu.se,

Alnarp: Lizel Potgieter (Dept. of Plant Breeding)

Statistics at SLU

SLU statistics center

Free consultations for all SLU staff

statistics@slu.se

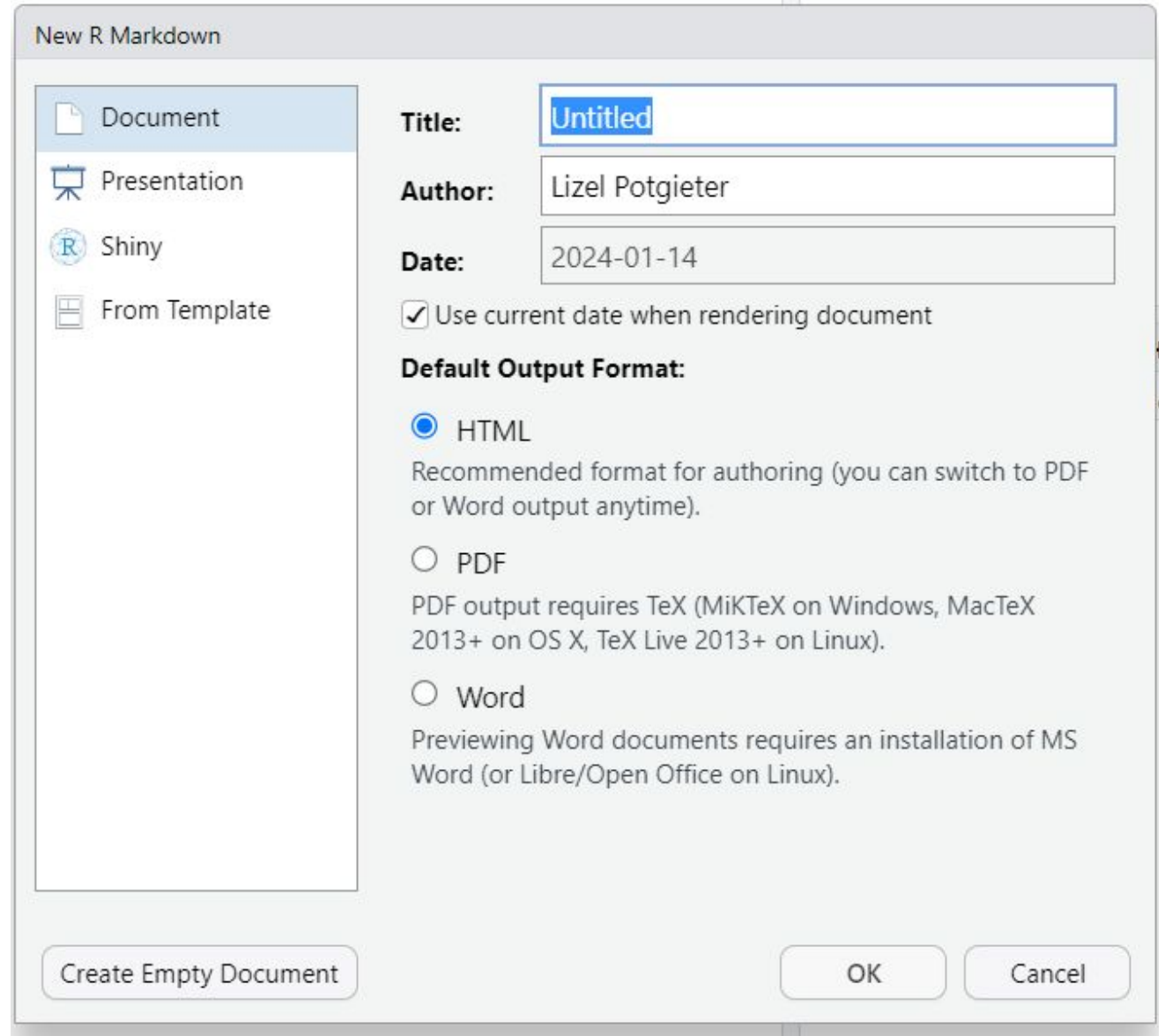
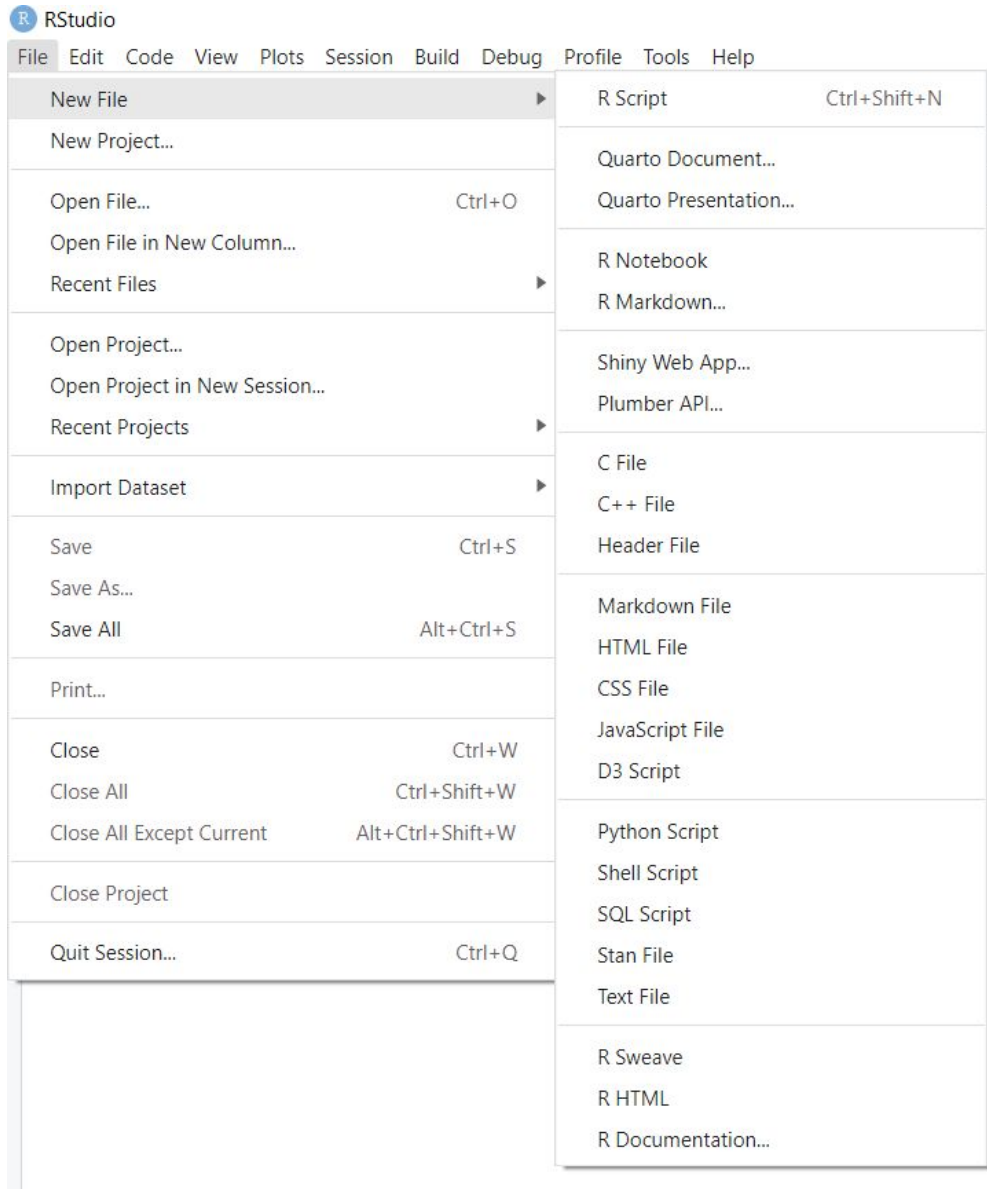
Alnarp: Jan-Eric Englund and Adam Flöhr (Dept. of Biosystems and Technology)

What is markdown

- Lightweight markup language that can be compiled in a variety of plaintext editors
 - R, VScode, even text editor
- Simple syntax
- Output can be rendered in several formats
 - HTML
 - PPTX
 - PDF
- Easily incorporated in version control
- Universal reporting style

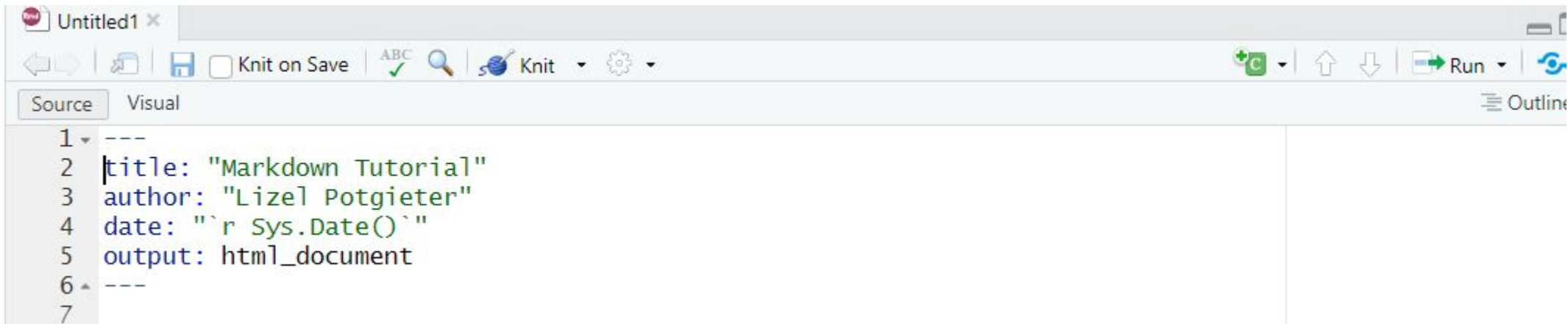


Getting started



YAML

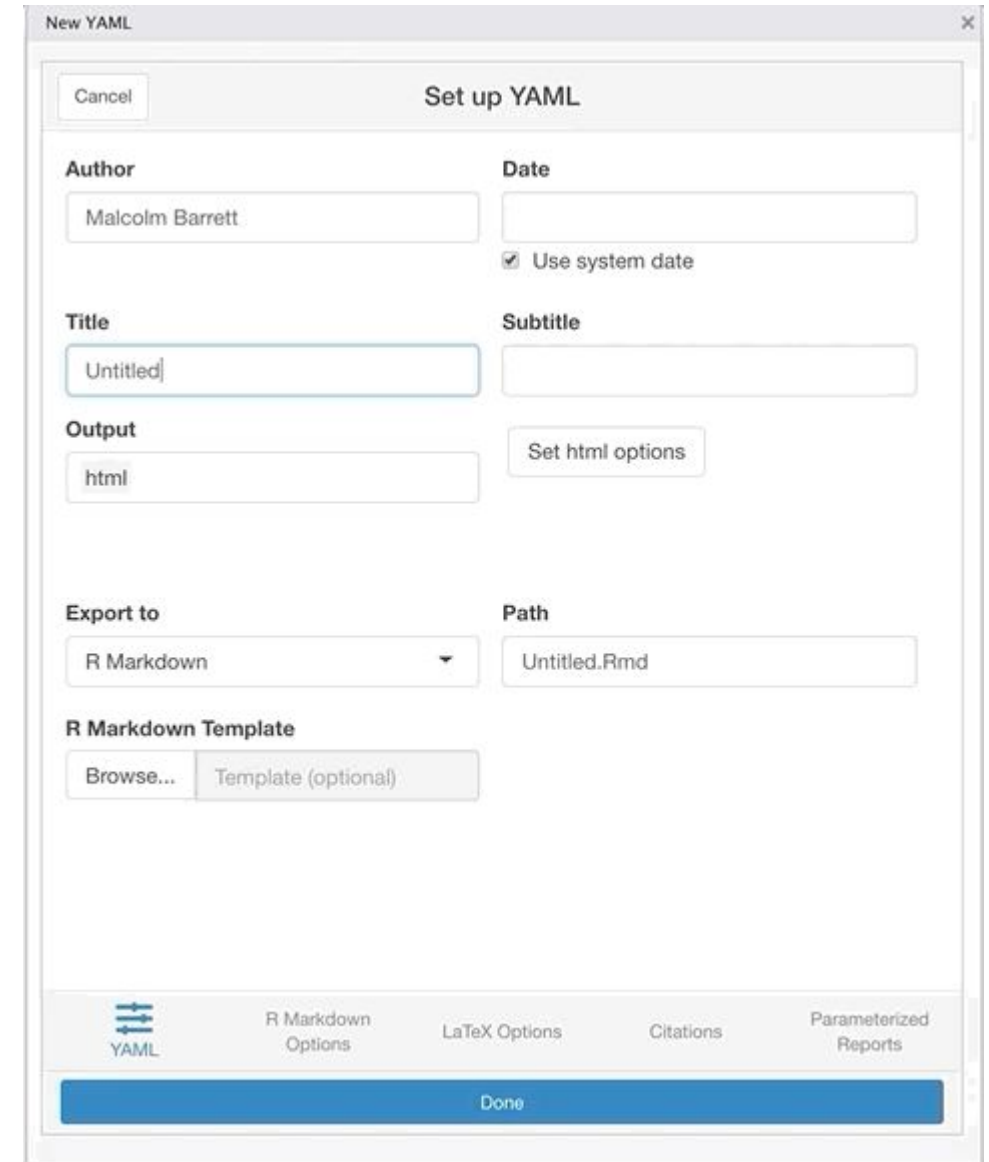
- Yet Another Markup Language (or YAML ain't markup language)
- Provides “settings” for the document
- Includes document type to be rendered
- Can include a table of contents, how code should be displayed etc
- https://zsmith27.github.io/rmarkdown_crash-course/lesson-4-yaml-headers.html has a good overview



```
1 ---
2 title: "Markdown Tutorial"
3 author: "Lizele Potgieter"
4 date: "`r Sys.Date()`"
5 output: html_document
6 ---
7
```

YAML made even easier

- yamllthis <https://yamlthis.r-lib.org/>
- Install and add view toolbar to get a user-friendly interface that builds the YAML for you



New YAML

Cancel Set up YAML

Author: Malcolm Barrett

Date: ☒ Use system date

Title: Untitled

Subtitle:

Output: html

Export to: R Markdown

Path: Untitled.Rmd

R Markdown Template:

YAML R Markdown Options LaTeX Options Citations Parameterized Reports

Done

Document Format

```

4  date: "`r Sys.Date()`"
5  output: html_document
6  ---
7
8  ```{r setup, include=FALSE}
9  knitr::opts_chunk$set(echo = TRUE)
10 ```
11
12 ## R Markdown
13
14 This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF,
15 and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.
16
17 When you click the **Knit** button a document will be generated that includes both content as well
18 as the output of any embedded R code chunks within the document. You can embed an R code chunk
19 like this:
20
21 ```{r cars}
22 summary(cars)
23 ```

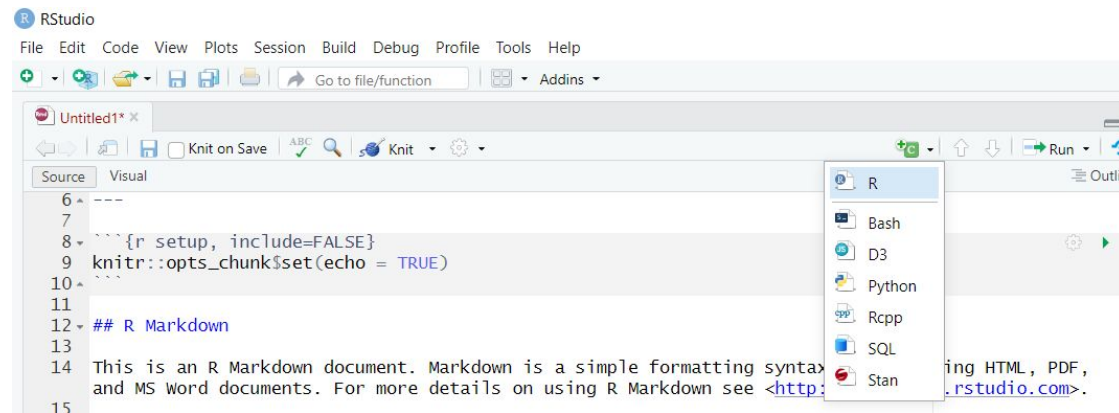
```

Setup block

Heading

Text

Code chunk



Tables

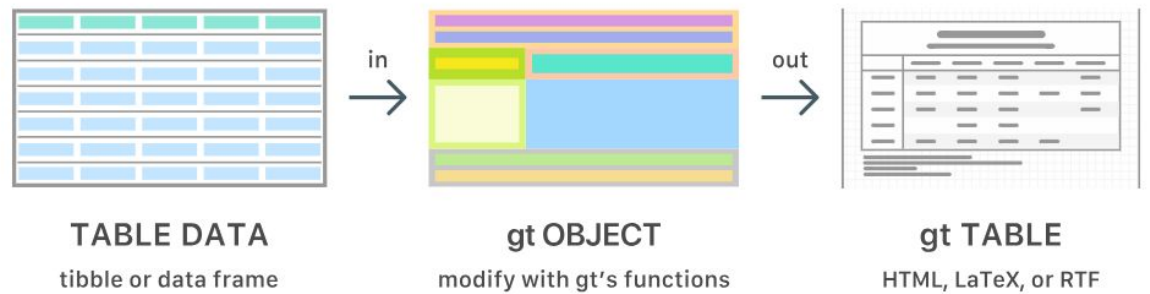
Classical markdown table format

Syntax	Description
-----	-----
Header	Title
Paragraph	Text

Syntax	Description
Header	Title
Paragraph	Text

gt: <https://gt.rstudio.com/>

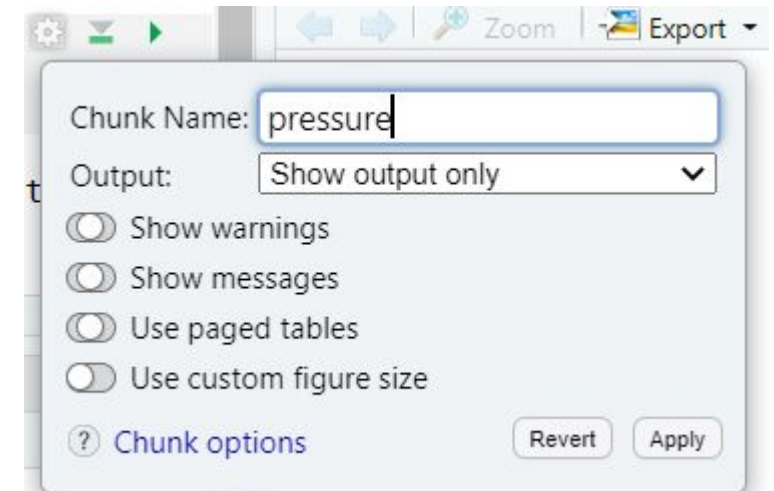
A Typical gt Workflow



Static plots (e.g. ggplot2)

Interactive plots (e.g. plotly)

```
29 {r pressure, echo=FALSE}  
30 plot(pressure)  
31 }  
32
```



Adding external information

- Hyperlinks
 - [Link text Here](https://link-url-here.org)
- Importing local image
 - ![alt text](Isolated.png "Title")

R Markdown Cheat Sheet

<https://www.rstudio.com/wp-content/uploads/2015/02/rmarkdown-cheatsheet.pdf>



Quarto

“New generation” of markdown

Syntax is the same, but what it can render differs

<https://quarto.org/>

Dynamic Documents

Generate dynamic output using Python, R, Julia, and Observable. Create reproducible documents that can be regenerated when underlying assumptions or data change.

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Use your favorite tools including VS Code, RStudio, Jupyter Lab, or any text editor. Use the Quarto visual markdown editor for long-form documents.

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