

Wood Anatomy of Puerto Rican Trees

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Contents

Introduction

Species list

Araliaceae

- *Schefflera morototoni*

Bursuraceae

- *Dacryodes excelsa*
- *Tetragastris balsamifera*

Elaeocarpaceae

- *Sloanea berteriana*

Fabaceae

- *Inga laurina*

Salicaceae

- *Casearia arborea*

Sapindaceae

- *Matayba domingensis*

Sapotaceae

- *Manilkara bidentata*

Urticaceae

- *Cecropia schreberiana*

Methods

Here we describe the methods, from field to data.

Sample collection

Collecting samples for wood anatomical analysis requires careful consideration of the research questions or objectives.

- Sample size
- Position of sample
- Other data to record

Additional Resources

- reference 1
- reference 2
- ...

Sectioning and slide preparation

Image capture

Image analysis

Details on the protocol...

- QuPath



Figure 1: Sectioning samples with the WSL lab microtome.

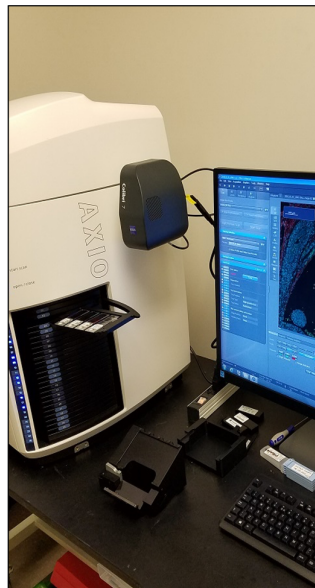


Figure 2: Scanning slides with the Zeiss slide scanner.

Processing of annotated images in R

We have developed the `qwar` R package to process the annotated images (as .svg files). You can see the source code on Github and install the package like this:

```
library(devtools)
devtools::install_github("bobmuscarella/qwar")
```

Some examples of possible outputs from the `qwar` R package are shown below.

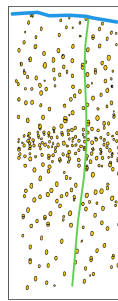


Figure 3: An example of output from the ‘qwar’ R package.

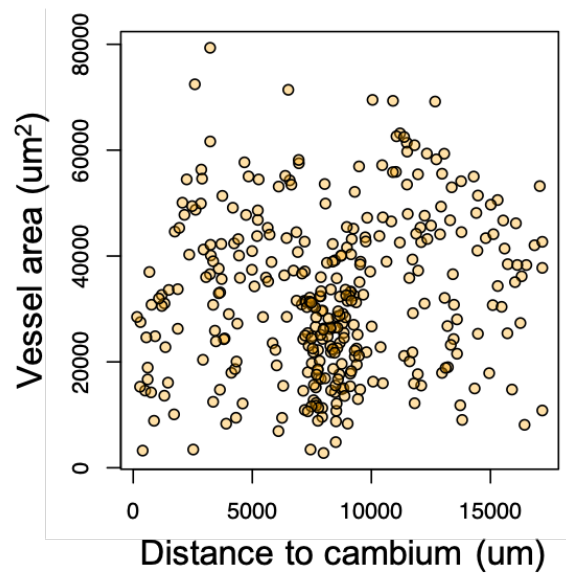


Figure 4: Quantifying vessel area as a function of distance to cambium using the ‘qwar’ R package.

Chapter 1

Araliaceae

Species in Araliaceae

Schefflera morototoni

Chapter 2

Bignoniaceae

Species in Bignoniaceae

Tabebuia heterophylla

