

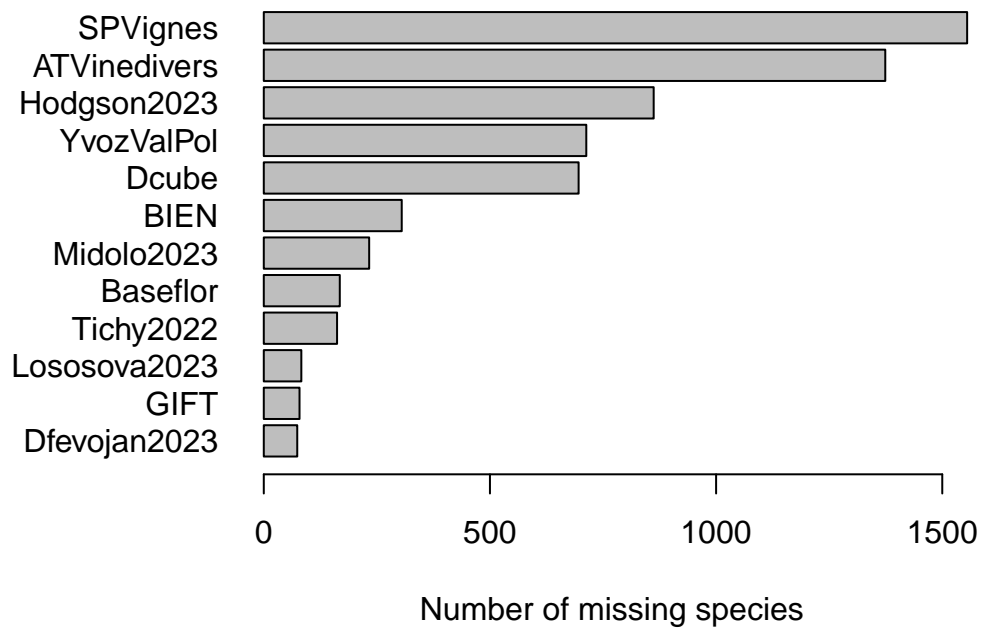
Exploration of FELLOW trait dataset

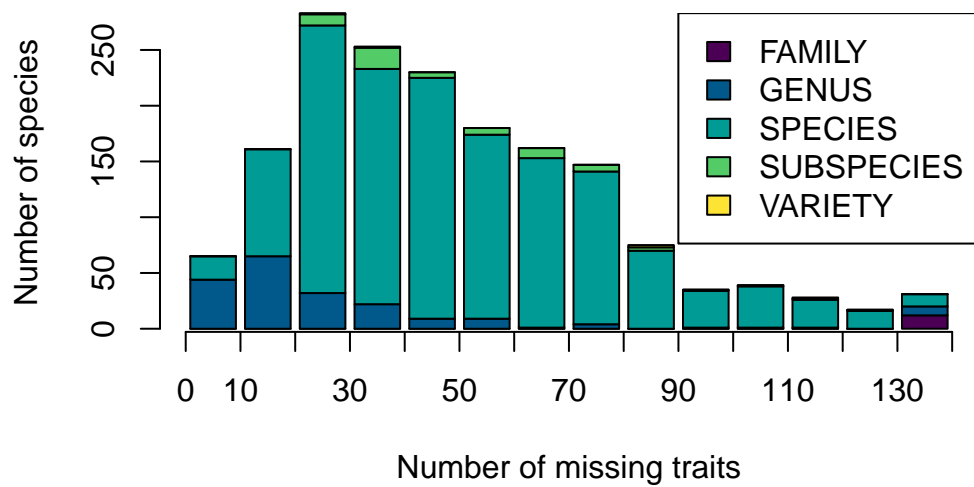
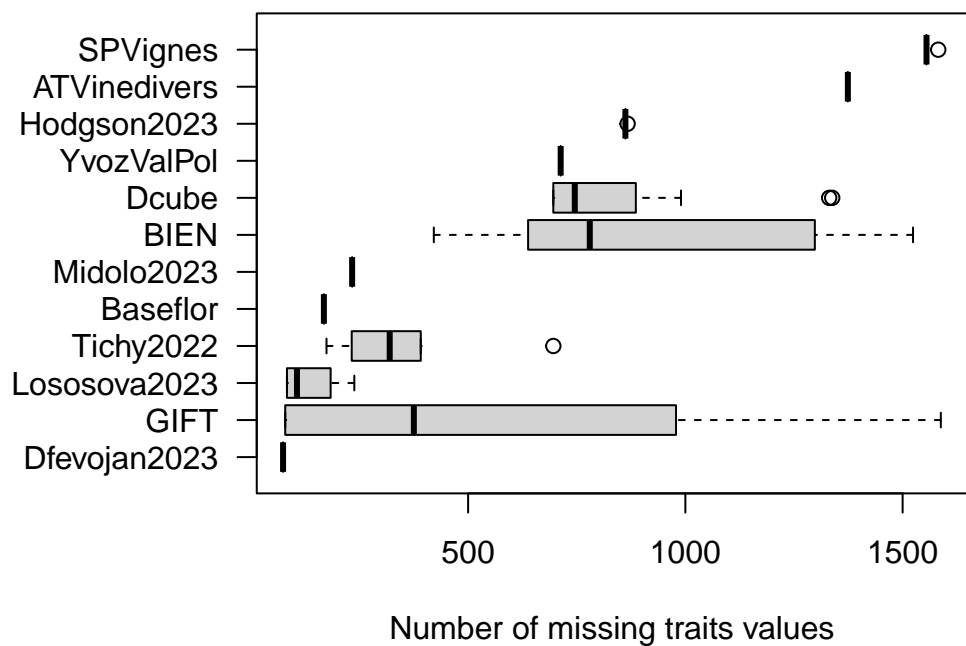
The objective of this document is to:

- visually explore the trait database
- understand trait coverage / data gaps
- check for possible inconsistencies

Description of trait databases

So far, we compiled 138 traits for 1706 taxa gathered from 12 trait databases. But there are many missing values.





Taxa with no or limited trait information (N=26).

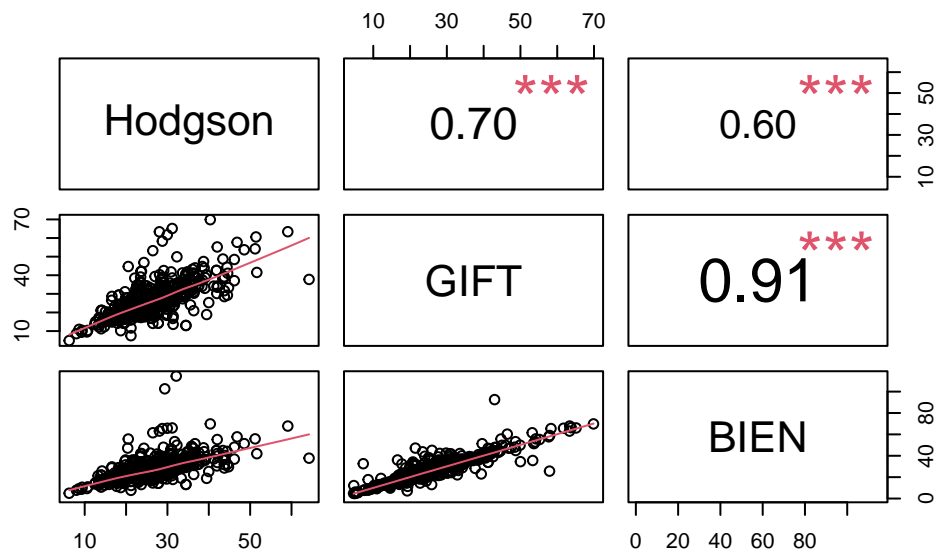
| | | | |
|------|---------------------|--------------------------|--------------------|
| [1] | "Acacia" | "Agrimonia agrimonoides" | "Agropyron" |
| [4] | "Amaranthaceae" | "Apiaceae" | "Asparagaceae" |
| [7] | "Brassicaceae" | "Caryophyllaceae" | "Ficaria ambigua" |
| [10] | "Glyceria" | "Lamiaceae" | "Liliaceae" |
| [13] | "Melomphis arabica" | "Onopordum gautieri" | "Paronychia" |
| [16] | "Piptatherum" | "Poaceae" | "Roemeria hispida" |
| [19] | "Rosaceae" | "Rubiaceae" | "Salix" |
| [22] | "Sanguisorba" | "Scorpiurus subvillosus" | "Viburnum" |
| [25] | "Vicia dasycarpa" | "Vicia pseudocracca" | |

Open question: **How to deal with families taxa?**

Comparison

SLA

There are three sources of information for Specific leaf area (SLA) : Hodgson et al. 2023 (in mm²/mg), GIFT (in cm²/g) and BIEN (in m²/kg = mm²/mg).



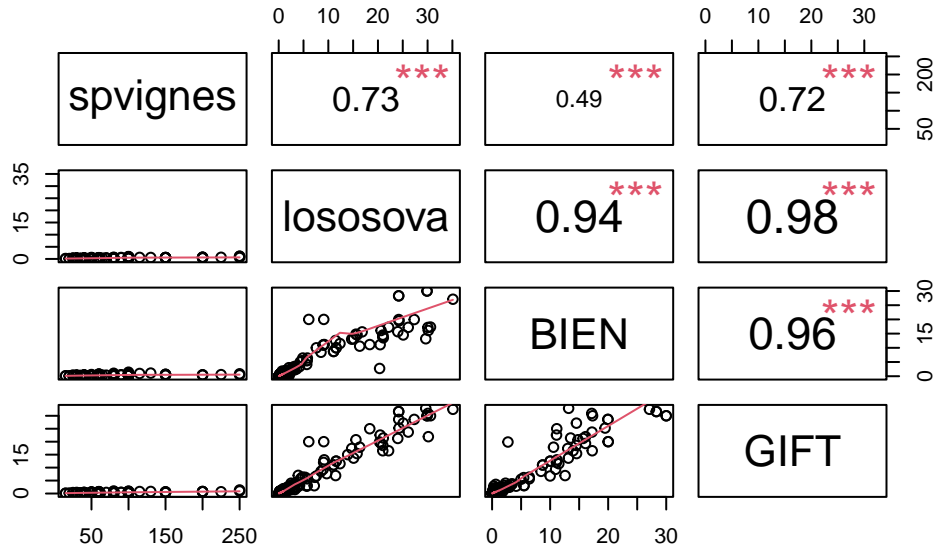
Values are highly correlated, so we could imagine filling the missing values (using preferred data sources or averaging them).

Number of NAs:

| Hodgson | GIFT | BIEN | filled |
|---------|------|------|--------|
| 862 | 731 | 758 | 476 |

Plant height

There are four sources of information for plant height.



Not sure what is the unit of Plant_Height in SPVignes (cm?), and why it is limited to only small plants (<1m). Yet we could potentially fill the height trait values.

Number of NAs:

| spvignes | lososova | BIEN | GIFT | filled |
|----------|----------|------|------|--------|
| 1582 | 129 | 655 | 492 | 109 |