UKBRC 09/05/18

Investigating the genetic basis of Glucosinolate variability in Oilrape seed (*Brassica napus*)

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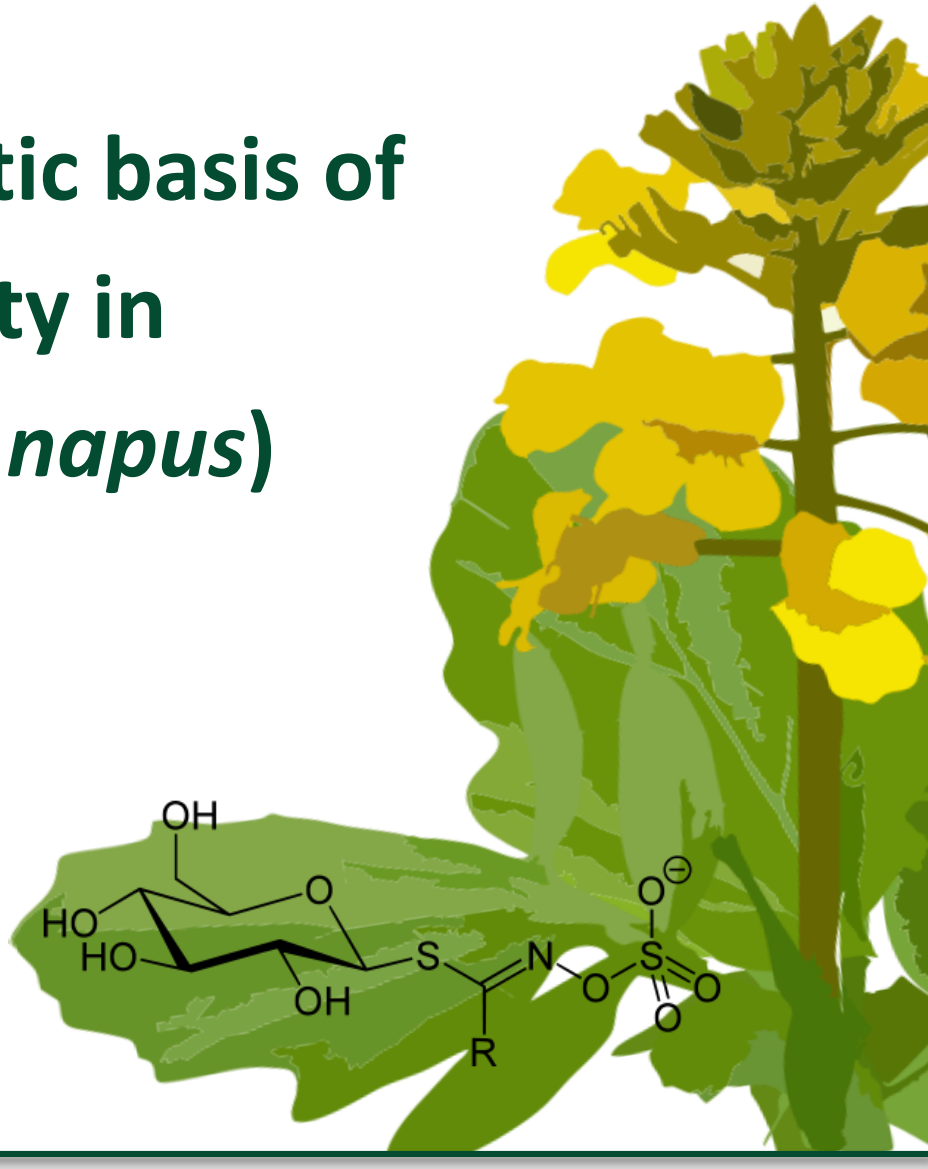
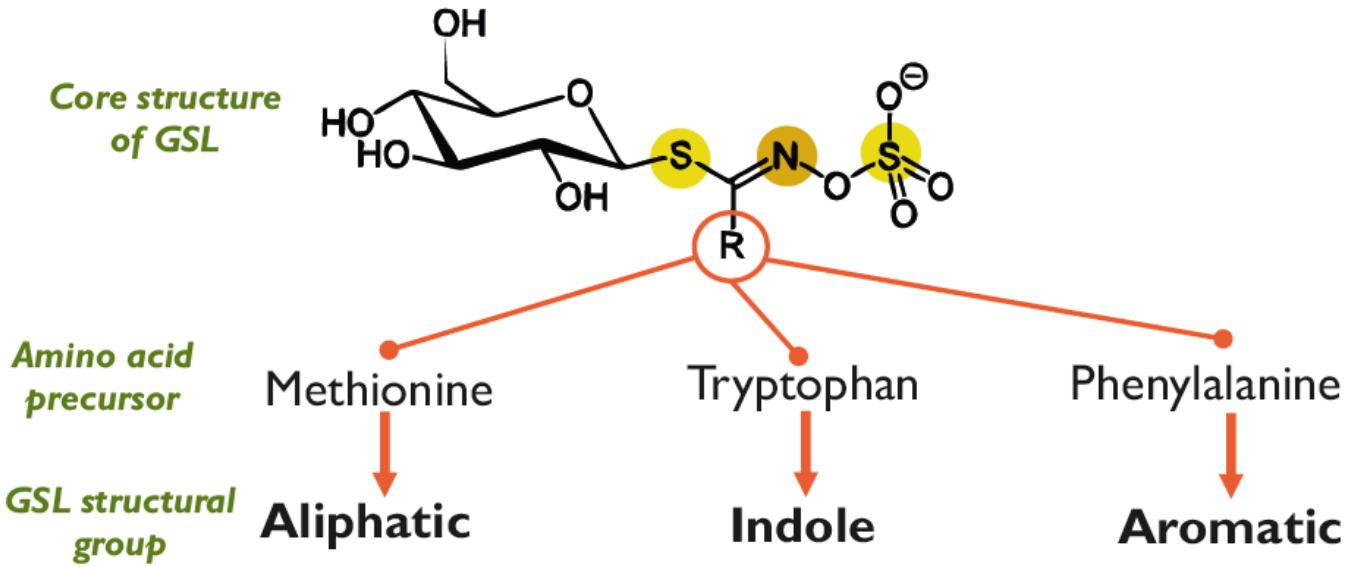


Glucosinolates and their importance



- Secondary metabolites present in Brassicales
- 120+ different GSLs have been identified
- Classified into three structural groups: Aliphatic, Indole, Aromatic

Glucosinolates and their importance

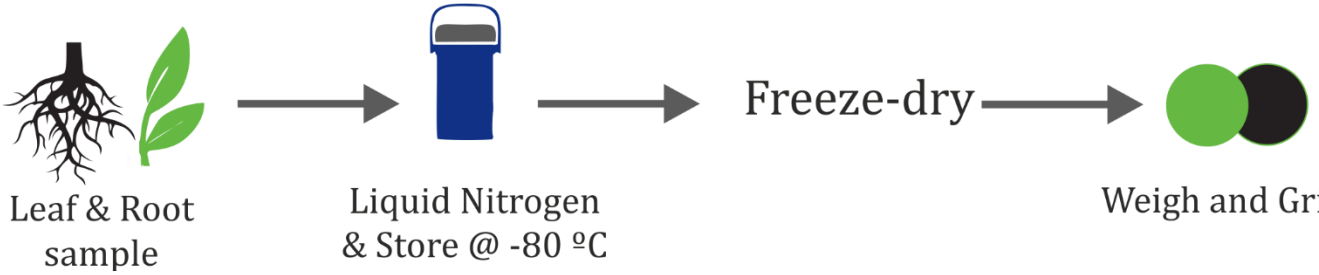
Diverse biological properties:

- Antifungal
- Antibacterial
- Bioherbicidal
- Biopesticidal
- Anticarcinogenic
- Pungency
- Antinutritional

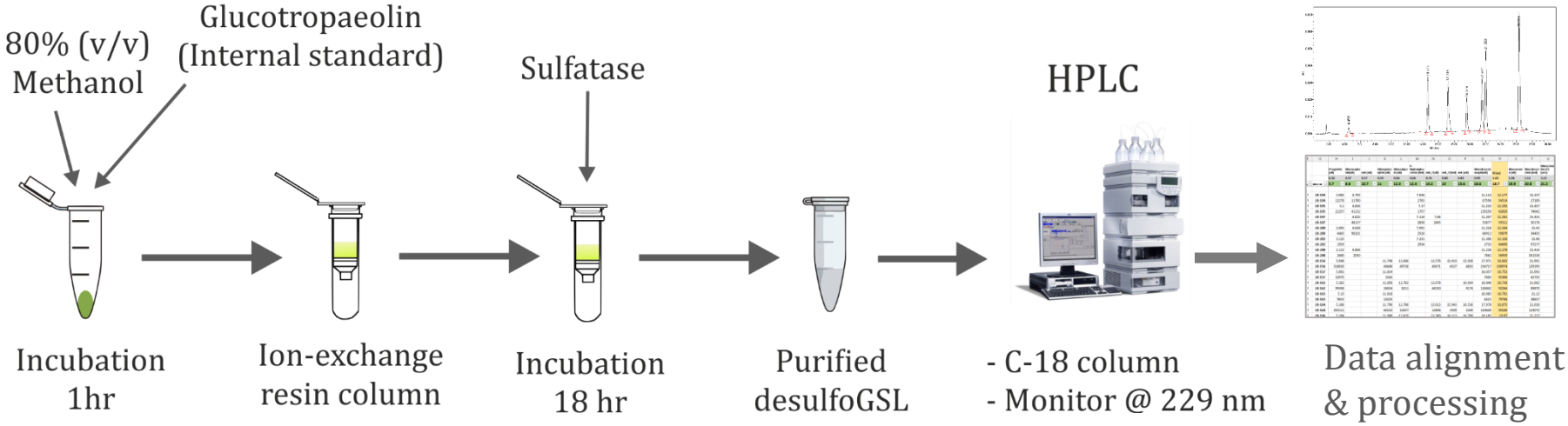
Greater understanding of genetic controls allow precise GSL manipulation and exploitation of GSL potentials

GSL quantification

Sample preparation



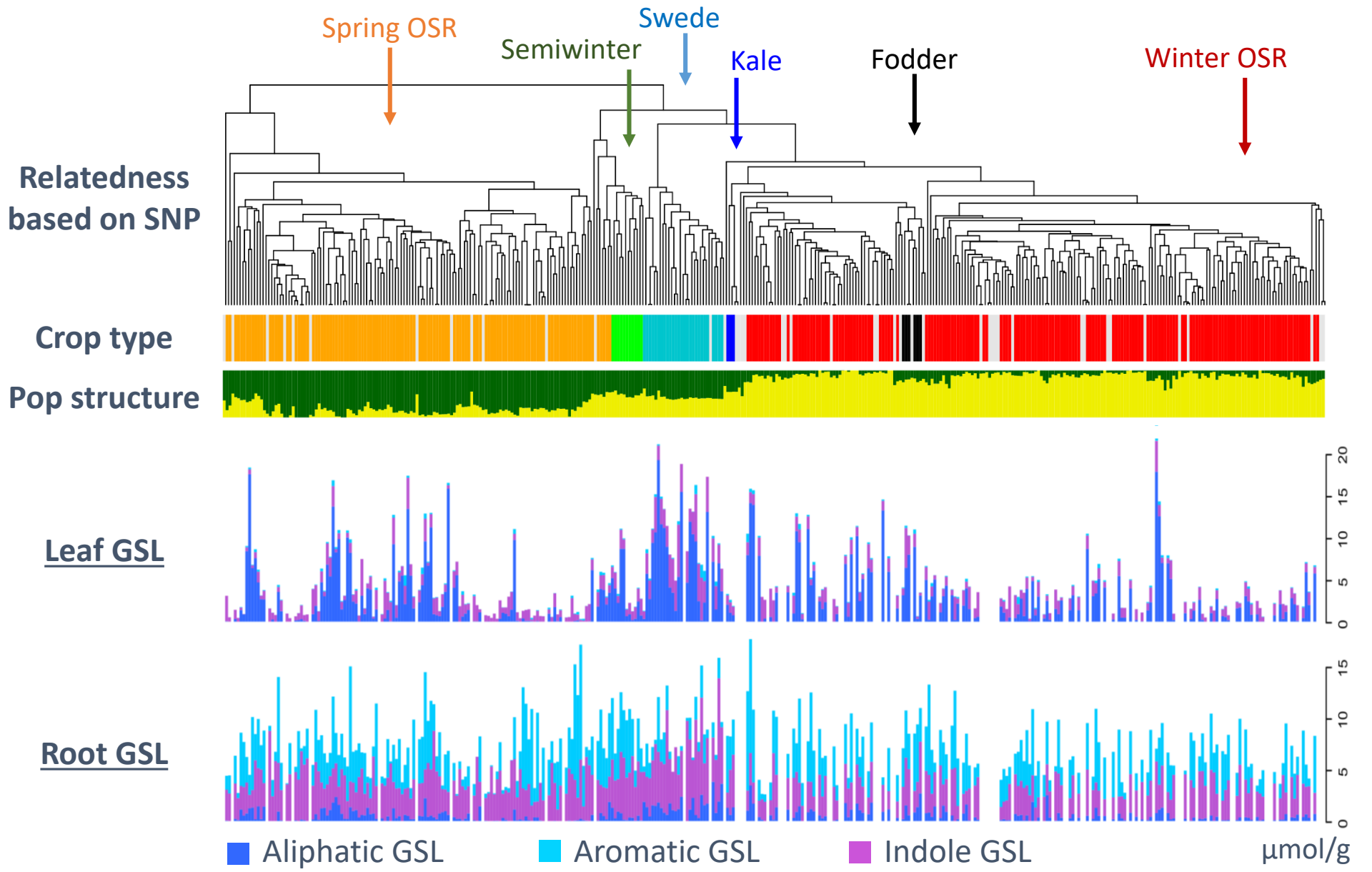
Extraction, purification & analysis



Plant Methods

Development of an efficient glucosinolates extraction method
Plant Methods, 2017 https://doi.org/10.1186/s13007-017-0164-8

Glucosinolate (GSL) profiles across 288 accessions of RIPR panel



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