



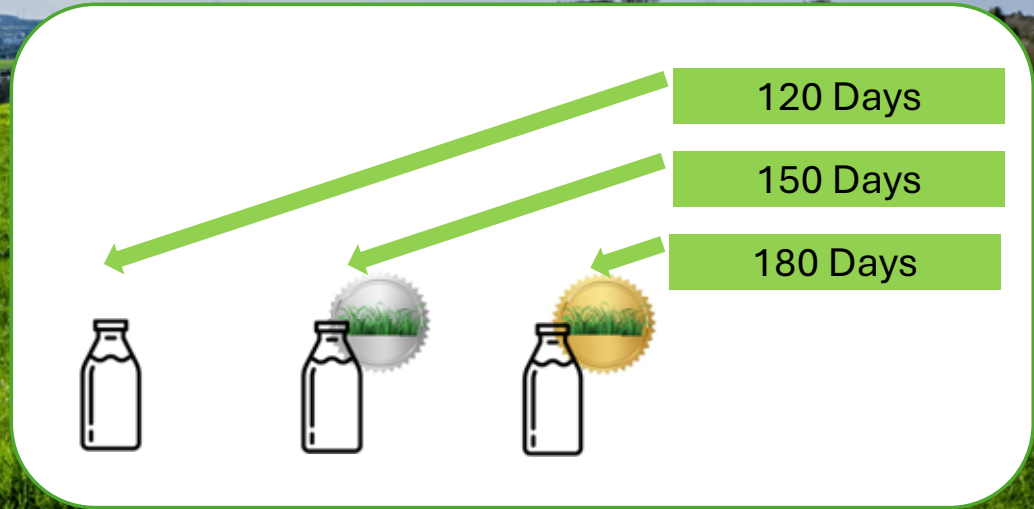
Kinetic assessment of the impact of a linseed-rich diet on a milk FT-MIR-based herbage intake indicator

K. Dichou, D. Veselko, A. Marvuglia, H. Soyeurt



General workflow

- Grazing calendars
- Certification
- Labels



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Bulk Tank Milk
FT-MIR spectral
predictions

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Grazing
indicator

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Herbage
consumption
indicator



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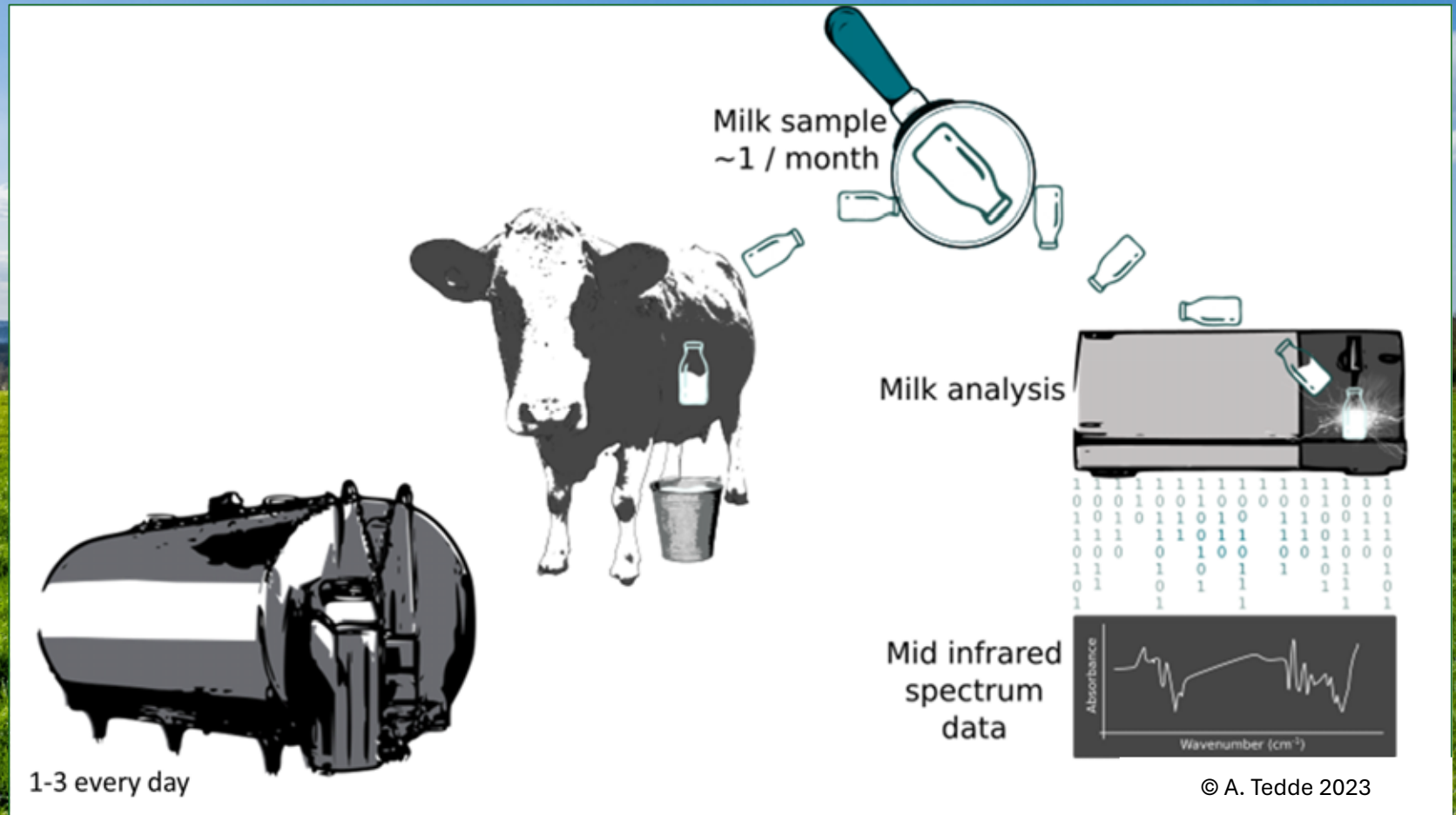
Grazing
indicator

Herbage
consumption
indicator

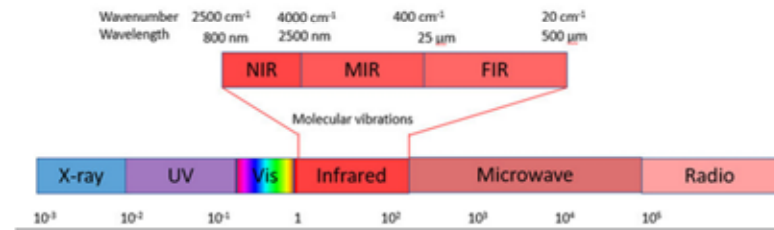
Bulk Tank Milk
FT-MIR spectral
predictions

```
graph LR; A[Bulk Tank Milk FT-MIR spectral predictions] --> B[Herbage consumption indicator]; B --- C[Grazing indicator];
```

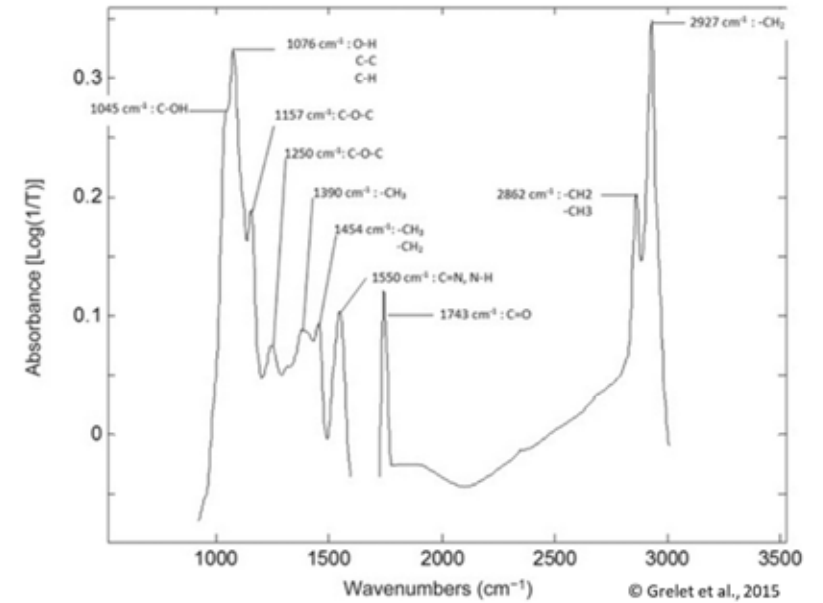
Bulk milk analysis



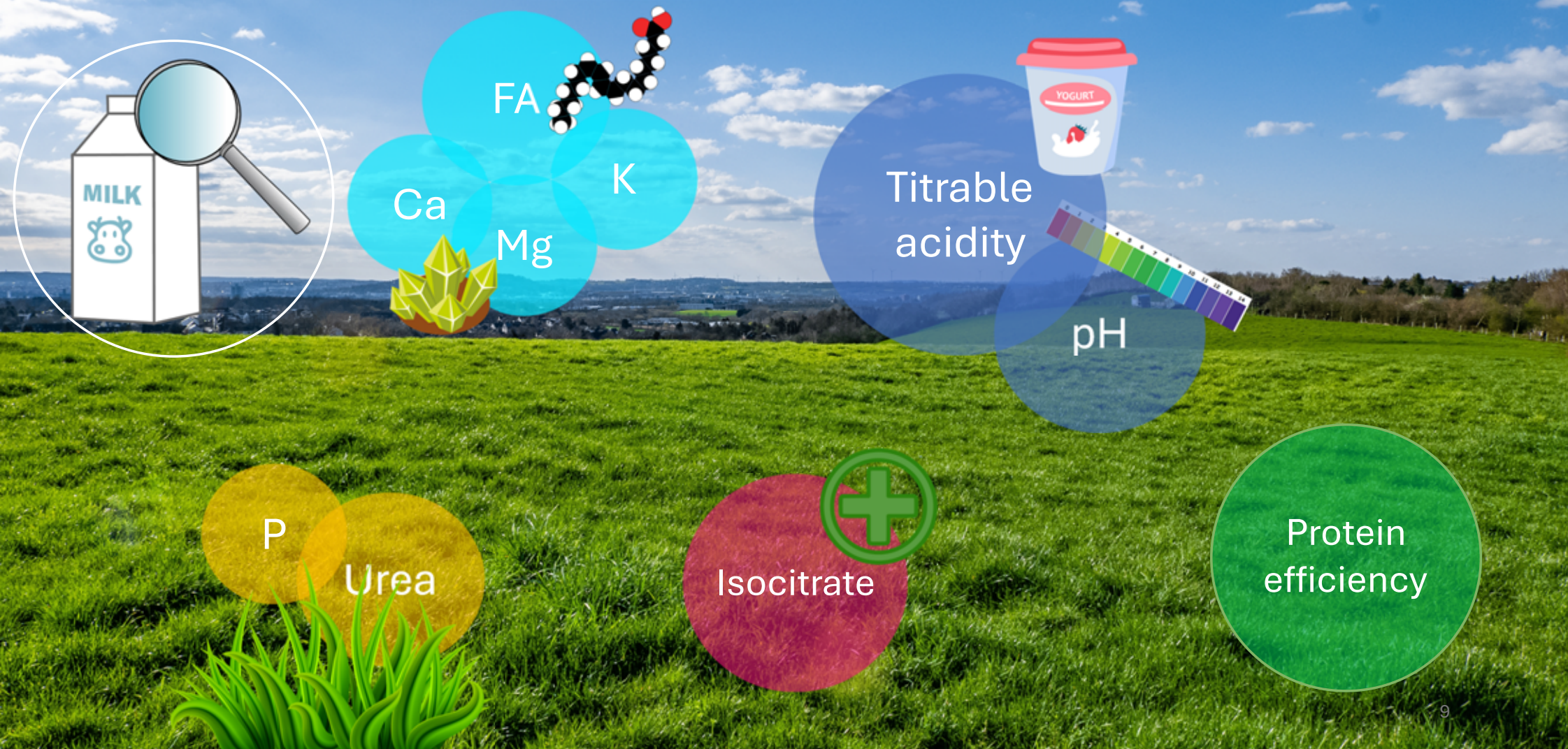
Bulk milk analysis



MIR spectra
= Absorption of infrared radiation at frequencies associated with the vibrations of specific chemical bonds.



Herbage indicator



Herbage indicator



Modeling feed herbage proportion and modeling of the likelihood of feeding strategies focused on grazing and herbage consumption using milk Fourier-transform mid-infrared spectral analysis

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Affiliations + expand

PMID: 40912556 DOI: [10.3168/jds.2025-26794](https://doi.org/10.3168/jds.2025-26794)

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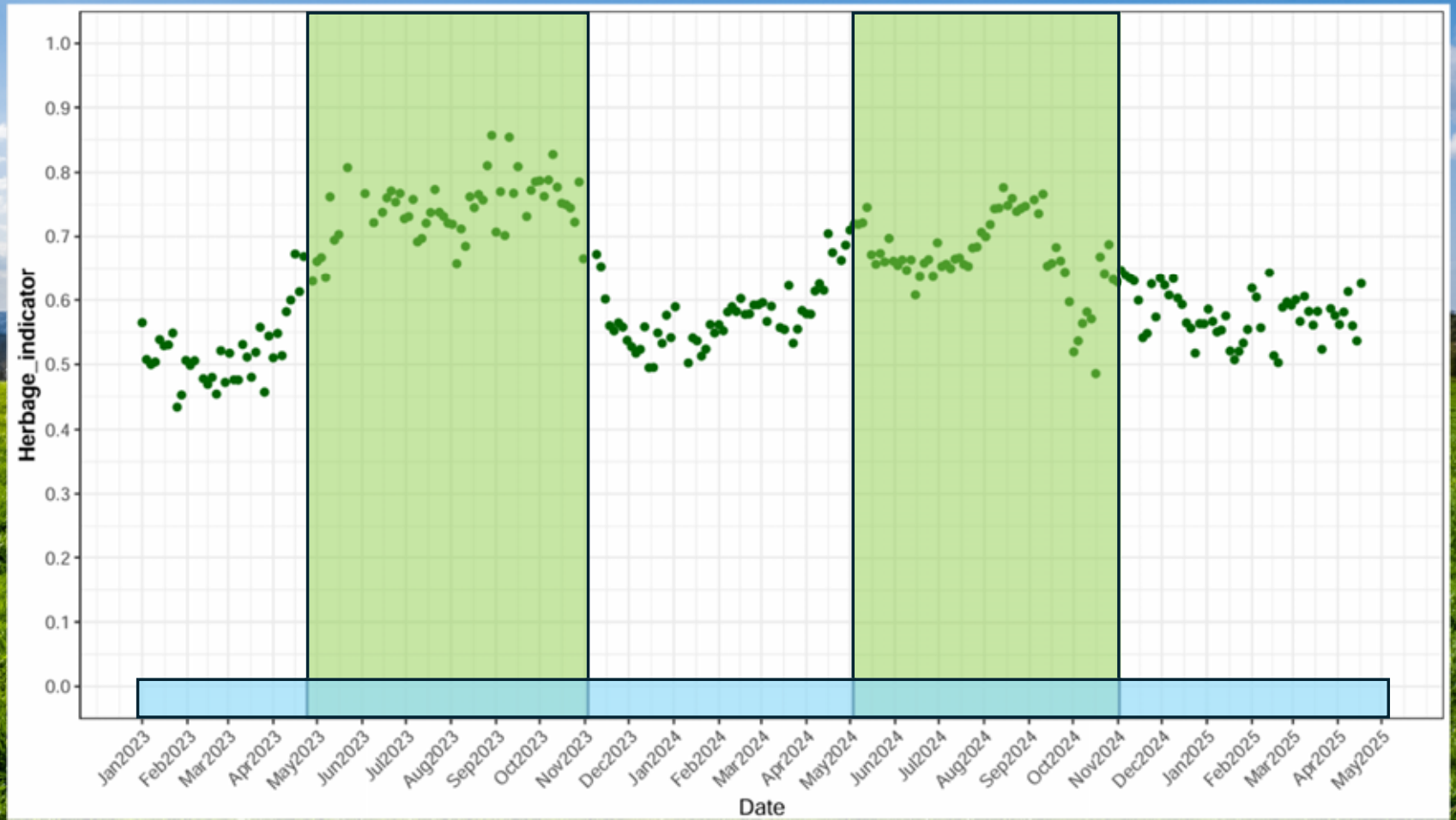
Bulk Tank Milk
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```

Added linseed to the diet - results

Pasture

Linseed



Added linseed to the diet - data



2,445 bulk tank milk analyses

8 farms

2023-2024



148 bulk tank milk analyses aggregated by months

grazing vs not grazing

indicator :
0,17 +- 0,03

31 bulk tank milk analyses aggregated by months

linseed vs no linseed

indicator :
0,12 +- 0,01

Added linseed to the diet - perspectives



Conclusion

- Pasture dynamics still clear
- Overall effect of the intake on the signal



Thanks to our partners and colleagues on the projects

- WALLeSmart, SPW, [grant number D65-1435]
- SIMBA project, FNR, [INTERFNRS/18/12987586] and the
- SIMBA project, F.R.S-FNRS (Belgium), [T.0221.19]

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