

Exploratory data analysis – Barley data

Goal: Can you predict the protein content in barley? How does mutant and/ or location (growth) influence the protein content?

Filename: barley.ltx / barley4matlab.mat

Number of measurements: 388

Xcal (308 x 1050): NIR spectra of the milled barley samples.

Xval (80x 1050): NIR spectra of the milled barley samples (test set samples).

Ycal (308 x 1) Protein content in the milled samples determined by Kjeldahl.

Description:

308+80 different barley samples have been made by milling several barley seeds taken from different barley mutants and locations. The outdoor location means that the barley has been grown in pots outside of the greenhouse, compared to the greenhouse, where they have been grown in pots inside. The field is, of course, plants grown (less controlled) in the field. In addition to measuring the NIR spectra on these barley samples, the protein content in the milled samples have also been determined by the Kjeldahl method.

Acknowledgement:

These data have kindly been made available by Lars Munck and Birthe Møller Jespersen.