Phoenix Application Note

Masa Dough

Introduction

This application note describes the general results when measuring uncooked masa dough using for the Phoenix NIR Analyzers.

Method

All samples were run on a Phoenix Series NIR Analyzer and calibrations were developed using Alligator Calibration software.

All samples were rolled into a small ball and placed into a ring cup. Samples were analyzed at room temperature

The ring cup was used for analysis.

Results

Samples are a mixture of white and yellow corn masa dough.

All results are on as-is basis.

Definitions

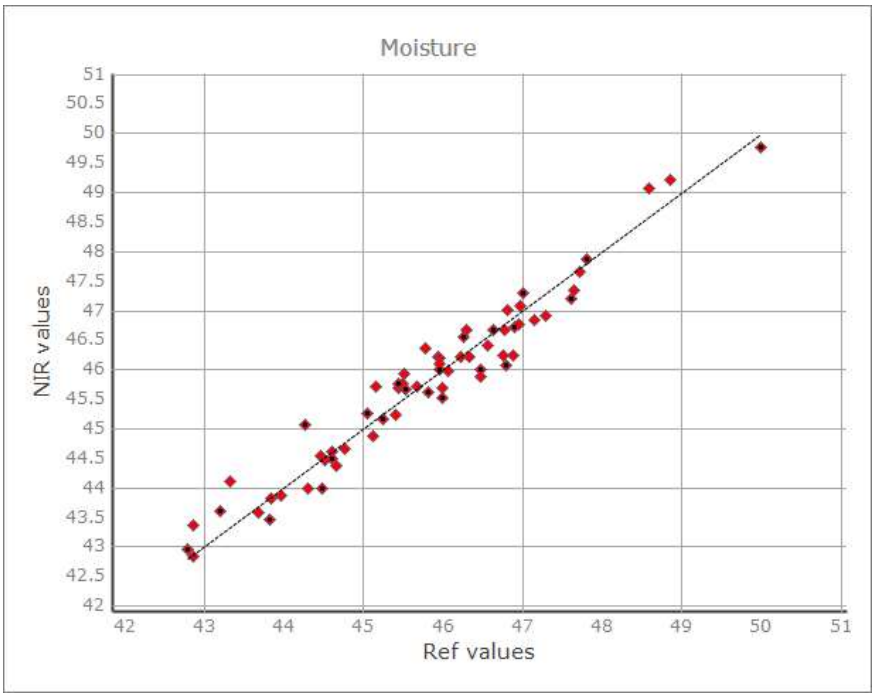
# of Samples: Total number of samples for each constituent.

Range: Constituent range in the calibration

R^2: Correlation coefficient is the agreement between the wet chemistry and NIR results. Correlation is dependent on lab accuracy and constituent range.

SECV: Cross Validation Error of the calibration. This value is approximately what can be expected when using the calibration for routine analysis.

Constituent	# of Samples	Range	R^2	SECV
Moisture	100	42.7 – 50.9	0.95	0.49


Moisture
NIR values
Ref values
51
50.5
50
49.5
49
48.5
48
47.5
47
46.5
46
45.5
45
44.5
44
43.5
43
42.5
42
42
43
44
45
46
47
48
49
50
51