

Dedicated Analytical Solutions

GRAIN NETWORK MEETING 2016 WGN TRAINING - STANDARDISATION

Tomas Nilsson, FOSS

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TRAINING PROGRAM



- ▶ 13.00-14.50
 - ▶ Training Mosaic (Red group, room Louis XIV)
 - ▶ Training Standardisation (Blue group, room Louis XV)
- ▶ 14.50-15.10
 - ▶ Coffee break
- ▶ 15.10-17.00
 - ▶ Training Mosaic (Blue group, room Louis XIV)
 - ▶ Training Standardisation (Red group, room Louis XV)
- ▶ 18.00-19.30
 - ▶ Drinks and Canapés

TRAINING STANDARDISATION



- ▶ Overview of standardisation
 - ▶ What is the prupose?
 - ▶ Parameter vs Instrument S/I adjustments
- ▶ Sample sets
 - ▶ Using dynamic sample sets for searching
 - ▶ Creating static sample sets
- ▶ Database setup
 - ▶ Standardisation model vs network model
- ▶ Standardisation
 - ▶ Instrument S/I adjustments

WHY NETWORKS?

- ▶ Quality assurance
- ▶ Fair trade, both locally and globally
- ▶ Sharing of costs
- ▶ Technical complexity shifted away from instruments and towards Centre



FOSS NETWORK CONCEPT

- ▶ One reference laboratory and one (sub)master Infratec
- ▶ Instruments simple to operate
- ▶ Identical specification of instruments
- ▶ Operator's influence on the results are eliminated
- ▶ Only authorized calibrations are allowed
- ▶ All instruments give the same results
- ▶ Submaster adjusted to the reference method
- ▶ All other instruments (satellites) adjusted to the submaster

ADJUSTMENTS



- ▶ Parameter adjustment
 - ▶ Submaster adjusted to the reference method
- ▶ Instrument adjustment
 - ▶ All other instruments (satellites) adjusted to the submaster
- ▶ All instruments give the same results!

DYNAMIC SAMPLE SETS

- ▶ Dynamic samples sets useful for:
 - ▶ Advanced search for specific samples such as standardisation samples (ID "gnm")
 - ▶ Collect and monitor production samples over time
- ▶ From sample sets tab select "New sample set"
 - ▶ Rename from default to your own: WGN1 (for user 1), WGN2 (for user 2), etc.
- ▶ Search criteria
 - ▶ Sample type: Normal
 - ▶ Analysed period: From 01/01/2016
 - ▶ Sample number: gnm

STATIC SAMPLE SETS

- ▶ Create Static sample set:
 - ▶ Surveillance tab: select and add to static sample set
 - ▶ Existing Static or Dynamic sample sets: select and add to static sample set
 - ▶ Convert Dynamic sample set into Static sample set in one click
- ▶ Reference values
 - ▶ Individual reference: for alignment of submaster to reference method
 - ▶ Master reference: for alignment of satellite instruments to submaster
 - ▶ Shared reference: for alignment of (satellite) instruments directly to reference method
 - ▶ Most useful when instruments are at the same site, otherwise expensive

DATABASE SETUP

- ▶ Standardisation model for collecting standardisation data
 - ▶ Must have an operation profile that saves both scan and result
 - ▶ Product name for Wheat can be: SW002016 Standardisation Wheat
 - ▶ Advantage: all standardisation data collected in a specific product
- ▶ Network calibration
 - ▶ Usually not set to save scan for Infratec 1241 due to memory deficiency
 - ▶ Infratec NOVA always saves both scan and results – no memory problems
 - ▶ Product name for Wheat can be: WH324500 Wheat WGN
 - ▶ Prediction models used in this training:
 - ▶ WBMO0032 Wheat
 - ▶ WBPR0045 Wheat

STANDARDISATION

- ▶ Standardisation procedure
 - ▶ Evaluation of standardisation data and outlier removal if needed
 - ▶ Statistical report with comparison to last year
 - ▶ No drastic change from last year for individual instruments or submaster position in the population
 - ▶ Apply standardisation results to calibrations
 - ▶ Save instrument S/I adjustments for each prediction model that needs standardisation
 - ▶ Create an update session for download to instruments
 - ▶ Verify that standardisation has been applied by scanning control samples