



TSNA in Air-Cured and Fire-Cured Tobacco Sub-Group Report

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**Berlin, Germany
CORESTA Congress 2016**

As confirmed by SC, Jan 2106

- ❖ 1. To determine proper placement of data loggers in curing barns to best represent the true curing conditions within the barn.
- ❖ 2. Sampling
 - (a) To define proper sampling method of post-cure tobacco for TSNA determination.
 - (b) To determine the optimal method for sample preparation for TSNA determination.
- ❖ 3. To collect available TSNA presentations and papers and publish them on the CORESTA website.

Determine proper placement of data loggers in curing barns to best represent the true curing conditions within the barn

- **Presented to SG for review Quebec 2014**
- **E-mailed to all interested participants for review and feedback**
- **These changes reviewed at 2017 SG meeting**
- **Submitted to SC for approval before publication on webiste**

Define proper sampling method of post-cure tobacco for TSNA determination

❖ Draft protocol circulated Quebec, 2014

- **Part (a). Sampling farmer packages**
- **Establishing a sampling protocol to estimate tobacco specific nitrosamines in growers' bales**
 - University of Kentucky
 - 2015, 2016
 - Co-PI: Kristen McQuerry, Applied Statistics Laboratory
- **2015 data very promising**
- **2016 sampling completed and being analysed**

Determine the optimal method for sample preparation for TSNA determination

- **Draft protocol was developed but re-evaluated**
 - University of Kentucky test:
 - Air dry
 - Freeze dry
 - Oven dry temperature
- **2015 test samples in lab for analysis**
- **2016 test in barn**

Available TSNA publications being published on CORESTA website

- **University of Kentucky will collect references**
- **Suggested that a review should be written**



Proposals for collaborative study

❖ Bale sampling

Objective: Verify core sampling method for TSNA in straight-laid bales

➤ Each collaborator to:

- Sample bales by taking 4 cores at prescribed position along length of leaf
- Collect 4 grab samples from within bale
- Lamina separated from midrib
- Air-dried
- Shipped to University of Kentucky for leaf chemistry analysis
- Statistical analysis of core sample vs grab sample



Proposals for collaborative study

Bale Sampling Collaborative Study

- ❖ Invitation to participate –
 - Worldwide regions
 - Companies
- ❖ Draft protocol prepared and sent to interested parties for review
 - Submission to SC for review and approval