

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

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

- 6 original objectives
 - Subcommittees assigned to address each objective
- 2 objectives completed or dropped
 - Survey of critical farmer practices – completed
 - Collaborative study to investigate standard deviation of moisture content of marketing packages – dropped
 - Initial moisture content of marketing package not as important as storage environment of marketing packages.

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■ Objective 1:

Develop a standardized nornicotine screening protocol so that baseline levels of nornicotine are comparable in tobacco seed varieties used by investigators.

Chair: Lowell Bush, Univ. of KY

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- Objective 1 status: completed
 - Proposal made at 2005 meeting that nornicotine screening protocol developed by University of Kentucky be accepted by Scientific Commission.
 - Concerns that “LC” added to variety name could violate international re-release laws without adequate justification.
 - Agreed that Univ. of KY screening protocol could be used without adding “LC” to variety name, only include acknowledgement that this protocol was used. If “LC” is added to name, Univ. of KY protocol must be used.

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■ Objective 2:

Develop a collaborative study which uses HOBO data loggers or similar instruments to collect curing conditions and possible impact of TSNA levels for tobaccos of diverse origins and curing environments. Attempt to standardize placement of equipment and sample protocols.

Chair: Vacant

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- Objective 2 status: nearing completion
 - Cooperative study conducted in 2008 by Univ. of KY, Univ. of TN, and Virginia Tech to compare environmental data during air-curing of burley from HOB0 and similar meters placed on tier rails between tobacco and within tobacco.
 - Data should be available before end of year.

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■ Objective 3:

Resolve sample handling of post-cure tobacco for TSNA analysis.

Chair: Marlene Adams, R.J. Reynolds Tob. Co.

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- Objective 3 status: reevaluation
 - Protocol developed but under reevaluation
 - Protocol should address methods for sampling plants and for sampling bales.
 - Concerns expressed over maximum temperature given on protocol for air-drying samples (35 C)
 - Maximum 20 C proposed
 - Samples should be processed/analyzed as soon as possible. Protocol should address maximum sample storage time prior to analysis.
 - Group agreed to review sampling protocols from various companies to find consensus in sampling methodology.

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■ Objective 4:

Review issues of post-cure tobacco storage and ventilation parameters.

Chair: Lowell Bush, Univ. of KY

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- Objective 4 status: near completion
 - Experiments have been conducted and data collected. Report completed.
 - Proposed that group should also evaluate post cure storage conditions in areas of Africa and Brazil.

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- New initiatives of group:
 - Development of general guidelines/best production practices for reducing TSNA in air-cured tobacco

 - Additional focus on fire-cured tobacco:
 - Possible new objectives:
 - TSNA effects of using forced air ventilation prior to firing
 - Comparison of TSNA levels in dark fire-cured and dark air-cured tobacco