NEWSLETTER

Issue 50 – April 2018

CORESTA CONGRESS
Kunming, China, 22-26 October 2018

Twenty years after the first Congress hosted by the China National Tobacco Corporation (CNTC) in 1988 in Guangzhou and ten years after the second Congress in Shanghai in 2008, CORESTA once more returns to China. The CNTC is again proud to host the 2018 CORESTA Congress in Kunming.

The theme of the Congress is:

"Science and Innovation: Addressing the Needs"

With this theme, the CORESTA Scientific Commission wishes the event to be an opportunity for delegates to share their experience with the broad scientific community, within and beyond the sole tobacco point of view. Workshops will be arranged to foster open dialogue on crop protection, biotechnologies, product risk assessment and biomarkers. This approach will provide valuable information to all stakeholders in the increasingly challenging regulatory environment. Latest updates and scientific achievements and findings will be presented to the benefit of both experienced and new scientists. The CORESTA Congress is always an invaluable opportunity for building links and networking between generations of scientists.

Online Abstract Submission

Online submission is available for authors wishing to present a paper at the Congress.

The "Call for Papers" and "Abstract Guidelines and Submission" can be found on the CORESTA website at www.coresta.org under the Meetings section.

It will also be available on the official Congress website when it goes online shortly.

Presenters are encouraged to submit papers related to the Congress theme "Science & Innovation" with focus on the needs of the industry's many stakeholders that are critical to maintaining a sustainable tobacco sector. Presenters should keep in mind the broad context of potential regulatory requirements affecting both conventional combustible and emerging products.

Abstract submission deadline:

16 May 2018

Authors will be contacted end of June.

WORKSHOPS →

Kunming

Kunming is the capital city of Yunnan Province in southwest China. It is the Province's political, economic, communications and cultural centre and the seat of the provincial government. Located at the edge of Lake Dian and surrounded by temples and impressive hill landscapes, Kunming has a history spanning over 2400 years and is known as "the City of Eternal Spring" due to its mild, sunny climate. It is a major international hub for the region's tourism industry, and the centre of China's main tobacco producing area where many local and international tobacco companies have headquarters and offices.

Venue

The Kunming InterContinental Hotel will be the venue of the 2018 Congress. This brand new hotel (constructed in 2016) caters perfectly for all accommodation, meeting and banqueting requirements with its attractive rooms, flexible function spaces, and its both studious and exciting atmosphere. It is situated in the Dianchi area, beside Lake Dian, about 40 km from the Kunming Airport.

Elections and General Assembly

Elections will be held for the renewal of the Scientific Commission and the partial renewal of the Board. Further details will be provided in the next Newsletter and through correspondence with the Official Delegates of CORESTA Member Organisations.

Timeline

Online Registration: May until 7 October 2018
(Earlybird registration until 7 August 2018)
Working Programme: available end of June 2018

Further Information

Please visit the official Congress website at
www.corestakunming2018.com
(online soon)

CORESTA Scientific Commission and Board Meetings

The **SCIENTIFIC COMMISSION** met in Myrtle Beach, South Carolina, USA, on 18-19 January, hosted by CORESTA, in conjunction with the 48th Tobacco Workers' Conference.

- Feedback was given from the Board meeting held in June 2017 and the partial meeting held during the SSPT2017 event in Austria. The main topic was the manufacture of the 9th CORESTA Monitor (CM9), stopped by German authorities as non-conforming with European regulations. Discussions had been launched at European Union (EU) level to explain the need for the Monitor by regulators.
- **ISO/CEN:** Stéphane Colard was to be appointed Chairman of TC 126 / SC 1 (Physical and dimensional tests). ** WG10: Alan Boobis to remain Convenor; Tim Mason appointed as Secretary. ** Nine CRMs currently processed to be adapted as ISO standards, most to be released in 2018. ** Arnaud Dumas de Rauly appointed Chair of both ISO/TC 126/SC 3 and CEN/TC 437 dealing with e-vapour products.
- **ACAC:** Increased focus on cigar tobacco. ** Guide No. 21 on cigar dark air-cured tobacco published.
- **Agronomy & Leaf Integrity:** Need for clarification on GMO definition depending on countries. ** Next Infestation Control Conference (ICC) to be held in Winston-Salem, North Carolina, USA, 7-8 May 2018.
- **Phytopathology & Genetics:** Further to AP2017 in Brazil, the Di@gnoplant content will be translated into Portuguese and extended with local data. ** Alkaloid Genetics (TAG) and Biotechnology (TBO) Task Forces had their kick-off meetings during AP2017.
- **Product Technology:** CRM 85 on Alkaloids by continuous-flow analysis, with a safer chemistry alternative, proposed to replace ISO15152. ** First Cigarette Variability (CVAR) report (short-term) under review, with huge amount of data available.
- **Smoke Science:** The Product Use Behaviour (PUB) Sub-Group proposed to develop new tools with an outside partner to validate Consumer Reported Outcome Measures.
- **Standards and PMO:** Two documents remain to be completed. ** The new Project Management Office (PMO) committee had its kick-off meeting.
- **Website:** Phase 3 (working group section) to be kept very simple due to impact on the Coordinators' and Secretariat's workload.

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The **BOARD** met on 27-28 February in Guangzhou, China, kindly invited by the China National Tobacco Corporation (CNTC).

- Regulatory issues were discussed, including track and trace, characterising flavours and hybrid or heated products in EU and USA.
- The CM9 issue had been solved and production scheduled for availability before end of 2018.
- The Tobacco Heated Product ad hoc group was finalising a survey to be circulated to all Members.
- The Board dedicated Committees (Strategy, Finance, Events, Communication and Information Technology), presented their first active reports.
- Hosts confirmed for 2019 AP and SSPT events, and for the 2020 Congress as well.

2018 CORESTA CONGRESS WORKSHOPS

This year, the programme of the CORESTA Congress will feature five workshops.

The first overarching workshop, held during the plenary session, will cover a broad range of topics around the theme of the Congress: ***Science & Innovation: addressing the needs***. Presenters will explain what "addressing the needs" means now and for the future in agronomy, biotechnology, product technology and product assessment.

The four other workshops will be held over the course of the Congress: two will be specific to Agronomy & Leaf Integrity and Phytopathology & Genetics, and two specific to Smoke Science and Product Technology topics.

A workshop on ***Crop Protection*** will be included in the Agro/Phyto programme. Topics such as the uptake and movement of CPAs in plants, CPA application technology, physics of spray droplet deposition, eco-friendly CPAs and trends in residues on marketed leaf will be discussed. Another workshop on ***Genetics & Genome*** will allow the participants to present their data, explore new avenues for collaboration and enhance research in tobacco biology and breeding by adapting new technologies and incorporating ideas from other crops. This is of particular interest since there has been worldwide interest recently in genomic research and marker assisted breeding in tobacco.

In the Smoke/Techno programme, a workshop on ***Product Risk Assessment*** will be proposed with the aim to increase awareness of quantitative risk assessments generally, and for tobacco products specifically, to discuss utility, tools, methodologies, assumptions, definitions, applications and challenges. Finally a workshop on ***Biomarkers*** will also be organised to critically review the application of biomarkers and limitations for tobacco product evaluation and to examine the biomarker qualification process for tobacco-related biomarkers.

CORESTA PROJECTS

The following projects were approved by the Scientific Commission and launched:

- **Project 173: Poster presentation at the European Pesticide Residue Workshop (EPRW 2018) in Munich, Germany, May 2018**
  (Sub-Group Agrochemical Analysis) - Approved January 2018
- **Project 175: Guide on Technical Aspects of CPA Usage**
  (Agrochemical Advisory Committee) - Approved January 2018
- **Project 176: Systematic Review of CORESTA Guide No. 11**
  (Sub-Group Tobacco and Tobacco Products Analytes) - Approved January 2018
- **Project 177: Presentation at Electronic Nicotine Delivery Systems (ENDS) Conference in London, UK, June 2018**
  (CORESTA Board) - Approved January 2018
- **Project 178: Guide for Designing E-Vapour Products and E-Liquids Stability Studies**
  (Sub-Group E-Vapour) - Approved March 2018
- **Project 179: 5th Proficiency Test for Detection of Transgenic Tobacco**
  (Sub-Group Proficiency Testing for Detection of Transgenic Tobacco) - Approved February 2018
- **Project 180: Presentation at the Rhodia Acetow 11th Cigarette Filter Colloquium in Freiburg, Germany, April 2018**
  (CORESTA Board) - Approved March 2018
- **Project 181: Presentation at the 2018 Genetic Toxicology Association Meeting in Newark, DE, USA, May 2018**
  (Sub-Group In Vitro Toxicity Testing) - Approved March 2018
- **Project 182: Commentary "Factors to consider in arriving at puffing regime to represent intense ENDS use" for publication in SRNT Journal**
  (Sub-Group Product Use Behaviour) - Approved April 2018
- **Project 183: Revision of Guide No. 13 - Guidance for Sampling the Tobacco Leaf Supply Chain**
  (CORESTA Agro-Phyto Study Group) - Approved March 2018
- **Project 184: Guide for Proficiency Study on the Determination of Metal Compounds in E-liquids**
  (Sub-Group E-Vapour) - Approved April 2018
- **Project 185: Revision of Guide No. 5 Technical Note #01 Maleic Hydrazide**
  (Sub-Group Agrochemical Analysis) - Approved April 2018

CORESTA REPORTS

The following reports have been published on the CORESTA website at www.coresta.org:

- **Cigar Smoke Analysis - 12th Collaborative Study**
  Technical Report [CSM-109-CTR] – January 2018 (Sub-Group Cigar Smoking Methods)

  Since 2006, the Sub-Group Cigar Smoking Methods (CSM) carries out periodic collaborative studies in order to improve repeatability and reproducibility measurement methods of different cigar sizes and types. This 12th Collaborative Study (CS) was conducted on cigar smoke analysis with the purpose to re-establish mean values for NFDPM, nicotine and carbon monoxide for different sizes and types of cigar products and test pieces. It also provides a tool for participating laboratories to prove competence in cigar smoke analysis. The changes made in the 11th Collaborative Study and continued in the 12th have a positive impact on the reproducibility estimations. Fewer inconsistencies were reported compared with the previous collaborative studies.

- **Use of Capillary GC Columns for the Determination of Water in Cigarette Mainstream Smoke**
  Technical Report [RAC-157-CTR] – March 2018 (Sub-Group Routine Analytical Chemistry)

  This report provides the statistical analysis of the results obtained for the determination of water in cigarette mainstream smoke condensates using packed and capillary GC columns, in the frame of the CORESTA Monitor No. 8 (CM8) Collaborative Study 2017. This work was done in support of the revision by ISO of its method 10362-1:1999 using the smoking regime ISO 3308. The results obtained with capillary columns were found not to be statistically different from the results obtained with packed columns, using the conditions provided in ISO 10362-1:1999.

CORESTA PROJECTS

New - CORESTA Guide No. 5 – Technical Notes
TN 006 – Dithiocarbamates *(December 2017)* [AA-098-CTN]

The CORESTA Guide No. 5 provides a framework for the creation of high quality analytical methods for agrochemical residue testing. However, many residues require additional consideration to ensure satisfactory analysis. To address this issue the Sub-Group on Agrochemical Analysis has produced a set of technical notes on compounds whose analysis had proved problematic in proficiency tests undertaken by the Group. The 6th Technical Note of the series covers Dithiocarbamates.

New - CORESTA Guide No. 21
Best Practices and Crop Protection in Cigar Dark Air-Cured Tobacco *(December 2017)*
[ACAC-158-CTG-21]

Some important aspects of Good Agricultural Practice (GAP) with regard to crop protection in cigar tobacco are different from the tobaccos used in other manufactured tobacco products, mainly cigarettes. This is due to the fact that any damage, whether mechanical or physiological or by pests and diseases, significantly depreciates the value of leaves to the extent that they no longer meet market requirements. This applies especially to cigar wrapper leaves. It is therefore necessary to take this into account when setting Guidance Residue Limits specifically for this type of tobacco.

This Guide outlines both the production and crop protection practices that contribute to the difference between cigar and other tobaccos. It also provides guidance on critical best practice for managing Crop Protection Agents (CPAs). The Guide is preparatory to setting Guidance Residue Levels (GRLs) for cigar tobaccos to complement those for tobaccos used in cigarettes listed in CORESTA Guide No. 1 ["The Concept and Implementation of CPA Guidance Residue Levels"].

New - CORESTA Guide No. 22
Technical Guide for the Selection of Appropriate Intense Vaping Regimes for E-Vapour Devices
(February 2018) [EVAP-128-CTG-22]

The purpose of this Guide is to provide guidance on which criteria should be considered when defining the required device and aerosol generation/collection system settings for intense use. Intense use can be regarded as the conditions which will result in higher levels of aerosol generation under normal use conditions (higher volumes of aerosol/higher exposure). The Guide covers parameters affecting aerosol delivery, topographical studies and technical limitations of aerosol generation instruments.

CORESTA REPORTS (continued)

- **Select Carbonyls in Tobacco and Tobacco Products - 2016/2017 Collaborative Study**
  Technical Report [TTPA-043-1-CTR] – January 2018 (Sub-Group Tobacco and Tobacco Products Analytes)

  The objective of this study was to evaluate the method developed for the determination of carbonyls in tobacco products including smokeless tobacco products and cigarette filler. The data were statistically evaluated in basic conformance with the recommendations of ISO 5725-2 to assess within (r) and between laboratory (R) variability. The study suggested the method is sufficiently robust for the determination of carbonyls in tobacco products and a CORESTA Recommended Method (CRM 86) was subsequently drafted and published.

  In addition to this study, the stability of carbonyl concentrations were investigated to determine if they are affected by transportation, grinding, and refrigerated storage after weighing out aliquots. However, the tests were limited robustness tests from which no certain conclusions could be drawn.

- **10th Collaborative Study (2017) for Physical Parameters of Cigarettes and Filters**
  Technical Report [PTM-122-CTR] – March 2018 (Sub-Group Physical Test Methods)

  The Physical Test Methods (PTM) Sub-Group carries out a normally annual inter-laboratory study on physical parameters of cigarettes and filters. This Collaborative Study monitors the repeatability and reproducibility of the test methods used to measure certain physical parameters of cigarettes and filters, such as weight, diameter, pressure drop, draw resistance and ventilation. The study results allow each laboratory to fulfil accreditation requirements, evaluate its performance in comparison to other laboratories, and to derive actions for improvement.

CORESTA RECOMMENDED METHODS

New

- **CRM No. 86** – Determination of Select Carbonyls in Tobacco and Tobacco Products by UHPLC-MS/MS
  (January 2018) [TTPA-043-2-CRM-86]

This CRM is applicable to the determination of formaldehyde, acetaldehyde and crotonaldehyde in smokeless tobacco products (e.g. moist snuff, snus, chewing tobacco and dry snuff) and cigarette filler. The method is based on the results of the Collaborative Study published in the CORESTA Tobacco and Tobacco Products Analytes Sub-Group Technical Report *Select Carbonyls in Tobacco and Tobacco Products - 2016/2017 Collaborative Study*, January 2018.

Updated

- **CRM No. 58** – Determination of Benzo[a]pyrene in Cigarette Mainstream Smoke by GC-MS
  (Fourth edition – January 2018) [SMA-163-CRM-58]

CRM 58 was subject to a periodic technical and editorial review by the CORESTA Smoke Analytes Sub-Group and updated accordingly.

- **CRM No. 70** – Determination of Selected Volatile Organic Compounds in the Mainstream Smoke of Cigarettes – GC-MS Method
  (Fourth edition – February 2018) [SMA-163-CRM-70]

Although CRM 70 has been proposed to ISO as an International Standard, it was considered helpful to review and amend it with relevant comments from the ISO review for consistency.

- **CRM No. 74** – Determination of Selected Carbonyls in Mainstream Cigarette Smoke by HPLC
  (Fourth edition – February 2018) [SMA-153-CRM-74]

CRM 74 has been proposed to ISO to become an International Standard. The Smoke Analytes Sub-Group considered it relevant to amend this CRM for correctness, completeness and alignment with the future ISO document.

- **CRM No. 79** – Determination of Ammonia in Tobacco and Tobacco Products by Ion Chromatographic Analysis
  (Second edition – March 2018) [TTPA-150-2-CRM-79]
- **CRM No. 82** – Determination of Benzo[a]pyrene in Tobacco Products by GC-MS
  (Fourth edition – March 2018) [TTPA-150-3-CRM-82]

In addition to smokeless tobacco products (e.g. moist snuff, snus, chewing tobacco and dry snuff), the scope of the above CRMs has been expanded to include ground cigars (wrapper, binder, and filler). The update of the CRMs is based on the Technical Report 2017 Collaborative Study on Ammonia and Benzo[a]pyrene in Tobacco Products.

All CORESTA Recommended Methods can be downloaded in PDF format at www.coresta.org

CORESTA REPORTS (continued)

- **2017 Collaborative Study on Ammonia and Benzo[a]pyrene in Tobacco Products**
  Technical Report [TTPA-150-1-CTR] – March 2018 (Sub-Group Tobacco and Tobacco Products Analytes)

  A Collaborative Study for the determination of ammonia and benzo[a]pyrene in smokeless tobacco, cigarette filler, and ground cigars (wrapper, binder, and filler) was initiated with the intent to support laboratory accreditation and to expand the scopes of CORESTA Recommended Methods (CRMs) No. 79 and No. 82 to include ground cigars. The results showed that the methods were fit for purpose for the analysis of cigar filler and the CRMs were updated accordingly.

- **2015 Collaborative Study on Ammonia**
  Technical Report [SMA-046-2-CTR] – March 2018 (Sub-Group Smoke Analytes)

  Studies were carried out from 2013 to 2015 to evaluate analytical methods for quantitative measurement of ammonia in mainstream cigarette smoke using Ion Chromatography (IC) with conductivity or suppressed conductivity detection. It was concluded that the two trapping systems were fit for purpose for cigarette products of various designs and constructions, but not suitable for measurement of ammonia in mainstream cigarette smoke generated from dark air-cured samples. This report relates to CRM 83.

CORESTA Standards Task Force

Stéphane COLARD
Task Force Coordinator

The CORESTA Standards Task Force continues to progress well and is now close to fully achieving its objectives. Since the beginning of the year, the Task Force has issued the *Procedure for Commenting Documents for Publication* and its associated *Table of Comments*. The procedure is in application and the table is in use by the Board and the Scientific Commission. All Study Groups and Task Forces (SGTFs) are encouraged to do the same as it facilitates comment management and traceability. The Standards Task Force has also published the *Guideline for Conducting a CORESTA Inter-laboratory Study* and the *Guideline for the Maintenance of CORESTA Documents*. The latter is particularly important as it is necessary to ensure that all Guides and CRMs made publicly available are still valid, or otherwise identified as obsolete. Consequently, each SGTF has been requested to review its previous publications. For more information, SGTF Coordinators are advised to contact their Scientific Commission Liaison member.

Communication and alignment are the key. The Standards Task Force is working closely with the CORESTA Website Task Force so that all templates and guidelines are easily accessible via the Member Content webpage (https://www.coresta.org/guidelines-forms).

Two remaining tasks are in the pipeline: *Guide for Writing a Collaborative Study Report* and *Guide for Writing a Proficiency Testing Report*. Once this final work is completed, the Task Force will be disbanded, but this does not mean that continuous improvements will cease.

The process of cooperation formalising New Work Item Proposals and project number assignments has highlighted the need for the improvement of project management governance. The Project Management Office (PMO) Committee, chaired by Pierre-Marie Guitton (CORESTA Secretary General), recently held its kick-off meeting. The objective is to review existing procedures and tools for project management and to propose and implement improvements to ensure that projects are run efficiently and delivered successfully without over-processing.

So, more to come for the benefit of the association and all its members!

CORESTA SUB-GROUPS, TASK FORCES & COMMITTEES

CORESTA Administration

UPDATE

Confirmed Objectives: Committee Project Management Office (PMO)

Final Objectives:

1. To review existing processes and tools for project management.
2. To propose and implement improvements to ensure that projects are run efficiently and delivered successfully.

The objectives were streamlined to better represent the work of the Committee.

TOBACCO WORKERS' CONFERENCE (TWC)
TOBACCO SCIENCE RESEARCH CONFERENCE (TSRC)

Presentations made at the above two conferences have been uploaded in PDF format to the CORESTA website going back to 2011.

The presentations may be accessed by going to **www.coresta.org**:

- Scroll across to the "Abstracts" tab at the top of the CORESTA web page.
- On the left side of the page, filter for the relevant conference in the "Source" section, and the relevant year in the “Year” section.
- To see the presentation slides, click on "Presentation" to the right side of the abstract in the "Documents" box (as for all other abstracts).

Abstracts and presentations going back further years are planned for upload in the future.

UPCOMING CORESTA MEETINGS (2018)

Meeting	Date	Location
SG Product Use Behaviour (PUB)	10 April	Geneva, Switzerland
SG Biomarkers (BMK)	10 April	Geneva, Switzerland
SG Smoke Analytes (SMA)	16 April	Guildford, UK
SG E-Vapour (EVAP)	16 April	Guildford, UK
SG Routine Analytical Chemistry (RAC)	17 April	Guildford, UK
SG Tobacco and Tobacco Products Analytes (TTPA)	18 April	Guildford, UK
SG Cigar Smoking Methods (CSM)	20 April	Cava de' Tirreni, Italy
Infestation Control Conference (PSMST)	7-8 May	Winston-Salem, NC, USA
SG Pest and Sanitation Management in Stored Tobacco (PSMST)	9-10 May	Winston-Salem, NC, USA
SG Physical Test Methods (PTM)	24 May	Vienna, Austria
Agrochemical Advisory Committee (ACAC)	4 June	Victoria Falls, Zimbabwe
Task Force Website (WEB)	*June**	Victoria Falls, Zimbabwe
Task Force Project Management Office (PMO)	*June**	Victoria Falls, Zimbabwe
Reading Committee	5 June	Victoria Falls, Zimbabwe
Scientific Commission	6-7 June	Victoria Falls, Zimbabwe
Board	26-28 June	Santiago, Dominican Republic
SG Agrochemical Analysis (AA)	27-28 June	Gothenburg, Sweden
CORESTA CONGRESS	**22-26 October**	**Kunming, China**

** Date to be advised*

Acronyms / Abbreviations used in the Newsletter

AA . . . . . Agrochemical Analysis
ACAC . . . . . CORESTA Agrochemical Advisory Committee
AP . . . . . Agronomy & Leaf Integrity and Phytopathology & Genetics (Agro-Phyto)
AP2017 . . . . . 2017 Agronomy & Leaf Integrity and Phytopathology & Genetics Joint Study Groups Meeting
BMK . . . . . Biomarkers
CEN . . . . . Comité Européen de Normalisation
CM . . . . . CORESTA Monitor
CORESTA . . . . Cooperation Centre for Scientific Research Relative to Tobacco
CPA . . . . . Crop Protection Agent
CRM . . . . . CORESTA Recommended Method
CNTC . . . . . China National Tobacco Corporation
CS . . . . . Collaborative Study
CSM . . . . . Cigar Smoking Methods
CTG . . . . . CORESTA Technical Guide
CTR . . . . . CORESTA Technical Report
CVAR . . . . . Cigarette Variability
DAC . . . . . Dark Air-Cured
DE . . . . . Delaware (USA)
EPRW . . . . . European Pesticide Residue Workshop
EU . . . . . European Union
EVAP . . . . . E-Vapour
FDA . . . . . Food and Drug Administration (USA)
GAP . . . . . Good Agricultural Practice
GC . . . . . Gas Chromatography
GC-MS . . . . . Gas Chromatography - Mass Spectrometry
GMO . . . . . Genetically Modified Organism
GRL . . . . . Guidance Residue Level
HPLC . . . . . High Performance Liquid Chromatography
IC . . . . . Ion Chromatography
IPCPR . . . . . International Premium Cigar & Pipe Retailers
ISO . . . . . International Organization for Standardization
NFDPM . . . . . Nicotine-Free, Dry Particulate Matter
OCIA . . . . . Organic Crop Improvement Association
PMO . . . . . Project Management Office
PPE . . . . . Personal Protection Equipment
PSMST . . . . . Pest and Sanitation Management in Stored Tobacco
PTM . . . . . Physical Test Methods
PUB . . . . . Product Use Behaviour
RAC . . . . . Routine Analytical Chemistry
SC . . . . . Scientific Commission
SC . . . . . Sub-Committee (ISO)
SG . . . . . Sub-Group
SGTF . . . . . Sub-Group and Task Force
SMA . . . . . Smoke Analytes
SRNT . . . . . Society for Research on Nicotine and Tobacco
SSPT . . . . . Smoke Science and Product Technology (Smoke-Techno)
SSPT2017 . . . 2017 Smoke Science and Product Technology Joint Study Groups Meeting
TAG . . . . . Tobacco Alkaloid Genetics
TBO . . . . . Tobacco Biotechnology and Omics
TC . . . . . Technical Committee (ISO) (CEN)
TF . . . . . Task Force
TSRC . . . . . Tobacco Science Research Conference
TTPA . . . . . Tobacco and Tobacco Products Analysis
TWC . . . . . Tobacco Workers' Conference
UK . . . . . United Kingdom
UHPLC-MS/MS . . . Ultra-High Performance Liquid Chromatography - Tandem Mass Spectrometry
USA . . . . . United States of America
WEB . . . . . Website
WG . . . . . Working Group (ISO)

Cigar Tobacco Workshop - Nicaragua

In January 2018, a two-day Cigar Workshop was organised by the ACAC Chairman, Marco Prat, to familiarise Agrochemical Advisory Committee (ACAC), Scientific Commission (SC) and Board members with the technicalities of dark air-cured tobacco production and cigar manufacture. The Workshop coincided with the December 2017 publication of the CORESTA Guide No. 21 and the work begun by ACAC to set agrochemical guidance residue levels for cigar tobacco (C-GRLs).

A 13 member CORESTA delegation, accompanied by three external cigar tobacco professionals, travelled to Nicaragua to visit cigar production facilities operated by Plasencia Cigars in Estelí, Jalapa and Ocotal. Managua may be Nicaragua's official capital city, but Estelí is Nicaragua's cigar capital with no less than 62 cigar companies operating in the city. Ocotal, north of Estelí, has more tobacco factories and warehouses, and the Jalapa Valley, in northern Nicaragua close to the border with Honduras, is a prime tobacco growing region.

"We don't smoke cigars, we enjoy cigars!" Nestor Andrés quoting his father, Nestor Plasencia Sr. This is an understatement; the Plasencia family are in fact passionate about tobacco and cigars! This is obvious the moment you meet Nestor Plasencia Sr. and his sons Nestor Andrés, José Luis and Gustavo. With a cigar in one hand, a firm handshake with the other, conversation immediately revolves around the golden leaf.

Tobacco has been a family business for the Plasencias for over five generations. With origins in the Canary Islands, the first generation moved to Cuba in the mid-1800s in search of a better future and started growing tobacco. One hundred years later they had to leave Cuba to Mexico and ended up in Nicaragua. They were then pressed by the circumstances to leave the country in 1978, began anew in Honduras, and subsequently rebuilt their operation in Nicaragua.

Overcoming all setbacks, the Plasencia family has become one of the largest cigar tobacco producers in the world. They have 6,000 employees, 4 factories, and 8 plantations in Nicaragua and Honduras and produce 40 million cigars a year (about 140 brands for more than 60 customers). In 2017, Plasencia Cigars launched its own in-house brand; their Plasencia Alma Fuerte Nestor IV cigar was ranked No. 1 of the 2017 list by the magazine "Cigar Snob" and their Generacion V was No. 9 in the "Cigar Aficionado" list.

Plasencia Cigars are therefore well placed to explain cigar tobacco production. The company grows all its wrapper tobacco and the majority of its filler tobacco production. The main tobacco varieties grown are Connecticut and Havana. Connecticut is used to produce wrapper leaf – it is grown under shade and not topped; Havana is topped and can be shade grown to produce wrapper or sun grown to produce filler.

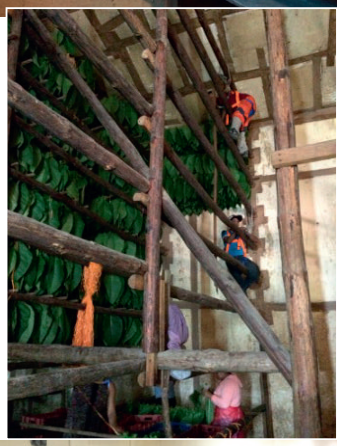
The small tobacco plants are carefully nurtured in greenhouses – seedlings are scrupulously selected to ensure they are healthy, vigorous and resistant. Seeds are roughly sown in trays to germinate, transplanted into new trays, clipped two or three times and then transplanted to the field.

Impressive expanses of tobacco in the field are covered with shade cloth to produce the light, stretchy, shiny, blemish free wrapper leaves. Shade growing is labour intensive and costly - shade cloth is moved to a new field every year and replaced every seven years or so, ridging is done with horse and plough to minimize leaf damage. The sun-grown crop is taller and darker and produces the flavour for filler tobacco. Harvesters pick on average two leaves per plant every week during the harvesting period and pack these in cases in a special pattern to ensure that stems do not damage the lamina. The tobacco growing season in Nicaragua runs from October through to June.

Air-curing is done in large wooden barns where temperature, humidity and ventilation are carefully controlled – vast expanses of leaves, sewn together and attached to beams, hang several stories high and are checked hourly to ensure optimum coloration of lamina and stem. Some tobacco is harvested before maturity and cured so as to retain its green colour – this will produce candela wrapper for "green cigars", a particular favourite of the Emperor of Japan.

The strong, throat stinging aroma of cured tobacco is a sure sign that one has entered the sorting, fermentation and storage area. Workshop participants witnessed the expertise of staff who, with the flick and twist of a wrist, remove leaf stems and place the leaves in piles according to colour, and those who deftly gather the sorted leaves to tie them into hands. The formation of piles - "pilónes" - starts the fermentation process that further ripens the leaf. The tobacco is then packed into bales and stored for aging – this can last from a few months to several years. The Plasencia range of cigars uses tobacco aged for over ten years.

Plasencia grows organic tobacco for its organic cigar range: Plasencia Reserva Organica. Pests and diseases are fought naturally with wasps, garlic, sunflower repellents, trichoderma and other biological agents. Fertiliser is produced by an army of earthworms who process compost to create high quality humus - a well fed plant is a resistant plant. The organic tobacco is certified by OCIA International from Lincoln, Nebraska, USA.



Management is meticulous. Attention to detail is vital to all aspects of the operation – from the layout of the fields and CPA handling to organisation of the factories and staff management. The Plasencia's do the rounds of all their tobacco operations in Nicaragua and Honduras every single week of the year.

Workshop participants were able to visit CPA storage facilities. Rows of neatly ordered bottles on separate, clearly labelled, clean shelves in a well ventilated room with sand on the floor to absorb any possible spillage, and a chart showing the year's crop protection plan, provided a textbook example of how to manage CPA stocks. Workers are provided with appropriate PPE when applying CPAs to the crop - a task they perform in almost military formation to maximise efficiency and minimise risk. Crop protection is an integral part of cigar tobacco production as market requirements demand blemish free wrapper leaves.

In terms of man-days, cigar tobacco production takes about 700-800 people/ha (compared to 140-240 people/ha for cigarette tobacco). Leaves are handled 8 to 9 times before packing and each step of production needs to be carefully monitored - the slightest error can have devastating consequences. The cost of production is therefore very high and return on investment takes years.

Social responsibility is taken very seriously as the quality of the product is dependent on the expertise and wellbeing of the labour force. Much is done to provide staff with assistance, such as schooling for children, in order to keep worker turnover to a minimum.

The actual production of the final product, the cigar itself, is done by specially trained staff working in pairs in large open rooms. The man puts together the tobacco filler, held together with a binder, and places the rough cigar in a mould that is pressed for about 40 minutes. The cigar is then tested for pressure drop before being handed over to the woman who wraps the cigar in the wrapper leaf. This fascinating process is very often the start of many relationships!

Cigars are finally sorted according to uniformity of colour and are ready for marketing, unless they are stored for further aging. Attractive packaging is the "icing on the cake" in terms of a good cigar. Designers are never short of ideas and Plasencia's Alma Fuerte range of cigars is packed in a box with a built-in ashtray.

Plasencia Cigars exports the bulk of its tobacco crop to the USA, a fraction to Europe and about 10 % is for local consumption. Its cigar brands are mainly exported to the USA but growth in the European market is steadily increasing. The company is present at many cigar fairs and exhibitions including the annual International Premium Cigar & Pipe Retailers (IPCPR) International Convention (being held in Las Vegas in 2018). A group of Nicaraguan cigar manufacturers, including Plasencia, also organises an annual Cigar Festival, the "Puro Sabor" to showcase the local cigar industry and promote the image of Nicaraguan grown tobacco and Nicaraguan made cigars.

Discussing challenges facing the cigar industry, Nestor Plasencia Jr. spoke candidly on the impact of regulation. With a major portion of Nicaragua's cigar tobacco production being sold to the USA, the FDA's new rule to regulate "the manufacture, import, packaging, labelling, advertising, promotion, sale, and distribution of cigars" is causing uncertainty and concerns. Cigar products are almost impossible to standardize due to the many variables affecting each stage of the production chain. But with courage and determination, Plasencia Cigars and their fellow cigar manufacturers plan to do all they can to comply with requirements and keep their customers supplied with the quality products they expect.

Nestor Plasencia Jr. readily admitted to Workshop participants that producing cigar tobacco is a lifelong learning experience Progress is made through trial and error. When it comes to growing the crop, Plasencia is involved in a joint project with tobacco companies to undertake research programmes to elaborate better ways to ensure maximum yield and quality whilst reducing CPA usage.

The hospitality and welcome extended by the Plasencia family was gratefully acknowledged by the Workshop participants. The hard work and know-how involved in producing a cigar tobacco crop was clearly evident and no-one was left in doubt as to the passion and dedication abundantly present in the Plasencia family.

For more details on cigar crop production and protection practices, please consult the CORESTA Guide No. 21 "Best Practices and Crop Protection in Cigar Dark Air-Cured Tobacco" available from the CORESTA website at www.coresta.org.

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