



NEWSLETTER

Issue 39 – July 2014

FOREWORD

Québec City beckons and visions of the Chateau Frontenac hover on the horizon as CORESTA actively prepares for the 2014 CORESTA Congress to be held in October. Preparations are well underway for what promises to be a dynamic, interesting and enjoyable event, held for the first time in Canada. The response to the Call for Papers has exceeded expectations with a record number of abstract submissions this year and a programme packed to the brim. The Congress theme "Building on experience to shape the future" will be the main focus of several talks, particularly as CORESTA aims to demonstrate that sound research forms the basis for progress. This will also be the focus of the three Workshops being organised during the Smoke Science & Product Technology sessions.

The CORESTA biennial General Assembly and Board and Scientific Commission elections are held during Congresses and administrative details are outlined in this Newsletter for your information.

The Sub-Groups and Task Forces have released several documents recently, which you find listed within the next few pages. Many of the groups have scheduled meetings prior and during the CORESTA Congress, and all will be presenting reports during the event based on the Congress theme. A new Task Force on Cigarette Manufacturing Variability has been launched and will present its first report at the Congress.

Of interest is the publication by the Institute of Soil Science and Plant Cultivation in Poland of a book entitled "Diseases and Pests of Tobacco". An outline is included in this Newsletter.



CORESTA CONGRESS Québec City, 12-16 October 2014

Québec City, a UNESCO World Heritage Site, is the venue of the 2014 Congress where CORESTA enthusiastically looks forward to welcoming international scientists from 12-16 October 2014, united under the theme **"Building on experience to shape the future."**

The Congress is being held at the Château Frontenac, Québec City's iconic landmark in the heart of the Old City. Fully renovated, the hotel offers modern conference amenities, room to accommodate all delegates, and is within walking distance of all major sites. On the banks of the St. Lawrence River, Québec City has all the advantages of a major city and the charm of a small European village. October will see it cloaked in its spectacular autumn colours.

Detailed information concerning the Congress, including working programmes, online registration and practical information can be found on the official Congress website at www.coresta2014.org.

A très bientôt !



La Citadelle and Château Frontenac
Photo courtesy: Luc-Antoine Couturier - www.quebecregion.com

WORKING PROGRAMME

2014 saw a record total of 251 abstracts submitted, the majority of which arrived just before the 23 May deadline. The CORESTA Study Group Presidents and Secretaries, who form the Reading Committee, were faced with the challenge of selecting the abstracts to be presented at the 2014 CORESTA Congress and scheduling them within the limited time slots available. The Smoke Science and Product Technology Study Groups had to resort to arranging concurrent sessions during three days.

On 24 June, authors were informed by email of the results of the Reading Committee selection process and the full list of papers and draft Congress programme were published on the CORESTA website at www.coresta.org and on the official Congress website at www.coresta2014.org.

A total of 211 abstracts were selected for presentation:

- Agronomy & Leaf Integrity /
Phytopathology & Genetics Study Groups:
53 papers, 1 inter-group paper, 30 posters
(Total: **84**)
- Smoke Science / Product Technology Study Groups:
95 papers, 2 inter-group papers, 30 posters
(Total: **127**)

In line with the Congress theme "Building on experience to shape the future" CORESTA Sub-Group and Task Force Coordinators will present reports on the activities of their groups, with a focus on how the work and achievements of their groups have contributed to today's existing knowledge and plans for the future.



CORESTA Reading Committee

Monday 13 October	
<i>AP</i>	<i>SSPT</i>
PLENARY	
TSNA	SMOKE CHEMISTRY - 1
<i>AP</i>	<i>SSPT</i>
NEMATODES	LIP TESTING
FUNGAL DISEASES	CHALLENGES IN TESTING PRODUCTS

Tuesday 14 October		
<i>AP</i>	<i>SSPT</i>	
VIRUS DISEASES	TOXICITY - 1	SELECTIVE FILTRATION
BREEDING	Workshop CIG. DESIGN	BIOMARKERS
<i>AP</i>	<i>SSPT</i>	
BREEDING	CIGARETTE DESIGN - 1	E-CIGARETTES - 1
FERTILISATION / CURING	SOURCES OF VARIABILITY	ANALYSIS

Wednesday 15 October	
<i>Official Delegates</i>	<i>All</i>
General Assembly	Posters
Elections	
<i>AP</i>	<i>SSPT</i>
ENTOMOLOGY	Workshop COLLABORATIVES
WEEDS / BACTERIAL DISEASES	SMOKELESS
	EXPOSURE ASSESSMENT
	TOBACCO/CPAs

Thursday 16 October		
<i>AP</i>	<i>SSPT</i>	
PRODUCTION ASPECTS	SMOKE CHEMISTRY - 2	MIXED - 1
SEEDS & SEEDLINGS	E-CIGARETTES - 2	MIXED - 2
<i>AP</i>	<i>SSPT</i>	
MISCELLANEOUS	Workshop TOXICITY	CIGARETTE DESIGN - 2
PLENARY		



WORKSHOPS

The Smoke Science and Product Technology Study Groups are this year initiating their first Workshops to highlight timely topics and serve as a helpful introduction to lively discussions with both questions and constructive insight from the floor within a cordial environment.

CIGARETTE DESIGN – Tuesday 14 October – 10:50

Product developers in the tobacco industry face an increasing number of challenges in delivering consumer acceptable products within the regulatory framework with respect to the practically achievable scope and limitations of the design tools.

Three presentations will reflect three basic issues:

- The main parameters within cigarette design which can reduce various particulate and gaseous components and their relative effectiveness for each, taking into account existing and potential future

regulatory requirements including the applied smoking regimes.

- How commercial products have been designed to take account of mandated regulations such as tar, nicotine and carbon monoxide ceilings under LIP requirements.
- How various filter materials have been used to selectively reduce levels of certain smoke constituents and some real world issues will also be pointed out.

Some information on the tar potential of different tobacco types will also be shown by the panel.

COLLABORATIVE STUDIES – Wednesday 15 October – 14:00

Tobacco product manufacturers and regulatory agencies require reliable analytical data to assess product performance and compliance. Collaborative studies are an essential component in the development and evaluation of robust analytical methods, either during the standardisation of a method (to assess within and between laboratory variation) or to assess its performance in comparison with others (via a proficiency test), and enable participants to exchange information, learn and improve their performance, and to support their laboratory accreditation.

Collaborative studies are therefore undertaken by many CORESTA Task Forces and Sub-Groups.

Presentations in this workshop will outline (1) factors to be considered in the design of collaborative studies and some aspects of the statistical analyses of data; (2) how continued participation in collaborative work, either using ISO standardized methods for cigarette tar, nicotine and carbon monoxide yields, or in-house methods for agrochemical residues on tobacco, has improved laboratory performance over time.

TOXICITY – Thursday 16 October – 10:50

In vitro toxicity assays have been utilized since the 1970s to assess the biological activity of individual chemicals and complex mixtures including cigarette smoke condensate (extracts of particulate matter) and “whole smoke”.

This workshop includes four presentations that highlight historical use and technical considerations, efforts and accomplishments of the CORESTA Toxicity Testing *In vitro* Task Force, considerations and limitations regarding data interpretation, and possible future directions.

Specifically:

- CORESTA *In Vitro* Toxicity Testing Task Force accomplishments and challenges
- Influence of cigarette design features and smoke chemistry on *in vitro* biological responses
- Statistical analysis of long-term assay variability
- Forward looking approaches for *in vitro* genotoxicity testing based on the US National Research Council’s “Toxicity testing in the 21st Century - a vision and a strategy”

CONGRESS ELECTIONS

Elections are held every two years during the CORESTA Congress to renew the CORESTA Board and Scientific Commission. CORESTA member organisations have a right to vote to elect new officials for both these executive bodies. Following structural changes to the CORESTA Statutes in 2012, each CORESTA member organisation now holds a pre-defined number of votes depending on its membership category.

The Official Delegates of CORESTA member organisations will have received by email the Activity Report and Financial Report for the 57th and 58th Financial Years, an agenda for the General Assembly and a form for registering delegates to the General Assembly. Official Delegates who have not received these documents should contact the CORESTA Secretariat.

Renewal of the Board

The Board is responsible for managing CORESTA and defining CORESTA policy.

The Board consists of 10 elected member organisations and two to four co-opted member organisations. The elected members hold a four-year term of office, which is renewable, and co-opted members are in office for two years. In 2014, the tenure of nine companies expires (five elected and four co-opted). The vote will seek to elect five organisations. After the election, the newly elected Board will meet to co-opt two to four extra organisations to form a complete executive committee and will elect its President and Vice President.

The election to renew the Board will be held during the General Assembly on the morning of Wednesday, 15 October. A simple majority quorum is required. **Member organisations wishing to run for election to the Board should contact the CORESTA Secretary General.**

<p>Members elected in 2010 whose terms will expire in October 2014</p> <p>KT&G Corporation (South Korea) Papierfabrik Wattens GmbH & Co KG (Austria) R.J. Reynolds Tobacco Company (USA) SWM International Inc. (USA) Universal Leaf Tobacco Company (USA)</p>	<p>Members elected in 2012 (until 2016)</p> <p>British American Tobacco (UK) China National Tobacco Corporation (China) Imperial Tobacco Ltd. (UK) Japan Tobacco Inc. (Japan) University of Kentucky (USA)</p>
<p>Co-opted members whose terms will expire in October 2014</p> <p>Alliance One International (USA) Borgwaldt KC GmbH (Germany) SODIM S.A.S. (France) Swedish Match North Europe Division (Sweden)</p>	

Renewal of the Scientific Commission

The Scientific Commission is responsible for leading and organising scientific and technical activities within CORESTA and acts as scientific counsel to the Board.

The Scientific Commission consists of a five person Executive Committee for each of the four Study Groups, i.e. 20 persons. They are elected *intuitu personae* which means they cannot be replaced by another person in case of absence, resignation, etc. They can serve up to three consecutive terms of office. Elections are held to elect the President, Secretary and two members, with a third member being co-opted. After the election, the incoming Scientific Commission members elect their new President and Vice President.

Each member organisation has the right to vote at each Study Group election. Proxies are accepted - however, a single person can represent no more than three members at each election.

The elections for the renewal of the Scientific Commission will be held on the morning of Wednesday, 15 October, after the General Assembly and Board elections. **Participants interested in running for election to the Scientific Commission, or nominating candidates, are asked to contact the CORESTA Secretary General and provide a brief résumé.** Candidates must be able, willing and committed to fulfilling their obligations and must participate fully in the activities of the Study Group Executive Committee.

CORESTA INTERNAL STRUCTURES

CORESTA is an association ruled by French law. The governing bodies and main rules are described in three documents:

A. The Statutes

This document, amended several times since the inception of CORESTA in 1956, and most recently in September 2012, describes the general purpose of the association and the role of its governing bodies.

The governing bodies are:

- The General Assembly, which elects the Board and has many powers, including that of dissolving the association.
- The Board, which in practice runs the association and reports to the General Assembly.

Only fundamental elements are included in the Statutes.

B. The Internal Rules

The Internal Rules detail the procedures and dispositions needed to implement the Statutes.

The latest version was approved in 2012; the amendments were those needed to be consistent with the new Statutes.

The Internal Rules give full details on the rights and duties of the members, on the procedures to elect the Board, on the duties and empowerments of the Secretary General, and only summary indications on the existence and work of the Study Groups and Scientific Commission, which are detailed in the third essential document, as developed hereunder.

C. The Rules Governing the Functions of the Scientific Commission and Study Groups

The existence and need for this document is mentioned in the Internal Rules. This document has to be approved by the General Assembly. The latest version, also approved in 2012, describes in detail the role, composition and functioning of the Study Groups and Scientific Commission and the rules for the elections within the Study Groups. Additional documents on the functioning of the Sub-Groups and Task Forces have been produced by the Scientific Commission.

No amendments to the Statutes or Rules will be proposed at the General Assembly at the Congress in Québec.

CORESTA Scientific Commission and Board Meetings

The **SCIENTIFIC COMMISSION** met in Hamburg during the first week of June. The meeting was hosted by Borgwaldt KC.

- ISO: CRM* 75 (TSNA in mainstream smoke) has been accepted as a working draft by ISO/TC 126. The TC is working on extending its scope to encompass new products of similar use.
- ACAC: The residue database has been fed with data up to 2011. Recent data will be uploaded later. CPAs and integrity issues are being discussed with authorities in several countries.
- Agro: the two-year TSNA curing barn study, partly funded by CORESTA, is almost complete and will be presented at the Congress. The three-year RFT TF is entering its second year with increased data to be collected and analysed.
- Phyto: The BM SG will be disbanded and some of its activity transferred to the APIC TF. Some US data has been entered and a seedlings section opened in the XDES project.
- Techno: Guide No. 5 has been revised but is on-hold pending new European regulations. The LIP Monitor has been released. Recommendations for e-cig. analytical methods will be presented at the Congress. A TF on Cigarette Manufacturing Variability (CVAR) was proposed.
- Smoke: A potential Toxicity SG was discussed, awaiting inputs from the related workshop to be held during the Congress.

The Rules for the Functioning of SGTFs and the Guidelines for Coordinators were reviewed to improve efficacy,

communication and CORESTA continuum. They will be presented at a specific meeting in Québec.

The programme of the Congress was defined, with emphasis on three workshops on the SSPT side.

CECCM presented an update on the European TPD with potential issues and how CORESTA can play its role, promoting the fact that government labs are welcome to participate in Collaborative Studies.

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The **BOARD** met mid-June in Stockholm, invited by Swedish Match North Europe.

- Emphasis has been brought again on visibility, not only in tobacco related events but also through publications in peer review journals to show that CORESTA produces robust science. SGTFs are encouraged to consider publishing relevant interim reports on their work.
- The Newsletter will be posted on the website and CORESTA Reports, Methods and Guides publication will be publicised.
- Further to CRM 75 being welcomed by ISO, other methods were discussed as candidates.
- The CVAR TF proposed by the Scientific Commission was approved and the concept of a CORESTA Science Communication Committee was reactivated to highlight what is at stake here for tobacco science.
- To date, no organisation has formally offered to host either 2015 Joint Study Groups Meetings, or the Congress in 2016 (CORESTA's 60th anniversary).

* See end of Newsletter for full list of acronyms.

CORESTA RECOMMENDED METHODS

New

- ◆ **CRM No. 76** – Determination of Moisture Content (Oven Volatiles) of Smokeless Tobacco Products (*April 2014*)

The accurate determination of moisture content in smokeless tobacco products is critical since moisture content impacts product stability and product integrity and in order to convert analytical measurements determined on an as-is basis to a dry-weight basis. This CRM is based on the results presented in the Technical Report "Analysis of Moisture Content (Oven Volatiles) of Smokeless Tobacco Products from 2010 Collaborative and Proficiency Studies" and on a modified version of the AOAC International official method 966.02.

- ◆ **CRM No. 78** – Determination of Selected Phenolic Compounds in Mainstream Cigarette Smoke by HPLC-FLD (*July 2014*)

This CRM is applicable to the determination of selected phenolic compounds (hydroquinone, resorcinol, catechol, phenol, p-cresol, m-cresol, and o-cresol) in the Total Particulate Matter (TPM) of mainstream cigarette smoke by RP HPLC-FLD. The described method is specified using ISO 3308 and Health Canada T-115 smoking parameters.

Updated

- ◆ **CRM No. 58** – Determination of Benzo[a]pyrene in Cigarette Mainstream Smoke by Gas Chromatography-Mass Spectrometry (*Third edition - July 2014*)
- ◆ **CRM No. 70** – Determination of Selected Volatile Organic Compounds in the Mainstream Smoke of Cigarettes - Gas Chromatography-Mass Spectrometry Method (*Third edition - July 2014*)
- ◆ **CRM No. 74** – Determination of Selected Carbonyls in Mainstream Cigarette Smoke by High Performance Liquid Chromatography (HPLC) (*Third edition - July 2014*)
- ◆ **CRM No. 75** – Determination of Tobacco Specific Nitrosamines in Mainstream Cigarette Smoke by LC-MS/MS (*Second edition - July 2014*)

A disclaimer has been added under the section "Field of Application" stating that the use of the machine smoking parameters reflects their inclusion in the reporting requirements of various national regulations rather than an endorsement of their appropriateness by CORESTA. This also applies to the new CRM No. 78 above.

Obsolete

- ◆ **CRM No. 02** – Determination of Organochlorine Pesticide Residues on Tobacco (*May 1997*)
- ◆ **CRM No. 04** – Determination of Maleic Hydrazide Residues in Tobacco (*September 1976*)
- ◆ **CRM No. 30** – Determination of Residues of the Suckercide Flumetralin (Prime Plus, CGA-41065) on Tobacco (*June 1991*)
- ◆ **CRM No. 31** – Determination of Residues of the Suckercide Pendimethalin (Accotab, Stomp) on Tobacco (*June 1991*)
- ◆ **CRM No. 32** – Determination of Residues of the Suckercide Off-Shoot-T (N-alkanol mixture) on Tobacco (*June 1991*)

These methods were developed and validated at a time when few multi-residue methods were available. Nowadays, more efficient and powerful multi-residue methods are being applied. CORESTA considers that although the work that led to these methods remains a scientific reference, the methods are no longer state of the analytical art and therefore cannot be considered as "recommended" anymore.

All CORESTA Recommended Methods, including the methods considered obsolete, can be downloaded in PDF format at www.coresta.org

CORESTA GUIDES

New - CORESTA Guide No. 15

CORESTA Reference Products – Production and Evaluation Requirements 2009 (*July 2014*)

In 2009, four different CORESTA Reference Products (CRPs) were produced by the Smokeless Tobacco Sub-Group in an effort to have products that cover a wide range of smokeless tobacco product categories. This document describes the CRPs produced in 2009 and can be used as a guideline for the future remanufacture of the CRPs.

CORESTA REPORTS

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

- **CORESTA Reference Products – 2011 Analysis**
Technical Report – February 2014 (Sub-Group Smokeless Tobacco)
The 2011 study is the first study to support a general assessment of stability for the CORESTA Reference Products (CRPs). Additional study objectives were: to provide more robust data using the new or updated CRMs; to support laboratory operations; and to provide data for an interlaboratory comparison of results. The 2011 study is intended to serve as the baseline for the determination of stability and will be repeated on an annual basis.
- **Analysis of Moisture Content (Oven Volatiles) of Smokeless Tobacco Products. 2010 Collaborative and Proficiency Studies**
Technical Report – March 2014 (Sub-Group Smokeless Tobacco)
The goal of this collaborative study was to calculate repeatability and reproducibility and draft a CORESTA Recommended Method (CRM) for the determination of moisture (oven volatiles) in smokeless tobacco products. The study results demonstrated that the method is fit for purpose and the results are suitable for inclusion into a CRM (published as CRM No. 76).
- **E-Cigarettes: Assessment of Analytical Literature from 55 Studies Published Worldwide in 2013 on Commercial E-Cigarettes**
Reference Report – May 2014 (Task Force E-Cigarettes)
This report is a point-in-time assessment of published literature related to analysis of e-cigarettes. The focus of the inventory considered literature results and methods for the analysis of e-liquids, mainstream aerosol and environmental emissions.

A link to the following document has also been included on the CORESTA website under the Reports section:

- **Analysis of Reference Cigarette Smoke Yield Data from 21 Laboratories for 28 Selected Analytes as a Guide to Selection of New CORESTA Recommended Methods**
(Sub-Group Special Analytes)
Published in *Beiträge zur Tabakforschung International / Contributions to Tobacco Research* Volume 26 - No. 2 - July 2014

The following report has been permanently removed from the CORESTA website due to data verification issues:

- **2010 Interlaboratory Proficiency Test (Cigarette and Filter Individual Weight, Diameter, Pressure Drop and Ventilation)**
Technical Report – July 2011 (Sub-Group Physical Test Methods)

CORESTA SUB-GROUPS & TASK FORCES

PRODUCT TECHNOLOGY Study Group

New Task Force: Cigarette Manufacturing Variability (CVAR)

Draft Objectives:

1. To develop an appropriate experimental plan for a collaborative study to explore cigarette manufacturing variability.
2. To conduct a collaborative study of cigarette manufacturing repeatability and reproducibility to enhance the understanding of overall tobacco and smoke analyte variability relevant to commercial cigarette design features (testing results will be anonymous and confidential cigarette design information will not be disclosed).
3. To create a CORESTA technical report appropriate for engaging with scientists and regulators.

For more information please contact Jason Flora – Altria Client Services, USA (jason.w.flora@altria.com)

WEBPAGES

In order to better publicise the work of the Sub-Groups and Task Forces (SGTF), CORESTA is in the process of publishing a dedicated webpage for each SGTF detailing achievements, on-going work and expectations. These pages can be accessed via the Study Groups links on the CORESTA website at www.coresta.org.

CORESTA Standard Task Force Meeting (Germany)

After several previous virtual meetings, the CORESTA Standard Task Force (STDS) had its first formal meeting in Hamburg on 3 June, hosted by Imperial Tobacco.

Twelve highly experienced and acknowledged CORESTA delegates representing various scientific areas were asked to review the CORESTA process of cooperation starting from the request for new works to the publication on the website. Roles, responsibilities of the Secretariat, Sub-Group and Task Force (SGTF) coordinators and members, the Scientific Commission and the Board were discussed and the documents generated along their workflows were identified.

Five types of documents were defined:

1. **Methods** which relate to either methodology (e.g. CORESTA Recommended Methods (CRMs)) or specifications (e.g. instrument performance).
2. **Reports** which relate to technical reports (e.g. on technology); literature/reference; study reports (e.g. collaborative studies); certificates and SGTF documents (e.g. minutes, annual reports).
3. **Guidelines** which relate to technology, good practices and technical processes.
4. Miscellaneous reports which relate to general information (e.g. glossary) and external communication.
5. All other documents related to CORESTA administration (e.g. statutes, forms).

Recommendations, guides and templates applicable to all working groups will be progressively released in order to reach the objective of continuous improvement and maximisation of the benefit of these CORESTA cooperations. The next Task Force meeting will be held in Québec, Canada on 11 October 2014.



Stéphane Colard
STDS TF Coordinator

Special Analytes Sub-Group Meeting (Germany)

The CORESTA Special Analytes Sub-Group (SPA) held its last meeting in Nuremberg, Germany, on 3 April 2014 at the kind invitation of British American Tobacco, Germany, attended by 41 members. A new paper has been published in *Beiträge zur Tabakforschung International (Volume 26/2) July 2014* entitled "Analysis of Reference Cigarette Smoke Yield Data from 21 Laboratories for 28 Selected Analytes as a Guide to Selection of New CORESTA Recommended Methods." The study demonstrated the wide yield ranges obtained by different methodologies and also some of the potential parameters that can cause these differences. As a consequence of this study, the SPA SG decided to prioritise the development of CRMs for selected phenols. Indeed, a new CORESTA Recommended Method (CRM No. 78) on the determination of selected phenolics in mainstream cigarette smoke has been finished and has recently been added to the CORESTA website. The collaborative study leading to this CRM also involved 21 laboratories. Current collaborative work is focussed on producing a CRM for the determination of ammonia in cigarette smoke.



Michael Intorp
SPA SG Coordinator



Steve Purkis
SPA SG Secretary

Sustainability in Tobacco Production Task Force Meeting (Switzerland)

Following the last face to face meeting in Brufa di Torgiano, Italy, the Sustainability Task Force held another meeting to follow up on the progress made and to proceed with the first draft of the documents being prepared by the group.

The meeting was kindly hosted by Philip Morris International in Lausanne from 13-15 May 2014. Thirteen members of the Task Force participated in the deliberations representing the four workstreams of the Task Force, namely Governance, Agronomy, Curing and Livelihoods.

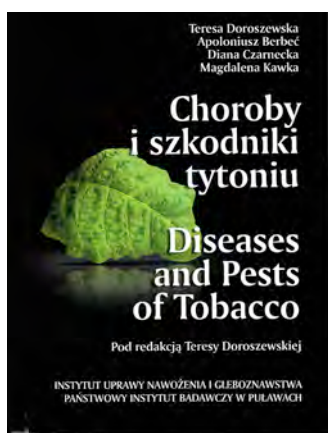
As per the agreed agenda, the first day was dedicated to individual workstream work, followed by two days of Task Force joint revision and validation of the drafts and capturing team contributions in the process.

By the end of the meeting, the first drafts of several documents were validated by the Task Force. The Task Force will now proceed with the finalisation of the drafts of those documents still in progress.



Pedro Seambelar
SUST TF Coordinator

DISEASES AND PESTS OF TOBACCO



The Institute of Soil Science and Plant Cultivation has released a new publication "Diseases and Pests of Tobacco" authored by Teresa DOROSZEWSKA*, Apoloniusz BERBEC, Diana CZARNECKA and Magdalena KAWKA. The book contains four main chapters: three of them deal with infectious diseases, pests and non-infectious diseases and the fourth is dedicated to integrated pest management. In the first and the most extensive chapter, diseases caused by diverse pathogens have been described. The section on diseases caused by pathogenic fungi contains successive description of fungal diseases which affect leaves, roots and stems. The two subsequent sections are concerned with bacterial and viral diseases. The second chapter is dedicated to pests. It contains two subsections: on insects which cause injury to leaves, floral parts and seed capsules, and those which damage stems and roots. The successive sections are devoted to arachnids and nematodes. The third chapter contains information on essential issues related to non-infectious agents. The impact of shortages and excesses of major nutrients, injuries caused by chemical agents (herbicides, fungicides and insecticides) and damage caused by climatic events have been discussed therein. The fourth chapter provides basic information on integrated pest management in tobacco.

The book contains numerous illustrations and also microscopic images which permit a better diagnosis of some agents which parasitise different host plants.

For further information, and to obtain a copy of the publication, please contact Teresa Doroszevska at dorter@iung.pulawy.pl.

*Teresa Doroszevska was Coordinator of the CORESTA Sub-Groups Potato Virus Y Collaborative Study (2003-2007) and Collaborative Study on Virus Diseases (2007-2012) and a member of the Scientific Commission from 2006-2012.



UPCOMING CORESTA MEETINGS (2014)

Meeting	Date	Location
Sub-Group Physical Test Methods (PTM)	17 September	Hamburg, Germany
Sub-Group Routine Analytical Chemistry (RAC)	10 October	Québec City, Canada
Sub-Group Smokeless Tobacco (STS)	11 October	Québec City, Canada
Sub-Group Smoking Behaviour (TSB)	11 October	Québec City, Canada
Sub-Group Biomarkers (BMK)	11 October	Québec City, Canada
Task Force Sustainability in Leaf Tobacco Production (SUST)	11 October	Québec City, Canada
Task Force Agrochemical Residue Field Trials (RFT)	11 October	Québec City, Canada
Task Force CORESTA Standard (STDS)	11 October	Québec City, Canada
Task Force E-Cigarettes (ECIG)	12 October	Québec City, Canada
Sub-Group Special Analytes (SPA)	12 October	Québec City, Canada
Task Force In Vitro Toxicity Testing of Tobacco Smoke (IVT)	12 October	Québec City, Canada
Sub-Group Proficiency Testing for Detection of Transgenic Tobacco (GMO)	12 October	Québec City, Canada
Sub-Group TSNA in Air-Cured and Fire-Cured Tobacco (TSNA)	12 October	Québec City, Canada
Agrochemical Advisory Committee (ACAC)	12 October	Québec City, Canada
CORESTA CONGRESS	12-16 October	Québec City, Canada
Task Force Curing Technology (CTECH)	13 October	Québec City, Canada
Sub-Group Virus Diseases (VIR)	14 October	Québec City, Canada
Task Force Cigarette Manufacturing Variability (CVAR)	20 November	Paris, France

Acronyms used in the Newsletter

APAgronomy & Leaf Integrity and Phytopathology & Genetics	ISO/TC ISO Technical Committee on Tobacco and Tobacco Products
APICAgro-Phyto Information Collection	LIPLower Ignition Propensity
BMBlue Mould	RFTAgrochemical Residue Field Trials
CECCMConfederation of European Community Cigarette Manufacturers	SGSub-Group
CRMCORESTA Recommended Method	SGTFsSub-Group and Task Forces
CPACrop Protection Agent	SSPTSmoke Science and Product Technology
CVARCigarette Manufacturing Variability	TFTask Force
HPLC-FLD ..High Performance Liquid Chromatography with Postcolumn Fluorescence Derivatization	TPDTobacco Products Directive
ISOInternational Organization for Standardization	TSNAtobacco specific nitrosamines
	UNESCOUnited Nations Organization for Education, Science and Culture
	XDESExtended Diagnostic Expert System

A BRIEF HISTORY OF QUÉBEC CITY

In 1534 Jacques Cartier, a French explorer, reached the Gulf of St Lawrence and claimed the Québec region for France. The land, referred to as New France, was populated by Amerindians – the name "Québec" comes from the Amerindian word "Kebec" meaning "place where the river narrows."

In 1608, another French explorer, Samuel de Champlain, sailed up the St Lawrence River and founded Québec City. The settlement's location and geography made it an important trading centre. In 1620, Champlain built Fort Saint-Louis near the present location of the Chateau Frontenac. The city was predominantly under French rule until 1759. The colony grew from an initial 28 inhabitants to over 60,000, was named official capital of New France and became the seat of political power and an administrative, commercial and religious centre. It was the seat of government answering directly to the French Crown.

Shipping and trade, mainly with France and the West Indies, dominated its economy – it exported furs, lumber and fish and imported food and consumer goods. The Catholic faith played a significant role in its development and the arrival of Francois de Laval as the vicar apostolic in 1658 cemented the place of the Church in Québec City.

In 1759, the army of British General Wolfe laid siege to Québec, and the Battle of the Plains of Abraham culminated in the defeat of the French General Montcalm and the surrender of Québec



City. The "Québécois" were permitted to retain linguistic and religious freedoms and in 1791 Canada was divided into two distinct self-ruled colonies, with Québec City being made capital of the French-speaking Lower Canada.

Through the 19th century industry flourished and the city became the third largest port in North America and attracted many immigrants. The early 20th century saw continued industrial development with the city being reputed for corset and furniture manufacturing, its tobacco industry, munitions factories during the world wars and tourism. In 1917, the longest cantilever bridge in the world was built, the Québec Bridge, which connects the north and south banks of the St Lawrence River.

Today Québec City is a modern, vibrant city, with a population of approx. 500,000 and a distinct European atmosphere. It was declared a UNESCO World Heritage site in 1985.

CORESTA Congress delegates may be interested to know that towards the end of the 1800s, the president of Canadian Pacific Railways wanted to build "the most talked about hotel in the world". The result was the Château Frontenac, designed by architect Bruce Price and opened in 1893. During World War II, two Allied Forces conferences were held in Québec City - the Chateau Frontenac's Salon Rose was the venue where Anglo-American high command drafted the D-Day Operation Overlord strategies.

