



CORESTA and TJI, looking back on common tracks

An invisible red thread that brings people together can be found in every human group, and therefore in every global industry. It may be that for the tobacco industry this magic thread is cooperation.

It has been felt as a need and carried out for almost 60 years, with the establishment of CORESTA (Cooperation Centre for Scientific Research Relative to Tobacco) in 1956, some seven years before this journal came to life. Over the years, cooperation has developed, gone through some structural changes and also been intensified. However, even if the importance of an institution such as CORESTA is widely recognised, it is not always easy for the scientists to collaborate and provide the needed resources. Their work is time consuming, it sometimes interferes

with, or is in addition to their regular company work, but it is certainly a worthy investment in time. The work carried out within the CORESTA Study Groups – Smoke Science, Product Technology, Agronomy & Leaf Integrity and Phytopathology & Genetics -plus the Agro-Chemicals Advisory Committee (ACAC) has produced CORESTA Recommended Methods (CRMs), Guides and Reports. CRMs have led the way for current ISO standards later adopted by the tobacco industry and regulators worldwide. To promote their work, hardworking scientists need external

support and Tobacco Journal International has played an important role by relaying information in a pedagogic way and giving regular feedback, closely following CORESTA's activities, and reporting on the organisation's numerous research topics and achievements. The following examples show the evolution of CORESTA's commitments and its resolve to promote research on topics that are of general interest without interfering with competitive issues. Competition focuses on the way companies will use the collected data and science, but the red thread, cooper-



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ation, has to be firmly grabbed, like a balanced relationship between each individual scientist and the tobacco community.

Phytopathology

Tobacco diseases have always been a concern and international cooperation in this field was already included in the list of CORESTA resolutions as early back as at the 1955 pre-founding CORESTA Congress. It resulted in the Blue Mould Info Service. In 2006 the monitoring of blue mould was handed over to the European Association for Tobacco Research and Experimentation (AERET), a network of growers and government research stations, which closely cooperates with CORESTA¹⁾.

Sustainability

In 1990 the general feeling was that the organisation should have more involvement with agrochemical issues and the Agro-Chemical Advisory Committee (ACAC) of CORESTA was born. Today

ACAC is an active working group strongly supporting the concepts of Good Agricultural Practice (GAP) in tobacco production. GAP is a concept encompassing a large number of topics, from soil and water conservation to pest and disease management. ACAC has provided information to the CORESTA membership on a number of issues surrounding this subject. The committee has also developed Guidance Residue Levels (GRLs) whose usage has spread worldwide when it comes to growing, selling or buying tobacco²⁾.

At the end of the 1990's there was a strong public concern and need to comply with regulations on threshold levels of Genetically Modified Organisms (GMO). A reliable, precise tool for measuring the presence of genetically modified tobacco was needed. The industry concurred that it would discourage the release of any genetically modified tobacco lines by avoiding their use in raw material and CORESTA created appropriate task forces and sub groups³⁾. TJI reported on a paper presented at Tabexpo 2003 by the chairman of ACAC about these organisms⁴⁾. Since its inception, CORESTA has been

a proponent of tobacco germplasm preservation and free exchange of seed for scientific and educational purposes. The Nicotiana Catalogue, updated in 2011, is a compilation of International Tobacco Germplasm Holdings, containing a list of 7000 accessions being maintained by twelve different organisations worldwide. It provides the names and addresses of the co-operators or curators, and the internet links to two collections.

RYO

In 1998 TJI titled one of its topics: "The difficult search for Tar and Nicotine for Fine-Cut"⁵⁾. Very little information existed on the use, consumer making habits or analysis of fine-cut tobacco before 1989. The situation was complex and as TJI put it: "To conduct the extensive research required to resolve this problem, the industry requested assistance from CORESTA." A Task Force was created to study the issues associated with the determination of smoke particulate matter and nicotine arising from the use of fine-cut tobacco. The participants (almost ▶

50 scientists from over 30 different organisations) represented manufacturers of fine-cut tobacco, cigarette manufacturers, paper manufacturers and converters, suppliers to the tobacco industry and manufacturers of testing equipment. The output was the Report of the CORESTA Task Force on Roll-Your-Own (fine-cut) tobacco published in 1999 paving the way for the ISO standards 15592-1, 15592-2 and 15592-3.

Stored Tobacco

Pest issues cause the loss of huge amounts of tobacco, and money. They are discussed in the Sub-Group on Pest & Sanitation Management in Stored Tobacco created in 1993. The Sub-Group has produced guides related to pest control techniques, freezing and fumigation for resistant beetle populations. It also evaluated alternatives to phosphine fumigations. In 2010 TJI titled: “Depriving beetles of oxygen”⁶⁾. This article dealt with controlled atmosphere (CA), a safe pest control method that does not use chemicals. In 2011 another TJI article reported on the same subject, now calling it “Tricky science”⁷⁾, which referred to the complexity of this issue due to the variety of parameters that need to be considered by scientists. When the article was published, further testing was underway and the results have been published in CORESTA Guide No12, June 2012, describing the proper use of Controlled Atmosphere in the control of the tobacco beetle. The Guide has been updated in June 2013 to confirm that CA was also effective against the tobacco moth.

TSNA

“Growing and curing study”⁸⁾ was the title of a long article in which TJI interviewed scientists and extension specialists at Virginia Tech and University of Kentucky on TSNA research findings. These persons are active members of

CORESTA working groups such as Sub-Group of TSNAs in Air-Cured and Fire-Cured Tobacco and Integrated Pest Management.

Reference Products

In its May 2013 issue TJI highlighted CORESTA reference and monitor products by publishing a paper called “Reference products used in tobacco and smoke analyses”⁹⁾. This report once again showed the importance of collaborative work by universities and research organisations as well as the increasing role of reference products in the regulatory environment.

As an example, the CORESTA unit, CU, is nowadays a common reference. It is often cited with regards to cigarette, plug wrap and tipping paper porosity levels. Actually, whereas it is written “CU”, users will say “this is an 80 CORESTA flax paper, or a 500 CORESTA perforated tipping”. It has become common usage, just as °C or ppm references, but very few remember that it stands for the flow (cm³ min⁻¹) passing through a 1 cm² sample of test material at an applied pressure of 1.00 kPa. It superseded a number of permeability units and is now the reference and one of many examples of CORESTA achievements used by scientists worldwide.

E-cigarettes and CORESTA

“The changing future and a new vocabulary for the tobacco industry”¹⁰⁾ was the title of an article published in TJI in 2012. According to this article, e-cigarettes are an example of the “join the train before it leaves you behind on the station” syndrome. Later on, in February 2013, TJI published a paper called “Should e-cigarette manufacturers take the FDA up on its ‘challenge’?”¹¹⁾ In this article a well-known tobacco scientist, evoked the need for “standards” and test methods to provide superior consumer satisfaction. According to him,

the development of such reference test materials and test methods will require significant resources that only a few organisations such as CORESTA can bring to the e-cigarette industry.

The tobacco industry and CORESTA have caught this train. With the support of CORESTA’s Scientific Commission and Board, an E-cigarette Task Force was officially launched in Geneva in May 2013. This is a totally new field of activity for CORESTA and thus a real challenge. It was nevertheless considered as a necessity in order to deal with this type of product and the related regulatory issues. Cooperation is needed more than ever from all parties.

Congresses and Meetings

Cooperation would not work without an important part of CORESTA life, Congresses and Study Group Meetings. These are events where science and friendship are shared. TJI has regularly announced the upcoming CORESTA meetings and generously reported on them afterwards. Among the titles published by TJI the most confederating one was probably: “United through CORESTA”¹²⁾, the theme of the Agro-Phyto Joint Study Groups Meeting. It illustrated CORESTA’s will for cooperation, including non-members and governmental and regulatory bodies. As for the two last Congresses, TJI described them as “Determined to provide hard science”¹³⁾ and “The CORESTA congresses - where leading edge science meets family spirit”¹⁴⁾. Reading between the lines one can sense robust science, teamwork and mutual assistance, which are the core principles of CORESTA collaboration.

The image of CORESTA given through TJI regular spotlights is of great support to its members. It reflects sound and solid action, not a mere showcase for the tobacco industry but rather an anchorage for all tobacco science to be spread in the fast and ever evolving environment of our industry. **CORESTA**

¹⁾ TJI 2011/6 p. 82-84; ²⁾ TJI 2012/1 p.115-117; ³⁾ TJI 2010/6 p. 82-84; ⁴⁾ TJI 2004/1 p. 42-43; ⁵⁾ TJI 1998/1 p. 64-67; ⁶⁾ TJI 2010/3 p. 41-49; ⁷⁾ TJI 2011/3 p. 49-53; ⁸⁾ TJI 2011/6 p. 39-43; ⁹⁾ TJI 2013/2 p. 150-154; ¹⁰⁾ TJI 2012/4 p. 89-94; ¹¹⁾ TJI 2013/1 p. 112-116; ¹²⁾ TJI 2003/6 p. 108