



Agrochemicals Analysis (AA) Sub-Group Report

CORESTA AP2021 Virtual Conference

4th October 2021



AA SG – Objectives

- ❖ To perform **regular proficiency testing** of **Multi-Residue Methods** for the analysis of agrochemical residues on tobacco.
- ❖ To undertake **joint experiments** to resolve unanswered questions arising from proficiency tests; to expand knowledge base on agrochemical residues and their analysis.
- ❖ To produce and maintain a series of **Technical Notes** (on different agrochemical residue classes and selected individual compounds) to supplement the **Technical Guideline** and aid method development and improvement



Proficiency testing 2021 (FAPAS FT0117)

- ❖ 116 CPAs listed in CORESTA Guide No.1 and its 13 GRL candidates
- ❖ Direction on reporting the sum of CPAs
 - Residue definition and Conversion factor
- ❖ Two test materials (artificially spiked and agronomically incurred)
 - 21 CPAs spiked on blank Burley tobacco
 - 20 CPAs in incurred Burley tobaccos (offered by RFT SG)
- ❖ 22 laboratories from 17 countries
- ❖ z-score evaluation
- ❖ FAPAS report in July 2021
- ❖ Discussion at online SG meeting in September 2021



Fapas® – Food Chemistry Proficiency Test Report FT0117

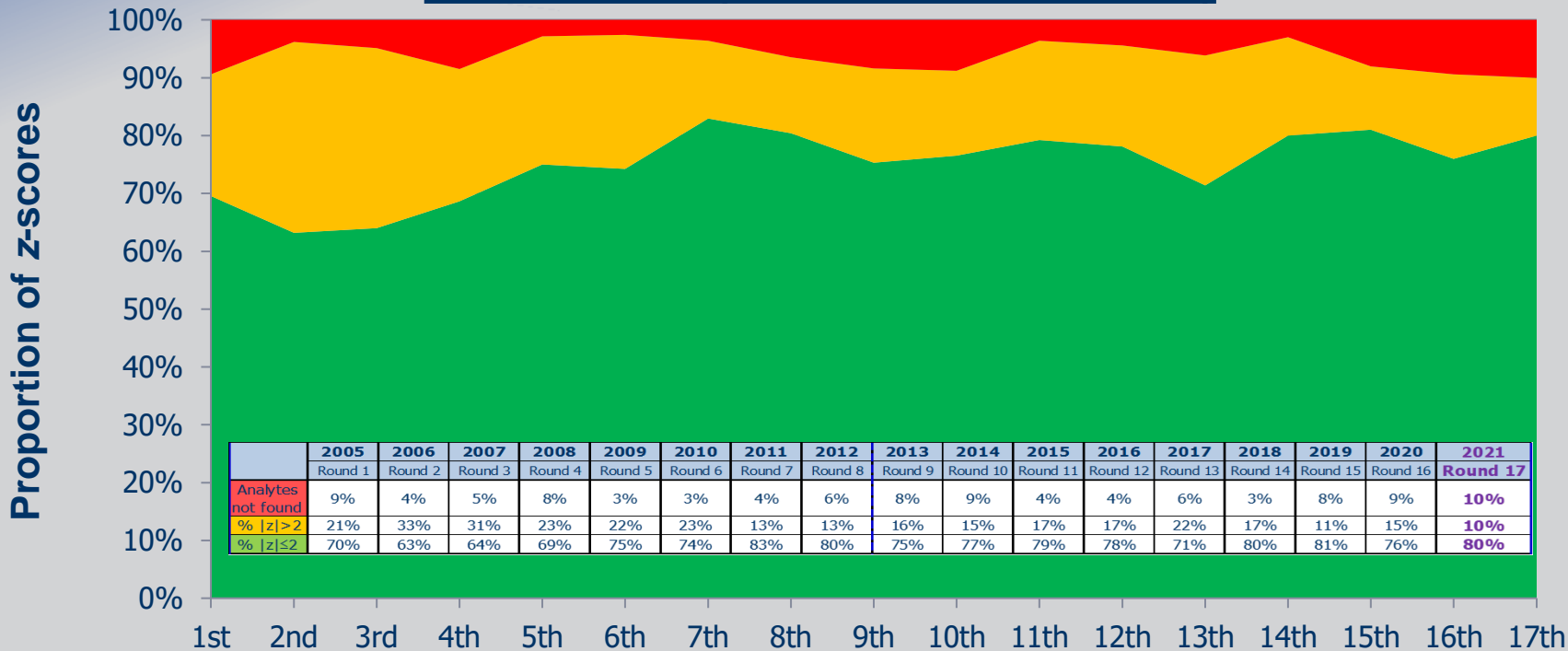
Pesticides in Tobacco

March-June 2021



AA SG – Activities

z-score trend (FAPAS FT0101-FT0117)





AA SG – Activities

Follow-up of Joint Experiment Technical Study on Matrix Effects from DAC tobacco

- ❖ This JETS was conducted with the aim of knowing if there are any differences in MEs among DAC, BLY and FCV.
- ❖ The outcome indicated no significant difference in the MEs was observed among DAC, BLY and FCV.
- ❖ The report was published on the CORESTA website in April 2021.
- ❖ Next steps to be considered once test materials available



Agrochemicals Analysis Sub-Group

**Joint Experiment Technical Study
(JETS) Report 19/1
Matrix Effects from Dark Air-Cured
Tobacco**

April 2021

Authors:

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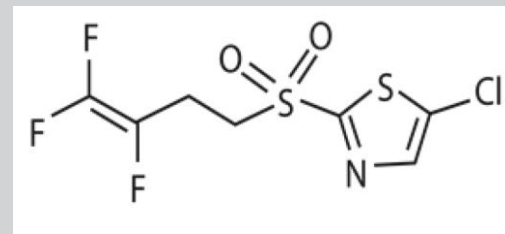
Method development of Fluensulfone and BSA

❖ Backgrounds

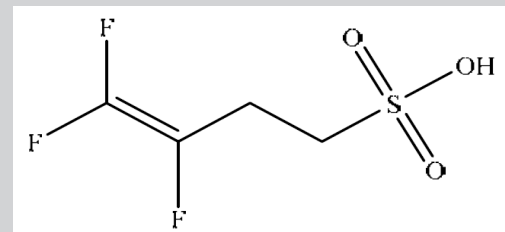
- ACAC sets provisional GRL 0.15 mg/kg for Fluensulfone
- Residue definition: Fluensulfone and its metabolite Butene Sulfonic Acid (BSA)
- ADAMA kindly provided 10 AA SG member laboratories with reference materials of BSA

❖ Results

- One member laboratory presented its developed method of Fluensulfone and BSA
 - Fluensulfone: LoQ 0.03 mg/kg (GC-MS/MS)
 - BSA: LoQ 0.03 mg/kg (LC-MS/MS)



Fluensulfone



Butene Sulfonic Acid (BSA)



AA SG – Activities

2021 online AA SG meeting

- ❖ September 3rd, 2021
- ❖ Some 30 participants from 14 countries
- ❖ Reviews of proficiency testing
- ❖ Follow-up of JETS on DAC
- ❖ Method development of novel GRL candidate
- ❖ Updates of ACAC and RFT SG



CORESTA Sub-Group on Agrochemicals Analysis

60th Meeting on 3rd September 2021

Time:	07:00 - 09:00 (Washington DC)
	08:00 - 10:00 (Brasilia, Buenos Aires)
	12:00 - 14:00 (London)
	13:00 - 15:00 CET (Harare, Lilongwe, Berlin, Stockholm, Vienna)
	14:00 - 16:00 (Athens)
	15:00 - 17:00 (Dubai)
	19:00 - 21:00 (Beijing)
20:00 - 22:00 (Seoul, Tokyo)	
Venue:	MS Teams

Agenda

Friday, September 3rd, 2021

13:00 (CET)	Welcome, meeting agenda, etc. Review of the minutes of the 59 th Meeting	Masahiro Miyoshi Heather Westberg
13:15 (CET)	Review of Fapas PT round 17 - Course of events, Study design and Participants - Data evaluation and Fapas Report PT017 - Participant's comments - Identification and Discussion of analytical problem - Summary and Conclusion - Next steps for future proficiency testing	Masahiro Miyoshi/Dominic Anderson all SG Members
14:00 (CET)	JETS 19/1 on matrix effect in Dark Air Cured tobacco	Shun Ueyama
14:05 (CET)	Method development of Fluensulfone and BSA	Bernhard Mayer-Helm
14:20 (CET)	Other AA Sub-Group activities	Masahiro Miyoshi
14:25 (CET)	ACAC update	Marco Prat
14:40 (CET)	Residue Field Trial Sub-Group update	Naiki Watanabe
14:55 (CET)	Next meeting venue and closing	Masahiro Miyoshi

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AA SG – Next Activities

❖ Proficiency testing

- Study design of 2022 testing to be planned with Fera

❖ Joint Experiment Technical Study

- Next steps to be considered

❖ Other activities

- Revision of technical documents (Technical Guideline or Technical Notes)
- Residue definition information for ACAC and RFT SG
- Encouragement to develop method of GRL candidates (supplying standard materials)
- etc.



Acknowledgment

Proficiency testing 2021 (FAPAS FT0117)

- ❖ Dominic Anderson (Fera)
- ❖ Marco Prat (JTI)
- ❖ Torbjörn Synnerdahl (Eurofins Sweden)
- ❖ CORESTA RFT SG
- ❖ Participating laboratories

Method development of Fluensulfone and BSA

- ❖ ADAMA
- ❖ Bernhard Mayer-Helm (JTI, Ökolab)



Thank you for your attention!