



Sub-Group Agrochemical Residue Field Trials (RFT)

Matthew Vann
on behalf of
Naoki Watanabe and Keisuke Nakayama

AP2017 - Santa Cruz do Sul, Brazil
23rd October 2017



- 1. Objectives**
- 2. Organisation**
- 3. Meetings**
- 4. Progress of RFT**
 - **Tested Agrochemicals**
 - **Review of the 1st 3-year trial cycle (2013-2015)**
 - **Planning of the 2nd 3-year trial cycle (2016-2018)**
 - **Update as of September 2017**



1. Objectives

1. In consultation with ACAC, to prepare and maintain a list of CPAs necessary to sustain successful leaf production and for which GRLs have to be set or reviewed
2. To produce a formal protocol for trial and testing procedures
3. To promote global participation in this programme
4. To collate results of trials done under the formal protocol and make them available to ACAC
5. To collect already available field residue trial data from various sources and make them available to ACAC



2. Organisation

❖ **TF → SG (2016)**

❖ **Under Agronomy & Leaf Integrity Study Group**

Coordinator: **Keisuke Nakayama**, Japan Tobacco Inc., Japan

Liaison: **Keisuke Nakayama**, Japan Tobacco Inc., Japan

Secretary: **Matthew Vann**, North Carolina State University, USA

Others: Trial Executors and Sub-group members
(come in and out flexibly)



3. Meetings

- Kick-off meeting:** June 30th 2012, Vienna Austria, 23 registered participants
- 2nd meeting:** September 22nd 2012, Sapporo Japan, 14 registered participants
- 3rd meeting:** January 20th 2013, Lexington USA, 16 registered participants
- 4th meeting:** October 12th 2013, Brufa di Torgiano Italy, 22 registered participants
- 5th Meeting:** January 11th 2014, Raleigh USA, 17 registered participants
- 6th Meeting:** October 11th 2014, Québec City, Canada, 25 registered participants
- 7th Meeting:** October 24th 2015, Izmir Turkey, 24 registered participants
- 8th Meeting:** October 8th 2016, Berlin Germany, 22 registered participants

- 9th Meeting:** October 21st 2017, Santa Cruz do Sul Brazil, 21 registered participants



Tested Agrochemicals

23 GRL Candidates

| Priority | # | Agrochemical | Priority | # | Agrochemical | |
|--------------|---------------|---------------------|----------|-----|---------------|--------------|
| 1st priority | 1 | Azoxystrobin | 2nd | 13 | Clothianidin | |
| | 2 | Difenoconazole | | 14 | Dicofol | |
| | 3 | Indoxacarb | | 15 | Teflubenzuron | |
| | 4 | Propamocarb | | 16 | Iprovalicarb | |
| | 5 | Tebuconazole | | 17 | Spirotetramat | |
| | 6 | Chlorantraniliprole | | 18 | Bitertanol | |
| | 7 | Triflumuron | | 19 | Iprobenfos | |
| | 8-1 | Triadimefon | | 20 | Thiacloprid | |
| | 8-2 | Triadimenol | | 3rd | 21 | Chlorfenapyr |
| | 9 | Ethion | | | 22 | Prothiofos |
| | 10 | Triazophos | | | 23 | Quinalphos |
| | 11 | Fenamidone | | | | |
| 12 | Flubendiamide | | | | | |



Review of the 1st 3-year trial cycle (2013-2015)

- ❖ **RFT trials were conducted in 16 countries**
(Northern hemisphere: 12, Southern hemisphere: 4)
- ❖ **32 executors have conducted RFT trials**
- ❖ **23 CPAs have been entered into first, second, and third priority categories.**
 - **10 out of the 23 CPAs remain untested.**
 - **237 trials were conducted and 1,436 samples were analyzed**
 - **All executors reports were received, all chemical analyses were completed, and some trials were discarded due to:**
 - Product label violation
 - Protocol violation
 - Contamination of untreated samples



Planning of the 2nd 3-year trial cycle (2016-2018)

❖ **Trials in 2016 and beyond, basically:**

- **Same CPA trials to be carried out for at least one more year (2016) to verify results and obtain more data.**
 - No new CPAs to be tested for the moment basically
 - Withhold further 'seedbed treatment only trials' except for oriental regions (e.g. Propamocarb)
- **Encourage completion of unfinished first three-year trials**
- **Exceptions:**
 - Spirotetramat in USA (as fundamental study)
 - Iprovalicarb in Turkey



Planning of the 2nd 3-year trial cycle (2016-2018) contd.

❖ Trials in 2016 and beyond, basically:

➤ 2017- trial

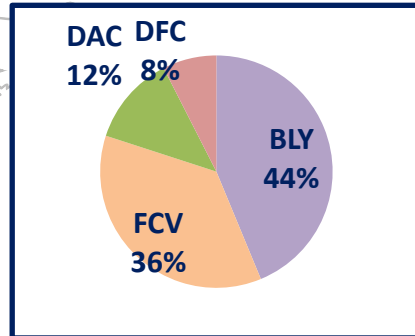
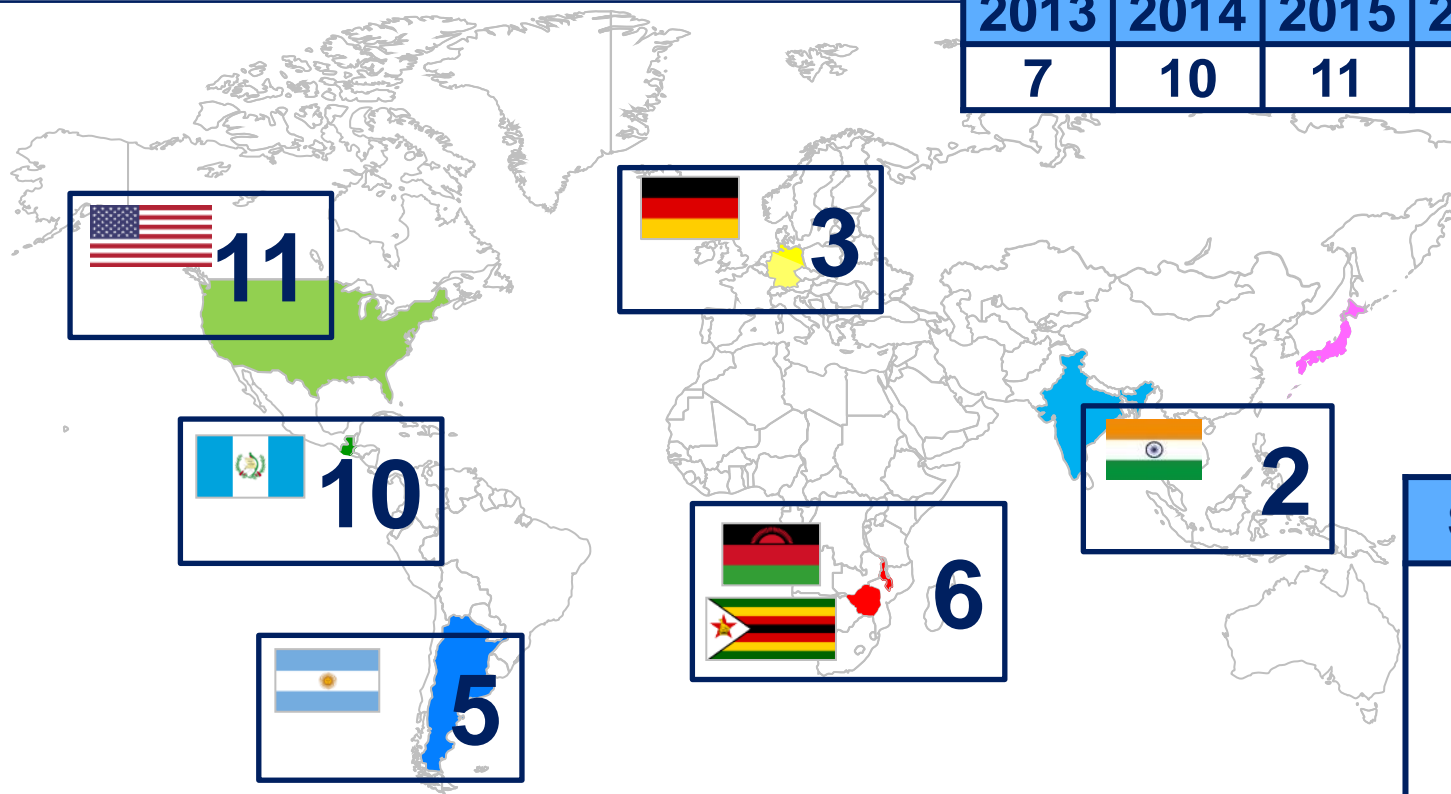
- CPAs and countries to be selected based on following key elements:
- GRL candidates not covered yet
- GRL candidates already covered, but few trials
- High frequency of detection/quantification in CARD
- CPAs registered for tobacco in a large number of countries

➤ => **A list to be circulated for the entry (ACAC to discuss)**



#1 Azoxystrobin

| 2013 | 2014 | 2015 | 2016 | 2017 | Total |
|------|------|------|------|------|-------|
| 7 | 10 | 11 | 5 | 4 | 37 |



Status: 74 datasets

Sufficient Datasets



Summary – Priority 1

| # | GRL Candidates | No. of countries | Total No. of trials | Total No. of dataset | Remark (Action plan) |
|----|-----------------------------------|------------------|---------------------|----------------------|------------------------------------------------------------------|
| 1 | Azoxystrobin | 7 | 37 | 74 | Sufficient Datasets |
| 2 | Difenoconazole | 3 | 11 | 22 | Will be Sufficient Datasets in 2019 |
| 3 | Indoxacarb ^{*a} | 3 | 13 | 26 | Sufficient Datasets |
| 4 | Propamocarb | 11 | 63 | 126 | Sufficient Datasets |
| 5 | Tebuconazole | 4 | 14 | 28 | Will be Sufficient Datasets in 2019 |
| 6 | Chlorantraniliprole ^{*a} | 4 | 23 | 46 | Sufficient Datasets |
| 7 | Triflumuron | 1 | 24 | 48 | Sufficient Datasets |
| 8 | Triadimefon/ Triadimenol | 1 | 9 | 18 | Residue definition to be clarified. Triadimefon / Triadimenol |
| 9 | Ethion | 1 | 2 | 4 | more trials to be considered except for Asia |
| 10 | Triazophos | 1 | 2 | 4 | more trials to be considered except for Asia |
| 11 | Fenamidone | 5 | 30 | 60 | Sufficient Datasets |
| 12 | Flubendiamide | 6 | 31 | 62 | Sufficient Datasets |



Summary – Priority 2, 3

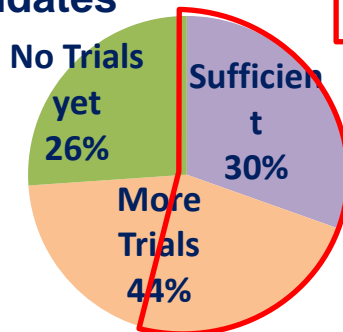
| # | GRL Candidates | No. of countries | Total No. of trials | Total No. of dataset | Remark (Action plan) |
|----|----------------|------------------|---------------------|----------------------|--------------------------------------------------|
| 13 | Clothianidin | 1 | 8 | 16 | new trials has started in US more trials in Asia |
| 14 | Dicofol | | | | No trials yet |
| 15 | Teflubenzuron | 1 | 12 | 24 | Sufficient Datasets |
| 16 | Iprovalicarb | 1 | 2 | 4 | more trials in Africa, Central America |
| 17 | Spirotetramat | 1 | 2 | 4 | more trials in Central America or Asia |
| 18 | Bitertanol | | | | No trials yet |
| 19 | Iprobenfos | | | | No trials yet |
| 20 | Thiacloprid | 2 | 6 | 12 | more trials in Central America or Europe |
| 21 | Chlorfenapyr | | | | No trials yet |
| 22 | Prothiofos | | | | No trials yet |
| 23 | Quinalphos | | | | No trials yet |



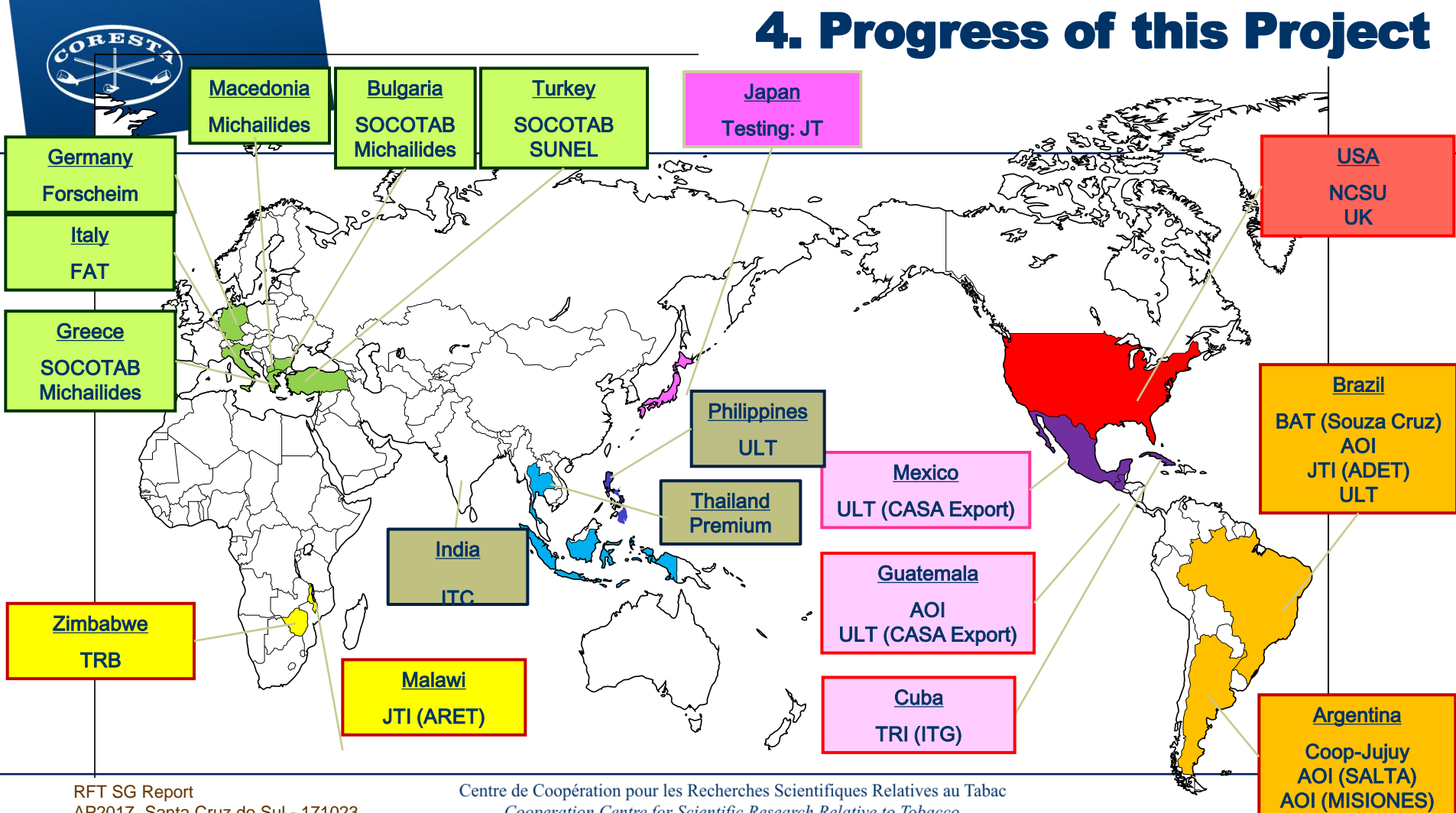
Summary - All

| Priority | GRL Candidates | No. of countries | Total No. of trials | Total No. of dataset | Remark (Action plan) |
|---------------|---------------------|------------------|---------------------|----------------------|------------------------------------|
| Total | | 17 | 388 | 776 | more than 2700 samples |
| 1 | 7 Candidates | | 221 | 442 | Sufficient Datasets |
| | 5 Candidates | | 38 | 76 | More trials to be conducted |
| 2, 3 | 5 Candidates | | 30 | 60 | More trials to be conducted |
| | 6 Candidates | | | | No Trials yet |
| others | | | 99 | 198 | Dimethomorph, Mandipropamide, etc. |

23 Candidates



4. Progress of this Project





Thank you!

Please see report on CORESTA website

<https://www.coresta.org/agrochemical-residue-field-trials-first-3-year-programme-report-30625.html>