

Anilinopyrimidines
Working Group

FRAC
FUNGICIDE RESISTANCE
ACTION COMMITTEE

Anilinopyrimidines (AP's) Working Group

Meeting on December 4, 2012, 8:30 am - 12:00 am
Protocol of the discussions and use recommendations of the AP's Working Group of the Fungicide Resistance Action Committee (FRAC)

Participants

BASF	Randall Gold Gerd Stammler
Bayer CropScience	<u>Andreas Mehl</u> Dominique Steiger
KI Chemical	Isao Kaneko Satoshi Usami
Syngenta	Duncan McKenzie Helge Sierotzki

Venue:

Lindner Congress Hotel, Frankfurt, Germany

ANTI-TRUST GUIDELINES (FROM FRAC CONSTITUTION) WERE SHOWN BEFORE THE MEETING STARTED

1. Monitoring Results 2012 (FRAC members)

1.1 *Botrytis* results

Vineyards

Extensive monitoring studies have been carried out for more than a decade by Bayer CropScience, KI Chemical, Syngenta, and BASF. Data from these studies are very comparable and show that the frequency of resistant isolates continues to remain low in Europe.

In 2012, sensitivity data were presented for Austria, France, Germany, Switzerland, Italy, and Spain in commercial vineyards and confirmed the previous findings of low resistance frequencies in Europe.

In 2011, first monitoring results in Chile indicated higher resistance frequencies in table grapes. Studies are on-going for 2012.

Products, applied according to the FRAC-AP guidelines in grape spray programs, maintained very good performance in the field.

Strawberries

(Syngenta, BASF)

Sensitivity monitoring was carried out during 2012 in Austria, Germany, Poland, Netherlands, Slovakia, Latvia, Lithuania, and Spain from commercial locations.

Spain, Slovakia, Poland, Germany, Netherlands: Data show that the frequency of resistant isolates is moderate, fluctuating from field to field, ranging from zero to high. Compared to 2011, an overall decrease in the frequency of resistant isolates in the monitored populations was observed.

Latvia, Lithuania: No resistance was detected.

Products, applied according to the FRAC-AP guidelines in strawberry spray programs, provided good control in commercial situations.

Evidence from field and laboratory trials has shown that there is a medium resistance risk of *Botrytis* to APs. The fact that resistant isolates can be found in commercial sites, albeit at low levels, reinforces the importance of strict adherence to the FRAC-AP guidelines to control *Botrytis*.

1.2. *Venturia* results

(BASF, Syngenta)

Monitoring studies for 2011 and 2012 were presented.

Samples from Austria, Belgium, Bulgaria, France, Germany, Italy, Latvia, Lithuania, Netherlands, Poland, Portugal, Romania, Switzerland, Spain, and UK were analysed.

Overall, in 2011 and 2012 a low frequency of resistant populations was detected in Germany, France, UK, Austria, Poland, Belgium, and Italy, following the fluctuations observed during the past five years.

1.3. *Monilinia* spp.

No monitoring studies were performed in 2012.

2. Use Recommendations

The purpose of the use guidelines for AP containing products is to maintain the sensitivity in the target pathogens and to prevent crop losses due to resistant pathogen populations

2.1 General AP's Guidelines (all crops)

Where different AP-containing products are used in one season, the cumulative number of applications with cyprodinil-, pyrimethanil- or mepanipyrim-containing products must not exceed the maxima as mentioned below.

The use recommendations were reviewed in the meeting on December 4th, 2012.

The guidelines for the use of AP fungicides against *Botrytis* grey mould were slightly adapted for specific situations in 2011 where seven or more treatments are applied per crop and season. No further changes in the guideline were made in 2012.

The *Venturia* guidelines have not been changed.

2.2 *Botrytis* Guidelines

- Where two treatments are made per season, the number of applications of AP-containing products is limited to one.
- In situations where up to six *Botrytis* treatments are made per crop and season, a maximum of two applications with AP-containing products are recommended.
- In specific situations where seven or more *Botrytis* treatments are required per crop and season, a maximum of three applications with AP-containing products is recommended and not more than two consecutive applications.
- For specific crops and products, follow use recommendations of individual companies.

2.3 *Venturia* Guidelines

- Apply a maximum of four AP-containing products per season.
 - In locations where resistance has been reported, use APs only in mixture with an effective non cross resistant scab fungicide.
 - Individual products should always be used at recommended dose rates and during the period when they are most effective.
 - Curative use only in conjunction with reliable scab warning systems.
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The next AP FRAC Working Group meeting is scheduled for December, the 10th, 2013.