

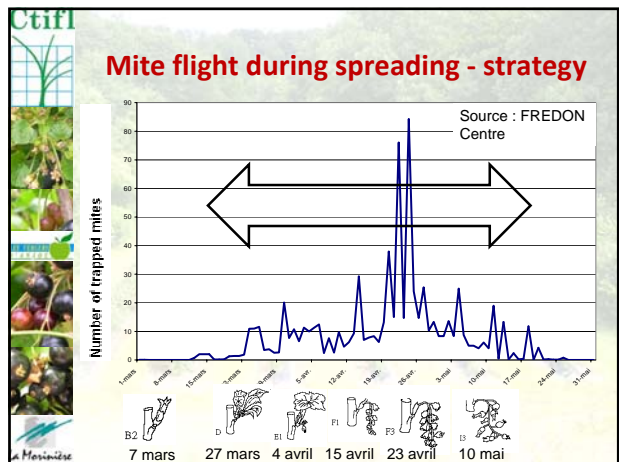
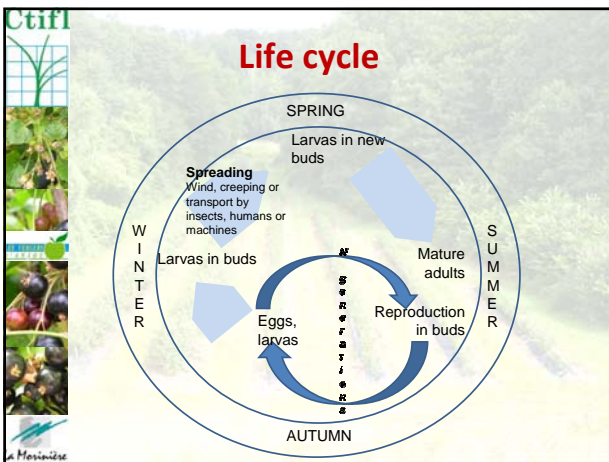
Blackcurrant International Conference

Beaune 19-20-21 mai 2010

Marie-Cécile DALSTEIN, Ctifl/La Morinière
 Philippe GUIGNEBAULT, La Morinière
 Jean-Philippe DUPIN, Les Vergers d'Anjou

Big bud mite (*Cecidophyopsis ribis*)

Life cycle
 Geographical distribution in France
 Control and experimentation



Symptoms, damages


- Big buds decay
- Bushes weaken

↓

- Yield losses
- Death of bushes
- Reversion


Geographical distribution in France

- Only Loire Valley area
- 1992-1993: only one department and spreading



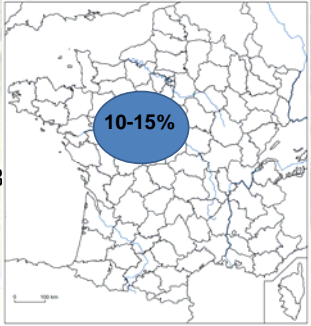
Geographical distribution in France

- Only Loire Valley area
- 1992-1993: only one department and spreading



Geographical distribution in France

- Only Loire Valley area
- 1992-1993: only one department and spreading
- Decrease in 2003 during warm summer, increase since



Registered products

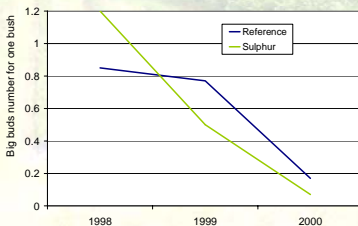
- Until 2007: endosulfan
- Since: pyridabene + propargite
(<http://e-phy.agriculture.gouv.fr>)
 - Pyridabene: possibility of revocation
- Experimentation for « orphan uses » (cf. next presentation)
 - Trials by La Moriniere station to prove efficiency of new products and to lead to a registration

1998-1999 trials

- Reference product: endosulfan, 4 applications from 01/04 to 26/05
- Sulphur: 5 applications from 27/03 to 25/05

F1 stage: 20/04 (1998 and 1999)

Evolution of big buds number after two years of experimentation



Year	Reference	Sulphur
1998	~0.85	~1.15
1999	~0.75	~0.55
2000	~0.25	~0.15

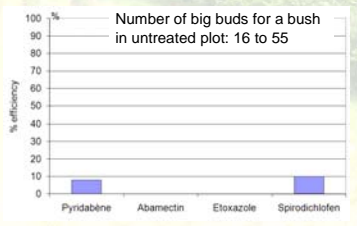
2008 trial

- Untreated plot
- Pyridabene (ref)
- Abamectin
- Etoxazole
- Spirodichlofen

4 applications from 16/04 to 28/05

F1 stage: 17/04

Number of big buds for a bush in untreated plot: 16 to 55



Product	% efficiency
Pyridabene	~10
Abamectin	~0
Etoxazole	~0
Spirodichlofen	~10

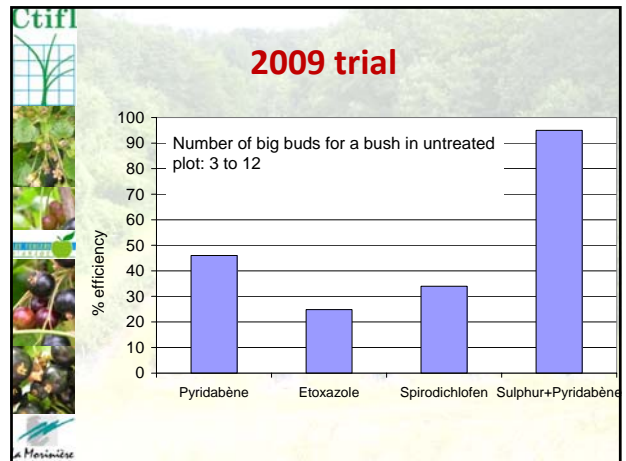
2009 trial

- Untreated plot
- Pyridabene (ref)
- Etoxazole
- Spirodichlofen

} 4 applications from 06/04 to 13/05


- Sulphur followed by pyridabene application
 - sulphur: 18 and 30/03
 - pyridabene: 4 applications like other treated plots

F1 stage : 17/04



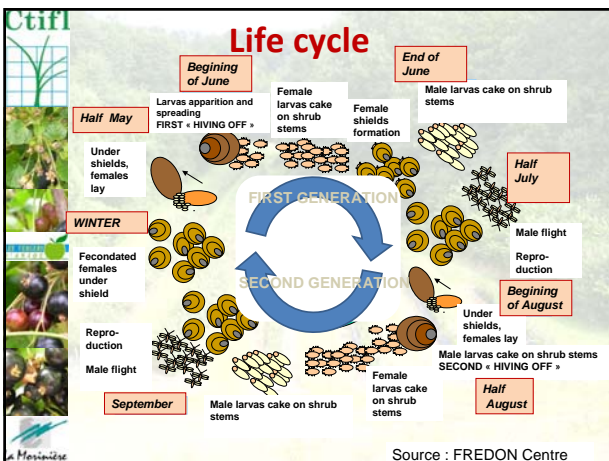
Conclusion

- Products with sulphur seem to be a way to investigate
- Problem of dose/application stage: phyto-toxicity may occur
- 2010: new experiment with comparisons of sulphur and reference product in spring and post harvest application
 - SEE YOU NEXT YEAR...
- Blackcurrant variety with tolerance to big bud mite



White peach scale (*Pseudaulacapsis pentagona*)

Life cycle
Geographical distribution in France
Control and experimentation



Winter to end of June

- 1 Female shields
- 2 Under shield: female + eggs
- 3 Female larvas crust
- 4 Male larvas

End of June to end of July

5 Male larvas crust
6 Saturation
7 Male adults (microscope)

Life cycle and strategy

- Pheromon traps to follow male flight
- Example during 2007 flights

Symptoms, damages

- Female shields on stems (encrusting)
- Bushes weaken quickly
- Yield losses
- Fields contamination

Geographical distribution in France

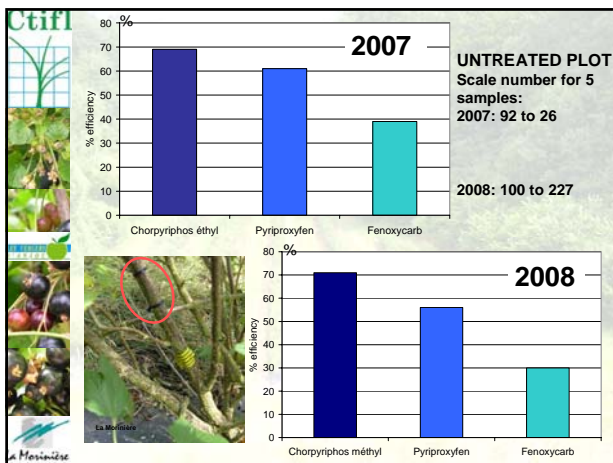
- Loire Valley, Burgundy and South East area of France
- Extension = more and more hectares concerned

Registered products

- No use created = empty use
- Mineral oils in winter (general use for winter stages of pests)
- Experimentation in Burgundy and Loire Valley (la Moriniere) Experimentation for « orphan uses » (cf. next presentation)

2007-2008 trials

Trial year	2007	2008
Plot 1	Untreated	Untreated
Plot 2	Chlorpyrifos éthyl	Chlorpyrifos méthyl
Plot 3	Pyriproxyfen	Pyriproxyfen
Plot 4	Fenoxycarbe	Fenoxycarbe
Post harvest applications	17/08 31/08	18/08 01/09



Conclusion

- Chlorpyrifos methyl and pyriproxyfen seem to be effective with post harvest applications but efficiency is partial
- Second hiving off may be difficult to define and can be long (more than one month)
- Tolerant or less sensitive blackcurrant varieties

THANK YOU FOR YOUR ATTENTION!