



**Asia-Pacific
Economic Cooperation**

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Pesticides and Regulation

Submitted by: Vinos De Chile



**Seminar on Key Issues in Wine Regulation
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PESTICIDES AND REGULATION

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General Objectives:

- Provide the wine industry with specific highlights on issues at stake on pesticides and wine.
- Determine the tasks that must be done before getting to agreements.
- Recommendations on management of pesticides, to satisfy the market rules in relation to residues in wine.
- Explore possible agreements.

Application of chemical products in viticulture
Where are we?

- It is a matter of food safety but also sustainability.
- Consumers, industries and governments are each day more concerned about the effects on food safety and more interested in a sustainable world.
- The requirements -privately and governmentally established- are more specific and pungeant, day by day.

Application of pesticides, wines and consumers,
What do we want?

- We all want safety; and we are all conscious about the need of having a sustainable wine industry.
- These are no “trendy” issues. Food safety and sustainability got here to stay.
- The requirements will be increasing and consumers, industries and governments have different responsibilities.

Application of chemical products
What is the situation for the Wine Industry?

- We have different regulations on food safety; MRL's are specific for each economy.
- We don't have homologation of laboratory methods. Methods to examine wine differ from economy to economy. Examining the same wine may get to different results depending on the lab method.
- We don't have scientific studies specific to wine and grape vines on MRL's though Grape fruit has been studied but studies differ.

Application of chemical products
Which are the implications?

- Access barriers.
- Higher costs: laboratories and certification, samples.
- Partial Information which is not science based; problems for decisions in viticulture.
- Information coming from the Chemical industry not necessarily true for all grape viticultural realities.
- Different methodology of laboratories to measure the same element in equal wines.

Application of chemical products What each actor can do?

- More R&D+i a goal for industries together with governments and can be done in a cooperative basis.
- More homologation or mutual recognition in regulations: a task for governments.
- More sustainable practices in the broad sense: environmental, social and economic convergence, a task for industries.

Application of chemical products A basic proposal for R&D+i

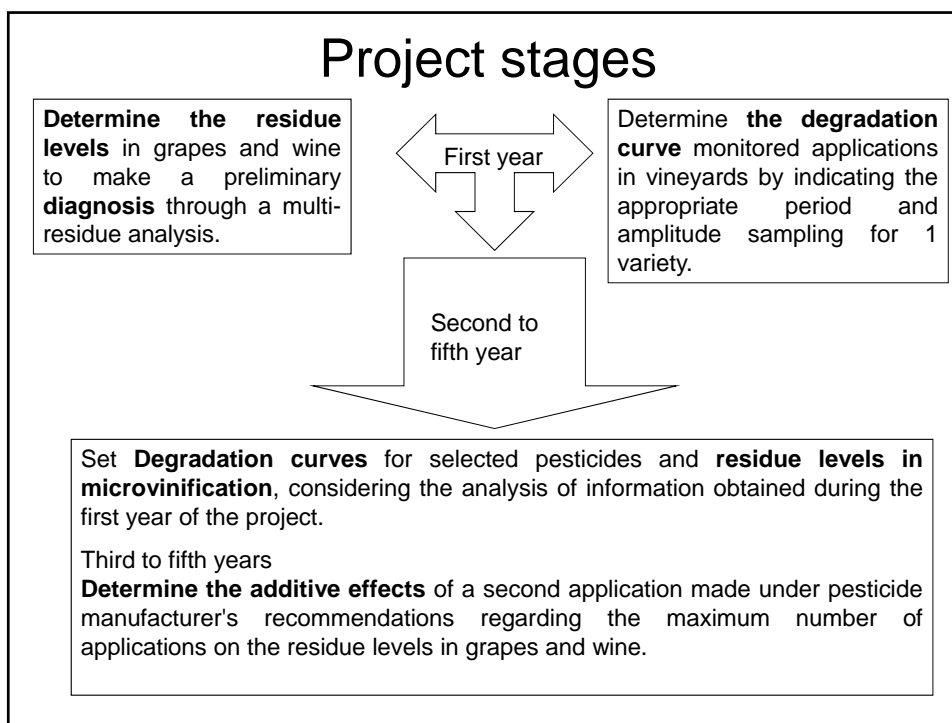
The Chilean wine industry has been trying to develop together with the universities a project for studying the degradation curves to the vine and wine to avoid this blindness in which we are of not knowing how much of those chemicals applied in viticulture, could remain in wine.

Specific Objectives of the Project

1. Determine the presence and levels of residues of the main pesticides used in the production of wine grapes at harvest time and wine production, to establish which are the most dangerous pesticides and define the sampling frequency in trials to develop.
2. Determine degradation curves of the main pesticides used in the production of the main wine grapes varieties grown in Chile for two different Valleys in terms of climate.

Specific Objectives of the Project

3. Establish waste transfer rates of major pesticides from the fruit harvested to the wine
4. Let consolidated skills and human resources in the area pesticides for the production of wine in the research and development to give permanence to the research and future development in this area, considering the permanent changes in regulations on pesticides.
5. Sharing and transfer of results and recommendations of investigations made in the field of consortium partners.



Wineries commitments

- Plants district to test pesticides
- Wine grapes
- Machines and people for the application
- People for the technical committee
- Funds

Proposed pesticides- 19

	NAME	TYPE	MANUFACTURER	PRODUCT NAME	Mas usado
1	Cyprodinil	Funguicida	SYNGENTA	Switch 62,5 WG, Switch Premium, Switch	
2	Fludioxonil	Funguicida	SYNGENTA	Switch 62,5 WG, Switch Premium, Switch Dry	
3	Pyrimethanil	Funguicida		Bonuss	
			ANASAC	TERCEL 50WP-TERCEL DRY-TERCEL DUST	x
4	Pyrimethanil	Funguicida	BAYER	Scala 400 SC - Twist duo 480 SC	
5	Trifloxystrobin	Funguicida	BAYER	Flint 50% WG - Consist full 75% WG - Twist duo 480 SC	
6	Pyraclostrobin	Funguicida	BASF	Bellis	
7	Boscalid	Funguicida	BASF	Bellis, Cantus	
8	Fenhexamid	Funguicida			
			BAYER	Teldor 50% WP - Teldort 500 SC - Teldor Wine - Teldor Dust - Tiebreak 416,7 SC	
9	Tebuconazol	Funguicida	BAYER	Horizon 25% WP - Consist full 75% WG - Tiebreak 416,7 SC	
			ANASAC	TACORA 25EW-TACORA 25WP-TACORA MAS	x
10	Asoxystrobin	Funguicida	SYNGENTA	Quadris, Amistar Top, AMISTAR 50WG	
11	Acetamiprid	Funguicida			x
			ANASAC	HURRICANE 70 WP	
12	Buprofezin	Funguicida			x
			ANASAC	Aplaud 25 WP	
13	Clorpirifos	Insecticida	DOW		
14	Methoxifenoziide	Insecticida	DOW	Intrepid*240SC	
15	Spinosad	Insecticida	DOW	Success*48	
			BAYER	Confidor 350 SC - Confidor Forte 200 SL	x
16	Imidacloprid	Insecticida	DUPONT	imaxi® 350 SC	
			ANASAC	PUNTO 70WP	
17	Fluazinam	funguicida	SYNGENTA	shirlan	
18	indoxacarb	insecticida	dupont	avaunt	x

Objective for year one

Determine the presence and levels of residues of the main pesticides used in the production of wine grapes at harvest time and wine, to establish the most dangerous pesticides and define the sampling frequency in trials to develop.

18 Pesticides

1 Grape variety

2 Valleys in Santiago and 2 in Talca (Casablanca and Maipo; Colchagua and Maule)

Test in Grape and Wine

4 monoresidue tests

1 multiresidue test

20 microvinifications

Objectives for years two to five

- Determine degradation curves of the main pesticides used in the production of wine grapes in two different climates Valleys for the main varieties grown in Chile.

6 pesticides per year
 1 valley per climate zone (Casablanca y Maule)
 2 kinds of grape Chardonnay and Cabernet Sauvignon
 3 Repetitions
 5 sample points

Conclusions:

Define list of chemicals used in viticulture among producing economies.

Examine in different areas the degradation curves for each one of them.

Incorporate Chemical industry to collaborate.
 Make government interested and aware of these needs.

Get governments to agree on international treaties that avoid barriers, to trade rooted most of the times, in ignorance of the scientific truth involved in Chemicals and wine.

Examine governmental laboratories methods and those of the private sector laboratories, to determine differences in those methodologies and opportunities to harmonize procedures in wine examination.

THANK YOU