



**For interviewer use only**

Based on label information, enter last digit of contact telephone number:

→ Column number

Enter number of vineyard listed in Step 2:

→ Row number

Use this table to select vineyard

# of vineyard	Last Digit of the contact's telephone number									
	0	1	2	3	4	5	6	7	8	9
1	1	1	1	1	1	1	1	1	1	1
2	1	2	2	1	2	1	2	1	1	2
3	1	2	1	3	2	1	2	3	3	1
4	1	4	3	3	2	1	2	2	3	1
5	4	5	3	1	5	2	2	4	1	3
6	5	1	2	1	3	6	4	3	2	5
7	7	2	1	3	2	4	6	5	6	4
8	6	4	2	3	8	5	6	1	3	7
9	5	8	5	4	9	2	7	6	7	1
10	8	4	5	3	7	6	1	2	9	10

FOR INFORMATION ONLY

**STEP 2: Questions about the vineyards where GRAPES were grown for sale in 2005**

2 What UNIT OF MEASURE will be used to report land areas? <sup>22</sup> This same unit should be used throughout the questionnaire.

(Check one circle only.)  <sup>01</sup> Acres  <sup>02</sup> Hectares  <sup>03</sup> Arpens (Quebec only)

3 What was your total producing and non-producing grape area (all varieties) on this operation in 2005? ....       <sup>60</sup>

4 What was your total producing area of grapes (Vinifera or Labrusca)? .....       <sup>23</sup>

5 How many vineyards (varieties of grapes, cultivars or vineries) produced grapes for sale? .....    <sup>24</sup>

**Include:**

- ▶ all areas of grapes grown for sale to the fresh or processing markets in 2005;
- ▶ all grape areas grown for wine production.

**Do not include:**

- ▶ grapes grown for home use.

To save time, this interview will focus on one producing vineyard only. First, we will list all producing vineyards (varieties of grape, cultivars or vineries) in 2005. You can use your identification system (name, number or description) to report each vineyard. Then, I will select one producing vineyard (variety of grape, cultivar or vinery) from the list.

6 What were your producing vineyards in 2005?

▶ If the respondent uses a different term than "vineyard" (variety of grape, cultivar or vinery) to describe the grape producing area, please specify here: \_\_\_\_\_ <sup>25</sup>

▶ If there are more than 10 producing vineyards, list the 10 largest producing vineyards.

Name, number or description of vineyard	
1	
2	
3	
4	
5	

Name, number or description of vineyard	
6	
7	
8	
9	
10	

Now, I will select one producing vineyard from all producing vineyards in 2005.

Interviewer action: enter the selected vineyard (variety of grape, cultivar or vinery) number .....   <sup>26</sup>

The selected producing vineyard is: \_\_\_\_\_ During this interview, I will ask you questions about this vineyard.

7 What was the area of this selected vineyard (variety of grape, cultivar or vinery)? .....       <sup>27</sup>

8 How many vines were in this selected vineyard? .....       <sup>61</sup>

9 What year was the selected vineyard planted? .....     <sup>62</sup>

10 In 2005, ... if more than one, report the most important

a) which grape variety (or cultivar) was grown? .....  <sup>29</sup>

b) when did harvest start? .....     <sup>32</sup>     <sup>35</sup>     <sup>38</sup>     <sup>41</sup>

c) when did harvest finish? .....     <sup>33</sup>     <sup>36</sup>     <sup>39</sup>     <sup>42</sup>

**STEP 3: Questions about herbicide, insecticide or fungicide applications from January 1 to December 31, 2005 on the vineyard selected in Step 2**

11 In 2005, did you apply any herbicides, insecticides, fungicides or other pesticides on the selected vineyard? <sup>43</sup>

<sup>01</sup> Yes  <sup>02</sup> No If "YES", continue to question 12. If "NO" → Go to Step 4.

12 What format was used to keep records of herbicides, insecticides, fungicides or other pesticides applied to this orchard? <sup>44</sup>

Was it ...? (Check all that apply.)

<sup>01</sup> Written  <sup>02</sup> Electronic/computer file  <sup>03</sup> No record kept

13 What information is kept in your logs/record-keeping system?

Does it include the ...? (Check all that apply.)

<sup>45</sup> Date of application  <sup>48</sup> Product applied  <sup>51</sup> Temperature at application

<sup>46</sup> Identification of vineyard  <sup>49</sup> Rate of application  <sup>52</sup> Targeted weed, insect or disease

<sup>47</sup> Total area treated  <sup>50</sup> Wind speed  <sup>53</sup> Other, specify:  <sup>54</sup>

14 Did the company or person purchasing your produce require the use of specific herbicides, insecticides or fungicides as part of a contractual agreement? <sup>55</sup>

<sup>01</sup> Yes  <sup>02</sup> No  <sup>03</sup> Not applicable, the produce was not sold to a grape processor or winery under a contractual agreement.

**STEP 3: Questions about herbicide, insecticide or fungicide applications from January 1 to December 31, 2005 on the vineyard selected in Step 2**

**15 What chemicals were applied to the selected vineyard in 2005? Report ALL CHEMICAL APPLICATIONS to the SELECTED VINEYARD in this table.**

Include all applications to the SELECTED VINEYARD (Step 2) made by the respondent, a partner, an employee or a custom applicator.

- ▶ Where necessary (more than 45 applications or lines), use additional tables supplied with the interviewer material.
- ▶ For pre-packaged mixes, enter the product code found in the *Interviewer Reference Guide*.
- ▶ If the respondent mixed more than one product in the tank, use a different line for each product mixed.
- ▶ If the code of a pre-packaged mix is not included in the list, report its name at the bottom of this table (p. 4).

Check if you use additional table  999

Line	Column [1] Date of application					Column [2] Which product was applied? <small>(Enter product name or code from the <i>Interviewer Reference Guide</i>)</small>					Column [3] What was the rate of application? <small>(e.g. 1 litre per acre)</small>					Column [4] What was the application technique? <small>(Enter the application technique code p. 4)</small>			Column [5] If this application was a local or half row treatment, what percent of the VINEYARD was treated?				
	D	D	M	M	101																		
1	D	D	M	M	101					201				301	per	401			501				601
2	D	D	M	M	102					202				302	per	402			502				602
3	D	D	M	M	103					203				303	per	403			503				603
4	D	D	M	M	104					204				304	per	404			504				604
5	D	D	M	M	105					205				305	per	405			505				605
6	D	D	M	M	106					206				306	per	406			506				606
7	D	D	M	M	107					207				307	per	407			507				607
8	D	D	M	M	108					208				308	per	408			508				608
9	D	D	M	M	109					209				309	per	409			509				609
10	D	D	M	M	110					210				310	per	410			510				610
11	D	D	M	M	111					211				311	per	411			511				611
12	D	D	M	M	112					212				312	per	412			512				612
13	D	D	M	M	113					213				313	per	413			513				613
14	D	D	M	M	114					214				314	per	414			514				614
15	D	D	M	M	115					215				315	per	415			515				615
16	D	D	M	M	116					216				316	per	416			516				616
17	D	D	M	M	117					217				317	per	417			517				617
18	D	D	M	M	118					218				318	per	418			518				618
19	D	D	M	M	119					219				319	per	419			519				619
20	D	D	M	M	120					220				320	per	420			520				620
21	D	D	M	M	121					221				321	per	421			521				621
22	D	D	M	M	122					222				322	per	422			522				622
23	D	D	M	M	123					223				323	per	423			523				623
24	D	D	M	M	124					224				324	per	424			524				624

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Line	Column [1] Date of application					Column [2] Which product was applied? <i>(Enter product name or code from the Interviewer Reference Guide)</i>					Column [3] What was the rate of application? <i>(e.g. 1 litre per acre)</i>					Column [4] What was the application technique? <i>(Enter the application technique code p. 4)</i>			Column [5] If this application was a local or half row treatment, what percent of the VINEYARD was treated?				
	D	D	M	M																			
25	D	D	M	M	125					225				325	per	425			525				625
26	D	D	M	M	126					226				326	per	426			526				626
27	D	D	M	M	127					227				327	per	427			527				627
28	D	D	M	M	128					228				328	per	428			528				628
29	D	D	M	M	129					229				329	per	429			529				629
30	D	D	M	M	130					230				330	per	430			530				630
31	D	D	M	M	131					231				331	per	431			531				631
32	D	D	M	M	132					232				332	per	432			532				632
33	D	D	M	M	133					233				333	per	433			533				633
34	D	D	M	M	134					234				334	per	434			534				634
35	D	D	M	M	135					235				335	per	435			535				635
36	D	D	M	M	136					236				336	per	436			536				636
37	D	D	M	M	137					237				337	per	437			537				637
38	D	D	M	M	138					238				338	per	438			538				638
39	D	D	M	M	139					239				339	per	439			539				639
40	D	D	M	M	140					240				340	per	440			540				640
41	D	D	M	M	141					241				341	per	441			541				641
42	D	D	M	M	142					242				342	per	442			542				642
43	D	D	M	M	143					243				343	per	443			543				643
44	D	D	M	M	144					244				344	per	444			544				644
45	D	D	M	M	145					245				345	per	445			545				645

For chemicals not listed in the *Interviewer Reference Guide*, please specify below:

Line	Name of formulated product or PCP number

**Form of product purchased**  
*(e.g. powders, emulsifiable concentrates, granules)*

	708
	709
	710
	711
	712
	713
	714

**Application technique codes**  
*(Enter codes in Column 4 above)*

1= Broadcast spraying (boom or non-boom)	8= Chemigation - high pressure gun
2= Band spraying	9= Backpack spraying
3= Orchard airblast - axial fan	10= Granular application
4= Orchard airblast - cross-flow tower	11= Pheromones & pit trap
5= Spraying by airplane	12= Other (specify on the line in Column 2)
6= Spraying by helicopter	
7= Chemigation - low-pressure drop tube	

**STEP 4: Questions about WEED, INSECT, DISEASE AND OTHER PEST MANAGEMENT PRACTICES in 2005 for the vineyard selected in Step 2**

**16 Which practices do you use in your spray operation in this vineyard in 2005?**

Do you ...? (Check all that apply.)

- |     |                       |   |     |                       |   |     |
|-----|-----------------------|---|-----|-----------------------|---|-----|
| 816 | <input type="radio"/> | Calibrate sprayer each year                     | 822 | <input type="radio"/> | Spray only when wind speeds are low (less than five km/h) |     |
| 817 | <input type="radio"/> | Use the highest labelled water volume           | 823 | <input type="radio"/> | Spray only when wind blows away from sensitive areas      |     |
| 818 | <input type="radio"/> | Replace nozzles at least every three years      | 824 | <input type="radio"/> | Maintain lower pressure or use low-drift nozzle           |     |
| 819 | <input type="radio"/> | Maintain sprayer travel speed less than 16 km/h | 825 | <input type="radio"/> | Use protective shrouds or cones around sprayer boom       |     |
| 820 | <input type="radio"/> | Maintain low boom height                        | 826 | <input type="radio"/> | Other, specify: _____                                     | 827 |
| 821 | <input type="radio"/> | Adjust airblast direction for target height     |     |                       | _____   | 828 |

**17 In 2005, for the selected vineyard, was the incidence of INSECTS compared to the last five years ...?** 844

- (Check one circle only.)
- |    |                       |           |    |                       |           |    |                       |                |
|----|-----------------------|-----------|----|-----------------------|-----------|----|-----------------------|----------------|
| 01 | <input type="radio"/> | Much less | 02 | <input type="radio"/> | Less      | 03 | <input type="radio"/> | About the same |
| 04 | <input type="radio"/> | More      | 05 | <input type="radio"/> | Much more |    |                       |                |

If the answer is "More" or "Much more", continue to question 18. Otherwise → Go to Question 19.

**18 What do you plan to do during the next growing season to reduce your INSECT problems?**

Will you ...? (Check all that apply)

- |     |                       |                                     |     |                       |  |     |
|-----|-----------------------|-------------------------------------|-----|-----------------------|--|-----|
| 951 | <input type="radio"/> | Scout for insect or damage presence | 849 | <input type="radio"/> | Take actions to disrupt insect reproduction or development |     |
| 952 | <input type="radio"/> | Use forecasting systems             | 850 | <input type="radio"/> | Increase rate of insecticide applications                  |     |
| 847 | <input type="radio"/> | Switch to a different insecticide   | 851 | <input type="radio"/> | Other, specify: _____                                      | 852 |
| 848 | <input type="radio"/> | Apply an additional insecticide     |     |                       | _____  | 853 |

**19 In 2005, did you deal with any NEW INSECTS in this vineyard?** 854

- 02  No      01  Yes

► If yes, what was the main insect? \_\_\_\_\_ 855

**20 In 2005, for the selected vineyard, what was the MOST PREVALENT INSECT you had to control?**

Enter "0" if there was no significant insect problem and skip to Question 22. \_\_\_\_\_ 856

**21 What did you do to control the MOST PREVALENT INSECT?**

Did you ...? (Check all that apply.)

- |     |                       |  |     |                       |                           |
|-----|-----------------------|--|-----|-----------------------|---------------------------|
| 857 | <input type="radio"/> | Apply insecticides throughout the growing season                                   |     |                       |                           |
| 858 | <input type="radio"/> | Time insecticide applications to target the insect at different development stages |     |                       |                           |
|     |                       | What were the developmental stages?  | 859 | <input type="radio"/> | Early nymph or egg stages |
|     |                       | If not applicable, go to next choice: Box 862                                      | 860 | <input type="radio"/> | Larval or nymphal stages  |
|     |                       |  | 861 | <input type="radio"/> | Adult                     |
| 862 | <input type="radio"/> | Take other steps to disrupt the reproduction of this insect                        |     |                       |                           |
| 863 | <input type="radio"/> | Take other actions to disrupt the morphological development of this insect         |     |                       |                           |
| 865 | <input type="radio"/> | Release beneficial organisms to control this insect                                |     |                       |                           |
| 866 | <input type="radio"/> | Manage this vineyard and its surrounding area to attract beneficial organisms      |     |                       |                           |

**22 In 2005, for the selected vineyard, was the incidence of DISEASES (fungus, bacteria, mildew) compared to the last five years ...?** 867

- (Check one circle only.)
- |    |                       |           |    |                       |           |    |                       |                |
|----|-----------------------|-----------|----|-----------------------|-----------|----|-----------------------|----------------|
| 01 | <input type="radio"/> | Much less | 02 | <input type="radio"/> | Less      | 03 | <input type="radio"/> | About the same |
| 04 | <input type="radio"/> | More      | 05 | <input type="radio"/> | Much more |    |                       |                |

If the answer is "More" or "Much more", continue to question 23. Otherwise → Go to Question 24.

**23 What do you plan to do during the next growing season to reduce your DISEASE problems?**

Will you...? (Check all that apply)

- |     |                       |   |     |                       |  |     |
|-----|-----------------------|---|-----|-----------------------|--|-----|
| 953 | <input type="radio"/> | Scout for disease damages               | 954 | <input type="radio"/> | Use forecasting systems                  |     |
| 869 | <input type="radio"/> | Increase rate of fungicide applications | 873 | <input type="radio"/> | Alter soil fertility or water management |     |
| 870 | <input type="radio"/> | Switch to a different fungicide         | 874 | <input type="radio"/> | Other, specify: _____                    | 875 |
| 871 | <input type="radio"/> | Apply an additional fungicide           |     |                       | _____                                    | 876 |

**24 In 2005, did you deal with any NEW DISEASES in this vineyard?** 877

- 02  No      01  Yes

► If yes, what was the main disease? \_\_\_\_\_ 878

**25 For the selected vineyard, what was the MOST PREVALENT DISEASE (fungus, bacteria, mildew) you had to control?**

If there was no significant disease problem, enter "0" and skip to Question 28. \_\_\_\_\_ 879

**26 What tools/methods did you or your advisor use to make decisions on when to apply fungicides in this vineyard to control the MOST PREVALENT DISEASE?**

Was the decision based on ...?

(Check all that apply.)

- |     |                       |  |     |
|-----|-----------------------|--|-----|
| 880 | <input type="radio"/> | A set application schedule (calendar spraying) |     |
| 881 | <input type="radio"/> | Scouting reports and thresholds                |     |
| 882 | <input type="radio"/> | Regional forecasting/warning services          |     |
| 883 | <input type="radio"/> | Climatic conditions (degree days, moisture)    |     |
| 884 | <input type="radio"/> | Advice from other operators                    |     |
| 885 | <input type="radio"/> | Advice from a chemical salesperson             |     |
| 886 | <input type="radio"/> | Don't know                                     |     |
| 887 | <input type="radio"/> | Other, specify: _____                          | 888 |

**STEP 4: Questions about WEED, INSECT, DISEASE AND OTHER PEST MANAGEMENT PRACTICES in 2005 for the vineyard selected in Step 2**

27 In 2005, which practices did you use to avoid the **MOST PREVALENT DISEASE** (fungus, bacteria, mildew) in this vineyard?

Did you ...?

(Check all that apply.)

- 889  Plant certified disease-free transplants
- 890  Select the plant variety known to be most resistant to the major disease threats in your area
- 891  Eliminate possible sources of inoculum, such as cull piles, pruning residue or volunteer plants in nearby fields
- 892  Clean equipment moving into this vineyard to reduce risk of transporting disease spores or inoculum
- 893  Adjust fertilizer levels to prevent excessive levels of nutrients in the root zone and foliage
- 894  Test your soil for micronutrient imbalances that can promote certain diseases
- 895  Alter the timing of fertilization and/or water applications

28 In 2005, did you use any of the following practices in this vineyard for **WEED** management?

Did you ...?

(Check all that apply.)

- 829  Mulch
- 830  Plant a cover crop
- 831  Use a cultivator or rotary hoe
- 832  Chop or remove pruning residue
- 833  Other, specify: \_\_\_\_\_ 834

29 In 2005, for the selected vineyard, was the incidence of **WEEDS** compared to the last five years ...?

(Check one circle only.)

- 01  Much less
- 02  Less
- 03  About the same
- 04  More
- 05  Much more

If "More" or "Much more", continue to question 30. Otherwise → Go to Question 31.

30 What do you plan to do during the next growing season to reduce your **WEED** problems?

Will you ...?

(Check all that apply.)

- 836  Switch to a different herbicide
- 837  Apply an additional herbicide
- 838  Increase rate of herbicide applications
- 955  Switch to a different weed control practice
- 841  Other, specify: \_\_\_\_\_ 842

**STEP 5: Questions about weed, insect and disease RESISTANCE to chemical applications for your ENTIRE OPERATION**

31 In 2005, did you use any of the following practices to prevent weeds, insects and disease resistance to chemical products?

Did you ...?

(Check all that apply.)

- 896  Always rotate chemical families (or groups)
- 897  Select more pest resistant crop varieties
- 898  Sometimes rotate chemical families (or groups)
- 899  Reduce pest populations through non-chemical means
- 900  Other, specify: \_\_\_\_\_ 901

32 On YOUR FARM, to what extent, if any, are weeds becoming resistant to **HERBICIDES**?

Are weeds becoming ...?

(Check one circle only.)

- 01  Very resistant
- 02  Resistant
- 03  Slightly resistant
- 04  Not resistant
- 09  Don't know

33 On YOUR FARM, to what extent, if any, are insects becoming resistant to **INSECTICIDES**?

Are insects becoming ...?

(Check one circle only.)

- 01  Very resistant
- 02  Resistant
- 03  Slightly resistant
- 04  Not resistant
- 09  Don't know

34 On YOUR FARM, to what extent, if any, are diseases becoming resistant to **FUNGICIDES**?

Are diseases becoming ...?

(Check one circle only.)

- 01  Very resistant
- 02  Resistant
- 03  Slightly resistant
- 04  Not resistant
- 09  Don't know

**STEP 6: Questions about the herbicide, insecticide or fungicide products that you would have liked to use if they had been registered for application on GRAPES in 2005**

35 What are the herbicide, insecticide and fungicide products that were **NOT** registered for use on GRAPES in 2005 that you would have liked to use if they had been registered in your province?

- ▶ List chemical products that are available in other provinces or countries.
- ▶ If necessary, use the comment box on page 8 to provide further details or explanations.

Product name

905  None ▶ Go to question 36.

(If available, enter PCP number or product code found in the Interviewer Reference Guide.)

1		906							907
2		908							909
3		910							911
4		912							913
5		914							915

**STEP 7: Questions about the characteristics of the operator(s) and agricultural operation as of December 31, 2005.**

36 Which of the following best describes this farm operation? 916

(Check one circle only.)

(If the operation is a family or hobby farm, check 1, 2 or 3).

- 01  Sole proprietorship 917
- 02  Corporation (Limited company)
- 03  Partnership
- 04  Cooperative or communal operation (e.g., Hutterite colony)
- 05  Other, specify:

37 Are you the person who looked after the day-to-day crop management decisions on this operation? 918

Yes  01 No  02

38 How many operators (decision-makers) 18 years of age and over were responsible for this operation? .....    919

39 What was the age of:

If there was only one operator, enter the age in the box for Operator 1.

<sup>1</sup> Operator 1? .....    920

<sup>2</sup> Operator 2 (minimum age 18)? .....    921

40 What is the highest level of education completed by the operator(s)?

If there was only one operator, enter the level of education in the box for Operator 1.

922 Operator 1 923 Operator 2

- <sup>1</sup> Some elementary or secondary (high) school (include upgraded and special education) .....  01  01
- <sup>2</sup> Completed secondary (high) school (graduation certificate or equivalent) .....  02  02
- <sup>3</sup> Some post-secondary, including some college or university courses .....  03  03
- <sup>4</sup> Completed college or university certificate or diploma below bachelor level (e.g., trade, technical or vocational school, agricultural diploma, business or community college, CEGEP) .....  04  04
- <sup>5</sup> Completed university degree program (include bachelor's degree and above) .....  05  05

41 How many years has the most experienced operator on this farm managed a farm business? .....   924

**STEP 8: Agreement to share data**

Thank you for taking the time to participate in our survey. In order to avoid duplication, Statistics Canada has entered into a data sharing agreement under Section 12 of the Statistics Act with the three federal government departments listed below to share the responses from this survey. The agreement requires that no names or addresses or any other identifier be shared with these departments and that the information be kept confidential and used only for statistical and research purposes by these three departments.

42 Do you agree to share this information with:

- a) Agriculture and Agri-Food Canada? ..... Yes  01 No  02 925
- b) Health Canada? ..... Yes  01 No  02 926
- c) Environment Canada? ..... Yes  01 No  02 927

In order to extend the research capabilities of this survey, Statistics Canada intends to combine the information from this survey with the 2005 Fruit and Vegetables Survey information that Statistics Canada obtained from your operation.

43 Do you agree that Statistics Canada combines information from this survey with the information you provided on the 2005 Fruit and Vegetables Survey? ..... 928

Yes  01 No  02

44 Would you like to receive a summary report of the survey results? ..... 931

Yes  01 No  02

If "YES" continue to Question 45. If "NO" → Go to Step 9

45 What is your e-mail (or mailing) address? Your address will **NOT** be shared with any other government department.

Enter "MAIL" if the respondent prefers to receive the report by mail.

E-mail address  932



**STEP 9: Operator or interviewer comments**

**46 Farm operator comments**

Check if you wrote comments

 933


**47 Interviewer comments**

Check if you wrote comments

 934


**INTERVIEWER EXIT CHECKLIST**

Interviewer identification number:

N	N	N	N	N	N	N	N
---	---	---	---	---	---	---	---

Number of contacts required:

N	N
---	---

Interview date:

M	M	D	D
---	---	---	---

Travel time to interview location:

H	H	M	M
---	---	---	---

Interview starting time:

H	H	M	M	○ <sup>01</sup> a.m.	○ <sup>02</sup> p.m.	939
---	---	---	---	----------------------	----------------------	-----

Interview finishing time:

H	H	M	M	○ <sup>01</sup> a.m.	○ <sup>02</sup> p.m.	941
---	---	---	---	----------------------	----------------------	-----

Circle fully completed steps

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

DK in the margin for questions "Don't know"

R in the margin for questions refused to answer

All unusual situations are explained in the "Comments" section

A farm status code has been entered on the cover page

A questionnaire status has been entered on the cover page

If you marked "Change of operator", "Out of business", "Refusal", or "No contact" on the cover page, the situation is explained in the "Comments" section in Step 9