Washington State Cherry Pest Management Practices Survey 2000

Endorsed by:

Washington State University
Washington Tree Fruit Research Commission
Washington State Horticultural Association
North Central Washington Fieldmen's Association

Please complete this form and return in the addressed, stamped envelope to:

Pest Management Survey
Attn.: Wendy Jones
WSU Tree Fruit Research & Extension Center
1100 N. Western Ave.
Wenatchee, WA 98801

Survey form ID no:	
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Section I. General description of your orchard operation in 2000.

These are general questions regarding your orchard operations. Please check the box associated with the best answer, or fill in the blank.

Q1.	Which category best describes	your farming acti	vity? (check any that	apply)
	☐ Full-time ☐ Part-time (supplemer ☐ Conventional comme ☐ Organic			
	☐ Transition to organic			
	☐ Other	please specify)		
	(t	please specify)		
Q2.	How many acres of the following (check all that apply and write in nu		you grow in 2000?	
		# Acre	es	
	☐ Apple			
	Pear Pear			
	Cherry			
	Peach			
	☐ Nectarine			
	☐ Prune			
	Other(please specify)			
03.	In which region(s) of the state is/are y		ed? (check all that apply)	
20.			,,	
	☐ Okanogan ☐ Wenatchee	Lower Yakima V		
	Chelan/Manson	Ellensburg	•	
	☐ Columbia Basin	Columbia Gorge	2	
	☐ Tri-Cities	Other		
		(pie	ase specify)	
Q4.	Approximately how many acres of cl	herry varieties did yo	u grow and what was	the yield in
	tons in 2000? (check all that apply and write	te in number of acres and	d tons)	
		# Acres	# Tons	
	☐ Attica			
	Bing			
	Chalan			
	☐ Chelan ☐ Index			
	Lambert			
	Lapins			
	Rainier			
	☐ Skeena			
	Sweetheart			
	Tieton			
	☐ Vans			
	Other			
	(please specify)			

25. In the past five (5) years, has your overall per acre use of pesticides increased, decreased or stayed about the same? (check only one box)								
☐ Increased☐ Decreased☐ Stayed about the same								
Q6. How often, if at all, do you (or y following Integrated Pest Manag			,					
	I	How often is t	he practice used	d				
a. Field monitoring for pests	Often	Sometimes	Seldom	Never				
b. Alternate row middle spraying	Often	Sometimes	s Seldom	Never				
c. Economic/treatment thresholds	Often	Sometimes	Seldom	Never				
d. Biological control	Often	Sometimes	Seldom	Never				
e. Reduced pesticide rates	Often	Sometimes Seldom		Never				
f. Pheromone traps/fruit fly traps	Often	Sometimes	Seldom	Never				
g. Others(please specify)	Often	Sometimes	s Seldom	Never				
(piease specify)								
Q7. How important are each of the decisions? (circle the answer)	following in	making pe	st managem	ient				
· · · · · · · · · · · · · · · · · · ·		Importance	e of information	ı source				
a. Advice from a private consultant	_	Very	Somewhat	Not				
b. Advice from a chemical distribution firm repr	resentative	Very	Somewhat	Not				
c. Recommendations from Cooperative Extensi	on	Very	Somewhat	Not				
d. WSU recommendation in the <i>Crop Protection Tree Fruit in Washington</i>	on Guide for	Very	Somewhat	Not				
e. Information in the book Orchard Pest Mana	gement	Very	Somewhat	Not				
f. Advice from a representative of a packing was service	rehouse field	Very	Somewhat	Not				
g. Consultation with other growers		Very	Somewhat	Not				
h. Other:		Very	Somewhat	Not				
(please specify)								

Section II. Questions specific to your orchard reporting block.

In Sections II and III, you need to choose a single cherry block, and report your pesticide usage on that block. Choose a block that you feel is representative of your operation, specifically of pesticide use. This is the "**reporting block**". Choose an orchard block that is bearing (more than 5 years old). First, please answer a few question about the reporting block:

Q1.	What is the size of your repo	orting block?		_ acres
Q2.	Which age best represents mo (check only one)	ost of the trees	s in the rep	porting block?
	☐ 5-9 years☐ 10-15 years☐ 16-20 years	<u> </u>	24 years 30 years e than 30 yea	nrs
Q3.	In which region of the state is (check only one)	s your reporti	ng block lo	ocated?
	☐ Okanogan☐ Wenatchee☐ Chelan/Manson☐ Columbia Basin☐ Tri-Cities	☐ Lower Ya ☐ Ellensburg	kima Valley Gorge	ify)
Q1.	Which category best describe (check any that apply)	s the farming	activity at	t you reporting block?
	☐ Conventional ☐ Organic ☐ Transition to organ ☐ Other			
Q4. one)	Which tree training system be		the reporti	ng block? (check only
	☐ Open center ☐ Steep le ☐ Central leader ☐ V trelli		Spanish but Other	(please specify)
Q5.	Which irrigation system best	describes the	reporting	block? (check only one)
	☐ Impact sprinkler (u☐ Micro sprinkler (u☐ Other(please s	nder-tree)	□ Drip □ Rill	

Q6.	Which tree spacing (write in # of feet)	<u>best</u> de	escribes your repor	ting bl	ock?		
			_feet between trees in the	he row			
			_feet between rows				
Q7.	What type of groun (check only one box)	d cove	r <u>best</u> describes the	one ii	your reporting	block?	
	☐ No cover crop (all☐ Grass middles, her☐ Solid grass (middles)	bicide st	trips under trees \square C	Mixed wo	(please specify)		
Q8.	What percentage of the reporting block is in the following cherry varieties? (check all that apply and write in %)						
	Variety	%	Variety	%	Variety	%	
	☐ Attica		☐ Index		☐ Skeena		
	☐ Bing		☐ Lambert		☐ Sweetheart		
	☐ Cashmere		☐ Lapins		☐ Tieton		
	☐ Chelan		☐ Rainier		□ Vans		
	Other		☐ Other		□ Other		

Section III. Spray applications to the reporting block.

In this Section, you are asked to provide information on the chemicals you used in your reporting block <u>during the 2000 growing season</u>. Sprays applied to the trees and foliage are in a separate section from herbicide sprays.

Sprays applied to trees and foliage: The year is divided into the major treatment periods (for example: dormant, delayed dormant, cover sprays, etc.), and for each application you are asked for information on the following items (arranged in about this layout):

Date of application Orchard Area Treated

(if any was made)

Type of application equipment Spray Volume/acre

Target of the treatment: (pest/disease/nutrient

deficiency/horticultural condition)

Material used and rate/acre

There is one page per application. This covers *all* materials put into the tank on that pass through the orchard. If you did not put on any sprays during a listed treatment period, simply check the box at the top left hand side of the page under "Date of application" that reads "No xxxxxxx treatment applied". Please put at least that one mark on each page so we know you didn't just skip the page. Most

sections can be answered by simply checking the box in front of the appropriate response.

In the chemical section, we have tried to list the most commonly used chemicals for you; you need

In the chemical section, we have tried to list the most commonly used chemicals for you; you need only write in the amount used. If you use a generically available chemical, check the equivalent trade name listed. (Note: PGR's are Plant Growth Regulators, like thinning and stop-drop materials.)

NOTE THAT AMOUNTS ARE IN RATE PER ACRE...DON'T FORGET TO SPECIFY THE UNITS (POUNDS, FLUID OUNCES, ETC)! Also, please specify the formulation used if not already indicated.

If your selection is not listed, check the "Other" category and write in your answer; or if you have more than one "other", use the blank lines, or the space to the right or in the margins or where ever, using arrows to point; we'll figure it out.

Summer sprays: There are 5 pages labeled "Lt. Green Spray", "Straw Spray", and "1st Cover Spray" through "5th Cover Spray". If you did not put on any summer sprays, indicate this at the top of each page. If you put on certain summer sprays, fill in the information on those pages, and check the upper left section "No 'xxxx' spray treatment applied" on the rest. If you put on more than 5 covers, photocopy a blank sheet, cross out the number, put in the next number (8, 9....?) and fill in the information as appropriate.

<u>Post-harvest sprays</u>: There are 3 pages numbered "Post-harvest Spray #1" through "Post-harvest Spray #3". If you did not put on any post-harvest sprays, indicate this at the top of each page. If you put on only 1, fill in the information on that, and check upper left section "No post-harvest spray treatment applied" on the second page. If you put on more than 3, photocopy a blank sheet, cross out the number, put in the next number (4, 5....?) and fill in the information as appropriate.

<u>Nutrients:</u> There are more formulations of nutrients than can be listed in the space available; we have listed them generically as "zinc" or "boron." Because the amount of active ingredient can vary, please write down either the **exact name of the product,** or the % active ingredient. If the product contains multiple nutrients, just give the **exact product name.**

Adjuvants: You do not have to list adjuvants (e.g., spreaders, stickers, buffers, UV protectants, etc.)

Herbicides: There is a separate section for herbicides; there are spaces for two applications/page. The layout is similar to the other spray application, except there is no "Target" (we're assuming you're spraying for weeds) and no "Orchard Area Treated." This should be obvious from Q8 in Section II, which asked you about your ground cover management.

Cover Spray EXAMPLE

Date of Application			ard Area Tr		
□ No summer spray treatn	nant annlied	⊠ A	ll rows (100% very other row	\bigcirc) \square Borde	ers only
☐ No summer spray treatm☐ Cover spray treatment of		ſav ☐ O	ther	(30%)	% treated
A servery	(date)			(please specify)	. /
A. n	Eastian Ma	-41 _{0.0.0}		Yolumalaana	
Engine-driven sprayer	oplication Me	etnoa ^F ertigation / Chemig		Spray Volume/acre	ral
☐ Engine-dirven sprayer ☐ PTO sprayer		Other		☐ <50 gal ☐ 50 ☑ 100 gal ☐ 15	0 gal
Handgun				200 gal 40	0 gal
☑ Aerial Cythion				Other	
Toward Costion	-11				
Treatment Target Section			1	11 1/II/	1040
Insects/mites 図 Black cherry aphid	<u>Diseases</u> ⊠ Brown	_ / ` \	1 7	disorders/Hort.con fruit firmness /	ditions
☐ Cherry rust mite		neum blight	/ /	rduced cracking	
Green soldier bug		ery mildew	\dashv	-	
leafminer	☐ Unkn		Λ		
☑ leafrollers	Other		∇		
☐ lecanium scale					
☐ San Jose scale		$C(\setminus)$			
shothole borer					
spider mites					
stink bug					
⊠ Western cherry fruit fly □ Unknown	′ ((<i>)</i>	\wedge			
Other					
Chemical Section: check		hemicals and write		plied per acre:	•
<u>Insecticides</u>	Amount/ Acre	Fungicides	Amount/ Acre	Nutrients/PGRs	Amount/ Acre
Apollo /		Abound		☑ Other	
図 Azinphos-methyl 50WP	/ 1 ½b) □	Benlate			
Carbaryl 4L		Captan 50WP	4 Lb		
☑ Curbary 12	1/pt	Indar 25WSP	+		
☑ Diazinon 4EC	4 pt	Orbit Orbit			
☐ Dimethoate 400		micronized sulfur			
Guthion 50WP		Rally 40WP	<u> </u>		
☐ Malathion 8EC		Rovral 50W			
☐ Savey 50WP		Rubigan 1EC	1		
☐ Sevin XLR		Sulforix	1		
Sevin 50WP		wettable sulfur			<u> </u>
Success		Other			
☐ Thiodan 50WP					<u></u>
☐ Vendex 4F					
☐ Vendex 50WP					
☐ Bt*					
Other					

^{*} if you selected Bt as a treatment please write in the **product name** in addition to the amount/acre used.

Dormant Spray

Date of Application ☐ No dormant treatment applied ☐ Dormant treatment on:			☐ All	ery other ro	[7%] □ Be	orders only reated
Application Method ☐ Engine-driven sprayer ☐ Fertigation / Chemigation ☐ PTO sprayer ☐ Other ☐ 100 gal ☐ 150 gal ☐ Handgun ☐ Aerial ☐ Other] 50 gal] 150 gal] 400 gal
Treatment Target Section: check one or more in Insects/mites ☐ Unknown ☐ Other Bacterial gummos ☐ Unknown ☐ Other Other			S	Nutrient zinc de	disorders/Hort. o	nce
Chemical Section: check one or more and write in amount applied per acre:						
Insecticides	Amount/ Acre	Fungicides.		Amount/ <u>Acre</u>	Nutrients/PGI	Amount/ Acre
☐ Other:		copper hydroxi	de		zinc	
		☐ fixed copper ☐ Other:			☐ Other:	

Delayed Dormant Spray

Date of Application ☐ No delayed dormant treatr ☐ Dormant treatment on:		Orchard Area Treated All rows (100%) Borders only Every other row (50%) Other % treated (please specify)
App	lication Method	Spray Volume/acre
☐ Engine-driven sprayer ☐ PTO sprayer ☐ Handgun ☐ Aerial	☐ Fertigation / C☐ Other	hemigation
Treatment Target Section:	check one or more in each	ch category:
Insects/mites ☐ Black cherry aphid ☐ cutworms ☐ spider mites ☐ San Jose scale ☐ lecanium scale ☐ Unknown ☐ Other	Diseases ☐ Coryneum blight ☐ Unknown ☐ Other	Nutrient disorders/Hort. conditions boron deficiency/maintenance zinc deficiency/maintenance Other
Chemical Section: check on	ne or more chemicals and	d write in amount applied per acre:
Insecticides	ount/ Ere <u>Fungicides</u>	Amount/ Acre Nutrients/PGRs Amount/ Acre
☐ Spray oil	Bravo	boron
☐ Apollo	☐ Captan 50WP	
☐ Diazinon 50WP	☐ lime-sulfur	zinc
☐ Lorsban 4EC	☐ Other	
☐ Lorsban 50WP		Other
Supracide 25WP		
☐ Thiodan 3EC		
☐ Thiodan 50WP		
☐ Vendex		
☐ Bt*		

^{*} if you selected Bt as a treatment please write in the **product name** in addition to the amount/acre used.

Pre-bloom Spray

Date of Application ☐ No pre-bloom treatme ☐ Pre-bloom treatment of	on:	 □ A □ E	hard Area Tr Il rows (100% very other row	Borders	•
☐ Engine-driven sprayer ☐ PTO sprayer ☐ Handgun ☐ Aerial	Application	Method Fertigation / Chemi Other	gation [Spray Volume/acre □ <50 gal	gal
Treatment Target Section: check one or more in each category: Insects/mites Diseases Nutrient disorders/Hort. conditions □ Black cherry aphid □ Unknown □ boron deficiency/maintenance □ Cherry rust mite □ Other □ K deficiency/maintenance □ Mg deficiency/maintenance □ N deficiency/maintenance □ P deficiency/maintenance □ zinc deficiency/maintenance □ Insects/mites □ Diseases □ Mg deficiency/maintenance □ Other □ Diseases □ Diseases □ Mg deficiency/maintenance □ Diseases □ Diseases □ Diseases □ Mg deficiency/maintenance □ Diseases □ Diseases □ Diseases □ Mg deficiency/maintenance □ Diseases □ Diseases □ Diseases □ N deficiency/maintenance □ Diseases □ Diseases □ Diseases					
Chemical Section: chec	Amount/	ore chemicals and write Fungicides	Amount/	applied per acre: Nutrients/PGRs	Amount
	<u>Acre</u>		<u>Acre</u>		<u>Acre</u>
☐ Diazinon 50WP ☐ malathion		Other		boron	
☐ Thiodan 3EC				urea	
☐ Thiodan 50WP					
Other				zinc	
				☐ NutraPhos Super K	
				☐ Sorba spray Mg	
				☐ Other	
				☐ Other	I

Blossom Spray

Date of Application ☐ No blossom treatment ☐ Blossom treatment on	:	All □ Ev	ery other ro		-
Application Method Spray Volume/acre □ Engine-driven sprayer □ Fertigation / Chemigation □ <50 gal					e 0 gal 50 gal 00 gal
Treatment Target Secti	on: check o	ne or more in each cate	egory.		
Treatment Target Section: check one or more in each cate Insects/mites Diseases □ Green soldier bug □ Brown rot □ Unknown □ Powdery mildew □ Unknown □ Unknown □ Other □ Other			Nutrient d	lisorders / Hort. con	
Chemical Section: chec	k one or mo	ore chemicals and write	in amount	applied per acre:	
<u>Insecticides</u>	Amount/ Acre	Fungicides	Amount/ Acre	Nutrients/PGRs	Amount/ Acre
☐ Other		☐ Abound		☐ Other	
		Captan 50WP			
		☐ Elite 45DF			
		☐ Indar 75WSP ☐ Orbit			
		☐ micronized sulfur			
		Rally 40WP			
		wettable sulfur			
		☐ Rovral 50W			
		☐ Other			

Petal Fall Spray

Date of Application		Orch	ard Area Tr	eated	
☐ No petal fall treatment a☐ Petal fall treatment on:		\Box Ev	ll rows (100% very other row her	(b) Borders (50%) (please specify)	·
Aı	oplication	Method		Spray Volume/acre	
☐ Engine-driven sprayer ☐ Fertigation / Chemigation ☐ <50 gal					gal gal gal
Treatment Target Sectio	n: check or	ne or more in each cat	egory:		
Insects/mites Diseases □ Black cherry aphid □ Brown rot □ Cherry rust mite □ Powdery mildew □ Green soldier bug □ Unknown □ leafroller □ Other Other			Nutrient disorders/Hort. conditions boron deficiency/maintenance K deficiency/maintenance Mg deficiency/maintenance N deficiency/maintenance P deficiency/maintenance zinc deficiency/maintenance Other		
Chemical Section: check	one or mo	re chemicals and write	e in amount a	applied per acre:	Amount/
<u>Insecticides</u>	Amount Acre	Fungicides	Amount Acre	Nutrients/PGRs	Amount/ Acre
☐ Diazinon 4EC ☐ malathion		☐ spray oil ☐ Abound		boron	
☐ Success		Elite	+	urea	
☐ Thiodan 3EC ☐ Thiodan 50WP		☐ Indar☐ micronized sulfur	r	☐ zinc	
Other		☐ Orbit	<u> </u>		
		☐ Rubigan 1EC		☐ NutraPhos Super K	
		☐ wettable sulfur		☐ Sorba spray Mg	
		Other		Other	
				□ Other	

Shuck-fall Spray

Date of Application ☐ No shuck-fall treatment ☐ Chemical thinning treatment			hard Area T All rows (100° Every other ro Other		-
Engine-driven sprayer ☐ PTO sprayer ☐ Handgun ☐ Aerial	gation	Spray Volume/acre □ <50 gal	0 gal		
Treatment Target Section	on: check o	ne or more in each ca	itegory:		
Insects/mites Diseases □ Black cherry aphid □ Brown rot □ Green soldier bug □ Coryneum □ White apple leafhopper □ Powdery m □ Unknown □ Unknown □ Other □ Other		own rot ryneum blight wdery mildew known ner	boron o K defice Mg decided zinc decided Other	disorders/Hort. cond deficiency/maintenance ciency/maintenance ficiency/maintenance eficiency/maintenance	
Chemical Section: chec	1	ore chemicals and wri		applied per acre:	
<u>Insecticides</u>	Amount/ Acre	Fungicides	Amount/ Acre	Nutrients/PGRs	Amount/ Acre
☐ Diazinon 4EC		spray oil		boron	
☐ Ecozin 3%		☐ Abound			
malathion		☐ Captan 50WP		☐ NutraPhos SuperK	
☐ Sevin 4F		☐ Elite 45DF		☐ Sorba Spray Mg	
☐ Sevin 50WP		☐ micronized sulfu	r	zinc	
☐ Success		☐ Orbit			
☐ Thiodan 3EC		☐ Rally 40W		Other	
☐ Thiodan 50WP		☐ Rubigan 1EC			
☐ Bt*		□ wettable sulfur			
☐ Other		☐ Other			

^{*} if you selected Bt as a treatment please write in the **product name** in addition to the amount/acre used.

Lt. Green Fruit Spray

Date of Application ☐ No ltgreen spray treat ☐ Cover spray treatment	All rows (100 Every other ro	ard Area Treated Il rows (100%)			
Engine-driven sprayer PTO sprayer Handgun Aerial	migation				
Treatment Target Section: check one or more in each category: Insects/mites Diseases Nutrient disorders/Hort. conditions □ Brown rot □ fruit firmness □ fruit sizing □ Green soldier bug □ Powdery mildew □ Other □ leafrollers □ Unknown □ Other □ San Jose scale □ Other □ Other □ shothole borer □ spider mites □ stink bug □ Western cherry fruit fly □ Western cherry fruit fly					
Unknown Other Chemical Section: check		re chemicals and wr			
<u>Insecticides</u>	Amount/ Acre	<u>Fungicides</u>	Amount Acre	Nutrients/PGRs	Amount/ Acre
☐ azinphos-methyl 50WF☐ Carbaryl 4L		spray oil Abound		gibberillic acid	
☐ cythion ☐ Diazinon 4EC ☐ Dimethoate 400 ☐ Guthion 50WP ☐ Malathion 8EC ☐ Sevin XLR ☐ Sevin 50WP ☐ Success ☐ Thiodan 50WP ☐ Vendex 4F ☐ Vendex 50WP		☐ Captan 50WP ☐ Indar 25WSP ☐ Orbit ☐ micronized sulf ☐ Rally 40WP ☐ Rovral 50W ☐ Rubigan 1EC ☐ Sulforix ☐ wettable sulfur ☐ Other	ùr	Other	
Bt*					

^{*} if you selected Bt as a treatment please write in the **product name** in addition to the amount/acre used.

Straw Fruit Spray

Date of Application			chard Area Treated				
☐ No straw-fruit spray tre ☐ Cover spray treatment	on:	olied $\overline{\square}$ Ev	All rows (100%)				
Engine-driven sprayer PTO sprayer Handgun Aerial	gation ——	Spray Volume/acre					
Treatment Target Section	n: check or	ne or more in each cate	gory:				
Insects/mites □ Black cherry aphid □ Cherry rust mite □ Green soldier bug □ leafrollers □ lecanium scale □ San Jose scale □ shothole borer □ spider mites □ stink bug □ Western cherry fruit fly □ Unknown □ Other							
Chemical Section: check	one or mo	re chemicals and write	in amount a	nnlied per acre:			
<u>Insecticides</u>	Amount/ Acre	<u>Fungicides</u>	Amount Acre		Amount/ Acre		
azinphos-methyl 50WF		spray oil		gibberillic acid			
☐ Carbaryl 4L		☐ Abound					
cythion		Captan 50WP		☐ Other			
☐ Diazinon 4EC		☐ Indar 25WSP			1		
☐ Dimethoate 400		☐ Orbit					
Guthion 50WP		micronized sulfur					
☐ Malathion 8EC		Rally 40WP					
Sevin XLR		Rovral 50W					
☐ Sevin 50WP		☐ Rubigan 1EC					
Success		Sulforix					
☐ Thiodan 50WP		wettable sulfur					
☐ Vendex 4F		Other					
☐ Vendex 50WP							
☐ Bt*							
☐ Other							

^{*} if you selected Bt as a treatment please write in the **product name** in addition to the amount/acre used.

1st Cover Spray

			All rows (hard Area Treated All rows (100%) Borders only			
☐ No cover spray treatment	on:		Every other		(50%) (please specify)	% treated	
Engine-driven sprayer PTO sprayer Handgun Aerial	pplication [[Method ☐ Fertigation / Cher ☐ Other		S	pray Volume/acre] <50 gal	0 gal	
Treatment Target Section	on: check o	one or more in each of	eategory:				
Insects/mites ☐ Black cherry aphid ☐ Cherry rust mite ☐ Green soldier bug ☐ leafminer ☐ leafrollers ☐ lecanium scale ☐ San Jose scale ☐ shothole borer ☐ spider mites ☐ stink bug ☐ Western cherry fruit fl ☐ Unknown ☐ Other	Co Pov Un Otl	ses own rot ryneum blight wdery mildew known ner			isorders/Hort. cond		
Chemical Section: check		ore chemicals and w			oplied per acre:	I A 4/	
<u>Insecticides</u>	Amount/ <u>Acre</u>	<u>Fungicides</u>	Amo Ac		Nutrients/PGRs	Amount/ Acre	
☐ Apollo		spray oil					
azinphos-methyl 50WF		☐ Abound			Other		
☐ Carbaryl 4L		☐ Captan 50WP					
cythion		☐ Indar 25WSP					
☐ Diazinon 4EC		☐ Orbit					
☐ Dimethoate 400		micronized sulf	ur				
☐ Guthion 50WP		☐ Rally 40WP					
☐ Malathion 8EC		☐ Rovral 50W					
☐ Savey 50WP		☐ Rubigan 1EC					
Sevin XLR		☐ Sulforix					
☐ Sevin 50WP		wettable sulfur					
Success		Other					
☐ Thiodan 50WP							
☐ Vendex 4F							
☐ Vendex 50WP							
☐ Bt*							
☐ Other				<u> </u>		 	

^{*} if you selected Bt as a treatment please write in the **product name** in addition to the amount/acre used.

2nd Cover Spray

			All rows (hard Area Treated All rows (100%) Borders only			
☐ No cover spray treatment	on:		Every other		(50%) (please specify)	% treated	
Engine-driven sprayer PTO sprayer Handgun Aerial	pplication [[Method ☐ Fertigation / Cher ☐ Other		S	pray Volume/acre] <50 gal	0 gal	
Treatment Target Section	on: check o	one or more in each of	eategory:				
Insects/mites ☐ Black cherry aphid ☐ Cherry rust mite ☐ Green soldier bug ☐ leafminer ☐ leafrollers ☐ lecanium scale ☐ San Jose scale ☐ shothole borer ☐ spider mites ☐ stink bug ☐ Western cherry fruit fl ☐ Unknown ☐ Other	Co Pov Un Otl	ses own rot ryneum blight wdery mildew known ner			isorders/Hort. cond		
Chemical Section: check		ore chemicals and w			oplied per acre:	I A 4/	
<u>Insecticides</u>	Amount/ <u>Acre</u>	<u>Fungicides</u>	Amo Ac		Nutrients/PGRs	Amount/ Acre	
☐ Apollo		spray oil					
azinphos-methyl 50WF		☐ Abound			Other		
☐ Carbaryl 4L		☐ Captan 50WP					
cythion		☐ Indar 25WSP					
☐ Diazinon 4EC		☐ Orbit					
☐ Dimethoate 400		micronized sulf	ur				
☐ Guthion 50WP		☐ Rally 40WP					
☐ Malathion 8EC		☐ Rovral 50W					
☐ Savey 50WP		☐ Rubigan 1EC					
Sevin XLR		☐ Sulforix					
☐ Sevin 50WP		wettable sulfur					
Success		Other					
☐ Thiodan 50WP							
☐ Vendex 4F							
☐ Vendex 50WP							
☐ Bt*							
☐ Other				<u> </u>		 	

^{*} if you selected Bt as a treatment please write in the **product name** in addition to the amount/acre used.

3rd Cover Spray

			All rows (hard Area Treated All rows (100%) Borders only			
☐ No cover spray treatment	on:		Every other		(50%) (please specify)	% treated	
Engine-driven sprayer PTO sprayer Handgun Aerial	pplication [[Method ☐ Fertigation / Cher ☐ Other		S	pray Volume/acre] <50 gal	0 gal	
Treatment Target Section	on: check o	one or more in each of	eategory:				
Insects/mites ☐ Black cherry aphid ☐ Cherry rust mite ☐ Green soldier bug ☐ leafminer ☐ leafrollers ☐ lecanium scale ☐ San Jose scale ☐ shothole borer ☐ spider mites ☐ stink bug ☐ Western cherry fruit fl ☐ Unknown ☐ Other	Co Pov Un Otl	ses own rot ryneum blight wdery mildew known ner			isorders/Hort. cond		
Chemical Section: check		ore chemicals and w			oplied per acre:	I A 4/	
<u>Insecticides</u>	Amount/ <u>Acre</u>	<u>Fungicides</u>	Amo Ac		Nutrients/PGRs	Amount/ Acre	
☐ Apollo		spray oil					
azinphos-methyl 50WF		☐ Abound			Other		
☐ Carbaryl 4L		☐ Captan 50WP					
cythion		☐ Indar 25WSP					
☐ Diazinon 4EC		☐ Orbit					
☐ Dimethoate 400		micronized sulf	ur				
☐ Guthion 50WP		☐ Rally 40WP					
☐ Malathion 8EC		☐ Rovral 50W					
☐ Savey 50WP		☐ Rubigan 1EC					
Sevin XLR		☐ Sulforix					
☐ Sevin 50WP		wettable sulfur					
Success		Other					
☐ Thiodan 50WP							
☐ Vendex 4F							
☐ Vendex 50WP							
☐ Bt*							
☐ Other				<u> </u>		 	

^{*} if you selected Bt as a treatment please write in the **product name** in addition to the amount/acre used.

4th Cover Spray

			All rows (hard Area Treated All rows (100%) Borders only			
☐ No cover spray treatment	on:		Every other		(50%) (please specify)	% treated	
Engine-driven sprayer PTO sprayer Handgun Aerial	pplication [[Method ☐ Fertigation / Cher ☐ Other		S	pray Volume/acre] <50 gal	0 gal	
Treatment Target Section	on: check o	one or more in each of	eategory:				
Insects/mites ☐ Black cherry aphid ☐ Cherry rust mite ☐ Green soldier bug ☐ leafminer ☐ leafrollers ☐ lecanium scale ☐ San Jose scale ☐ shothole borer ☐ spider mites ☐ stink bug ☐ Western cherry fruit fl ☐ Unknown ☐ Other	Co Pov Un Otl	ses own rot ryneum blight wdery mildew known ner			isorders/Hort. cond		
Chemical Section: check		ore chemicals and w			oplied per acre:	I A 4/	
<u>Insecticides</u>	Amount/ <u>Acre</u>	<u>Fungicides</u>	Amo Ac		Nutrients/PGRs	Amount/ Acre	
☐ Apollo		spray oil					
azinphos-methyl 50WF		☐ Abound			Other		
☐ Carbaryl 4L		☐ Captan 50WP					
cythion		☐ Indar 25WSP					
☐ Diazinon 4EC		☐ Orbit					
☐ Dimethoate 400		micronized sulf	ur				
☐ Guthion 50WP		☐ Rally 40WP					
☐ Malathion 8EC		☐ Rovral 50W					
☐ Savey 50WP		☐ Rubigan 1EC					
Sevin XLR		☐ Sulforix					
☐ Sevin 50WP		wettable sulfur					
Success		Other					
☐ Thiodan 50WP							
☐ Vendex 4F							
☐ Vendex 50WP							
☐ Bt*							
☐ Other				<u> </u>		 	

^{*} if you selected Bt as a treatment please write in the **product name** in addition to the amount/acre used.

5th Cover Spray

☐ No cover spray treatment applied ☐ I			☐ All	Chard Area Treated All rows (100%)			
☐ Engine-driven sprayer ☐ PTO sprayer ☐ Handgun ☐ Aerial		Method Fertigation / C Other	hemiga	ntion	Spray Volume/acre	60 gal	
Treatment Target Section	on: check c	one or more in ea	ch cate	gory.			
Insects/mites ☐ Black cherry aphid ☐ Cherry rust mite ☐ Green soldier bug ☐ leafminer ☐ leafrollers ☐ lecanium scale ☐ San Jose scale ☐ shothole borer ☐ spider mites ☐ stink bug ☐ Western cherry fruit fl ☐ Unknown ☐ Other	Disea Bro Co Por Un Otl			Nutrient o	lisorders/Hort. cond		
	1	1 . 1	1	. ,	1: 1		
Chemical Section: chec	Amount/	Fungicide		Amount/	Nutrients/PGRs	Amount/	
	<u>Acre</u>		<u> </u>	<u>Acre</u>	Nuti lelits/FGRS	<u>Acre</u>	
Apollo		spray oil					
azinphos-methyl 50WF		Abound	'D		Other	+	
☐ Carbaryl 4L		☐ Captan 50W☐ Indar 25WS					
☐ cythion ☐ Diazinon 4EC		☐ Indai 23 w S	Г				
Diazilion 4EC Dimethoate 400		☐ micronized s	ալքաբ				
Guthion 50WP		Rally 40WP					
☐ Malathion 8EC		Rovral 50W					
Savey 50WP		☐ Rubigan 1E0					
Sevin XLR		☐ Sulforix					
Sevin 50WP		wettable sulf	ur			†	
Success		Other					
☐ Thiodan 50WP							
☐ Vendex 4F							
☐ Vendex 50WP							
☐ Bt*							
Other							

^{*} if you selected Bt as a treatment please write in the **product name** in addition to the amount/acre used.

Pre-Harvest Spray

Date of Application ☐ No pre-harvest spray treat ☐ Pre-harvest spray treat	ll rows (100%)						
Application Method ☐ Engine-driven sprayer ☐ Fertigation / Chemiga ☐ PTO sprayer ☐ Other ☐ Handgun ☐ Aerial				Spray Volume/a □ <50 gal	□ 50 gal		
Treatment Target Section: check one or more in each category:							
Insects/mites Diseases □ grasshoppers □ Brown rot □ Green soldier bugs □ Powdery mildew □ Unknown □ Other			☐ fruit fi☐ Other				
Chemical Section: check	Amount/ Acre	Fungicides	Amount/ Acre	Nutrients/PG	Rs Amount/		
Cythion	ACIE	☐ Abound	Acre	calcium chlor			
malathion		☐ Benlate		Other			
☐ Pyrenone		☐ Elite 45DF					
☐ Sevin 4F		☐ Indar					
☐ Success		☐ micronized sulfur					
☐ Other		☐ Orbit					
		Rally 40W					
		☐ Rubigan 1EC					
		☐ Sulforix					

Harvest Spray

Date of Application ☐ No pre-harvest spray t ☐ Pre-harvest spray trea	ard Area Treated I rows (100%)						
☐ Engine-driven sprayer ☐ PTO sprayer ☐ Handgun ☐ Aerial	Spray Volume/acre						
Treatment Target Section: check one or more in each category:							
Insects/mites Diseases □ grasshoppers □ Brown rot □ Green soldier bugs □ Powdery mildew □ Unknown □ Other □ Other □ Other			☐ fruit fir☐ Other				
Chemical Section: chec	Amount/	nore chemicals and write Fungicides	Amount/	applied per acre: Nutrients/PGRs	Amount/		
Cythion	<u>Acre</u>	Abound	<u>Acre</u>	calcium chloride	<u>Acre</u>		
☐ Cythlon ☐ malathion		☐ Benlate		Other			
☐ Pyrenone		☐ Elite 45DF					
☐ Sevin 4F		☐ Indar					
Success		☐ micronized sulfur					
Other		☐ Orbit					
		☐ Rally 40W					
		☐ Rubigan 1EC					
		Sulforix					
		☐ Other					

1st Post-Harvest Spray

☐ No post-harvest spray treatment applied ☐ E				hard Area Treated All rows (100%)			
Application Method ☐ Engine-driven sprayer ☐ Fertigation / Chemig				otion	Spray Vol		gal
☐ PTO sprayer ☐ Handgun ☐ Aerial	Fertigation / Chemiga Other			100 gal			gai) gal) gal
Treatment Target Section: check one or more in each category:							
Insects/mites ☐ Green soldier bug ☐ Coryneum blight ☐ leafrollers ☐ Powdery mildew ☐ shothole borer ☐ Unknown ☐ Western cherry fruit fly ☐ Other ☐ Unknown ☐ Other				Nutrient disorders/Hort. conditions ☐ Other			
Chemical Section: check	one or mo	ore chemicals ar	nd write	in amount	applied per	acre:	
<u>Insecticides</u>	Amount / <u>Acre</u>	Fungicid	es	Amount / Acre	Nutrien	ts/PGRs	Amount /Acre
☐ Spray oil		☐ Spray oil			Other		
azinphos-methyl 50WF		☐ Captan					
☐ Dimethoate 400		☐ Sulforix					
☐ Guthion 50WP		Other					
Omite							
☐ Thiodan 50WP							
☐ Vendex 50WP							
☐ Bt*							
* if you selected Bt as a tree	atment plea	se write in the n	roduct	name in add	lition to the	amount/acre	used.

2nd Post-Harvest Spray

□ No post-harvest spray treatment applied □				chard Area Treated All rows (100%)			
		,				27	
Application Method Engine-driven sprayer			Chemiga	Spray Volume/acre gation □ <50 gal □ 50 gal □ 150 gal □ 150 gal □ 200 gal □ 400 gal □ 400 gal □ 150 gal □ 150 gal □ 200 gal □ 150			
☐ Aerial					Other		
Treatment Target Section: check one or more in each category:							
Insects/mites ☐ Green soldier bug ☐ leafrollers ☐ shothole borer ☐ spider mites ☐ Western cherry fruit fluid Unknown ☐ Other	cts/mites Freen soldier bug Fr			Nutrient disorders/Hort. conditions ☐ Other			
Chemical Section: check	one or mo	ore chemicals ar	nd write	in amount	applied per ac	cre:	
<u>Insecticides</u>	Amount / <u>Acre</u>	Fungicid	es	Amount /Acre	Nutrients	/PGRs	Amount /Acre
☐ Spray oil		☐ Spray oil			Other		
azinphos-methyl 50WF		☐ Captan					
☐ Dimethoate 400		☐ Sulforix					
☐ Guthion 50WP		Other					
☐ Omite							
☐ Thiodan 50WP							
☐ Vendex 50WP							
☐ Bt*							
* if you selected Bt as a tre	eatment plea	se write in the n	roduct	name in add	lition to the an	nount/acre	e used.

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3rd Post-Harvest Spray

Date of Application ☐ No post-harvest spray treatment applied ☐ post-harvest spray treatment on:			Orchard Area Treated All rows (100%) Borders only Every other row (50%) Other % treated (please specify)					
Application Method Engine-driven sprayer Fertigation / C PTO sprayer Other Handgun Aerial				ation	Spray Volu		gal) gal) gal	
Treatment Target Section: check one or more in each category:								
Insects/mites ☐ Green soldier bug ☐ leafrollers ☐ shothole borer ☐ spider mites ☐ Western cherry fruit fly ☐ Unknown ☐ Other				Nutrient disorders/Hort. conditions Other				
Chemical Section: chec	k one or mo	ore chemicals an	nd write	in amount	applied per a	acre:		
<u>Insecticides</u>	Amount / Acre	<u>Fungicid</u>	les	Amount / Acre	Nutrient	s/PGRs	Amount / Acre	
☐ Spray oil		☐ Spray oil			Other _			
azinphos-methyl 50WF		☐ Captan						
☐ Dimethoate 400		☐ Sulforix						
☐ Guthion 50WP		Other						
☐ Omite								
☐ Thiodan 50WP								
☐ Vendex 50WP								
☐ Bt*								
☐ Other								

^{*} if you selected Bt as a treatment please write in the **product name** in addition to the amount/acre used.

Herbicides: Pre-bloom

Date of Application												
☐ No pre-bloom herbicide	on:											
Application Method				y Volume/a	acre							
☐ Boom sprayer ☐ Other				☐ <50 gal ☐ 100 gal ☐ Other								
Chemical Section: check one or more chemicals and write in amount applied per acre:												
<u>Herbicides</u>	Amount/ Acre	Herbicides (co		Amount/ Acre	Herbicides (cont.)	Amount/ Acre						
☐ Casaron		☐ Round-up			☐ Touchdown							
☐ Goal 2XL		☐ Solicam DF			☐ Weedar 64							
☐ Gramoxone		☐ Surflan AS			☐ Other							
☐ Other		Other			☐ Other							
Herbicides: Summer (#1) Date of Application No summer herbicide applied Summer herbicide on:												
Application Method				Spray Volume/acre								
☐ Boom sprayer ☐ Other	 20 gal 40 gal Other _		☐ 30 gal ☐ 50 gal									
Chemical Section: che	eck one or r	nore chemicals	s and write	e in amount	applied per acre:							
Herbicides	Amount/ Acre	Herbicides (cont.)		Amount/ Acre	Herbicides (cont.)	Amount/ Acre						
Gramoxone		☐ Round-up			☐ Rely							
□ Weedar 64					□ Other							

Herbicides: Summer (#2)

Date of Application											
☐ No summer herbicide applied ☐ Summer herbicide on:											
Application Method				Spray Volume/acre							
☐ Boom sprayer ☐				20 gal							
Chemical Section: check one or more chemicals and write in amount applied per acre:											
Herbicides Amount/ Acre Herbicides (c			ont.)	Amount/ Acre	Herbicides (cont.)	Amount/ Acre					
Gramoxone		☐ Round-up			☐ Rely						
☐ Weedar 64		☐ Touchdown	l		☐ Other	_					
Herbicides: Post-harvest Date of Application □ No post-harvest herbicide applied □ Post-harvest herbicide on:											
		(uate)	_ 								
Application Method Boom sprayer Other			□ <5 □ 10	y Volume/2 50 gal 90 gal her	acre						
☐ Boom sprayer			□ <5 □ 10 □ Oth	50 gal 90 gal her							
☐ Boom sprayer ☐ Other			<5 10 Oth	50 gal 90 gal her		Amount/ Acre					
Boom sprayer Other Chemical Section: che	eck one or n	more chemicals	<5 10 Oth	60 gal 90 gal her e in amount	applied per acre:						
Boom sprayer Other Chemical Section: che	eck one or n	more chemicals	<5 10 Oth and write	60 gal 90 gal her e in amount	applied per acre: Herbicides (cont.)						