



SPRAYER COMPARISON - HOPS

On Target Conventional Sprayers

 **1 TRACTORS**

 **1 WORKERS**

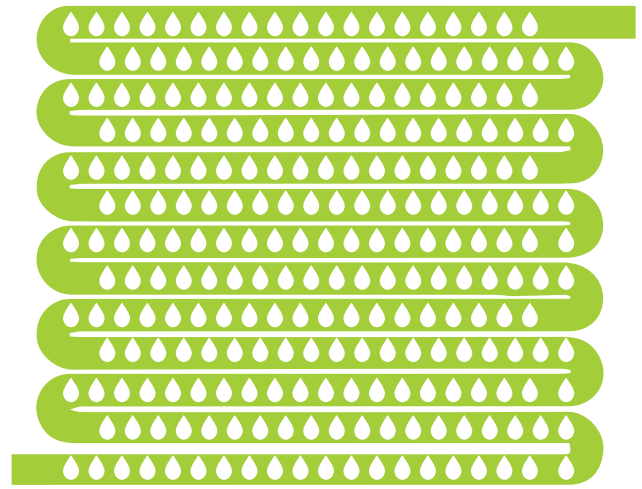
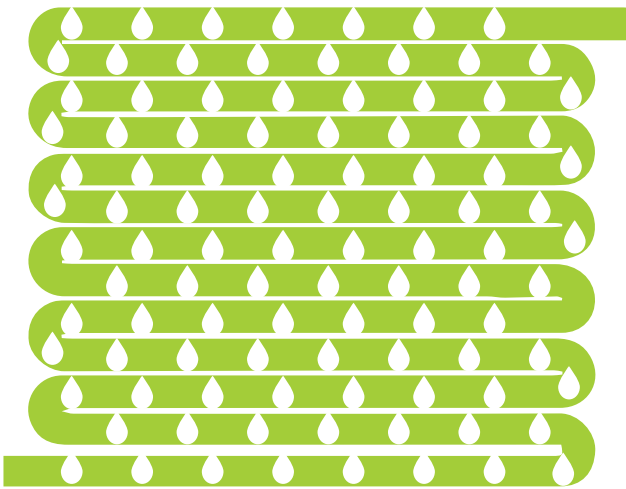
 **1 SPRAYERS**

VS

    **4 TRACTORS**

    **4 WORKERS**

    **4 SPRAYERS**



ON TARGET GPA

100 TANK REFILLS (rounded)

1,000 acres x 40 GPA = 40,000 gallons of water
40,000 gallons of water/400 gallon tank = 100 tank refills

TANK SIZE	MPH	# OF ROWS	ROW WIDTH
400 gal.	3	1	12 ft


CONVENTIONAL GPA


250 TANK REFILLS (rounded)


1,000 acres x 100 GPA = 100,000 gallons of water
100,000 gallons of water/400 gallon tank = 250 tank refills


TANK SIZE	MPH	# OF ROWS	ROW WIDTH
400 gal.	2.5	1	12 ft

On Target vs Conventional Sprayers

MODEL		TANK SIZE	MPH	ROWS	WIDTH	ACRES	APPLICATIONS	WATER GPA
	On Target	400 gal.	3	1	12 ft	1,000	12	40
	Conventional	400 gal.	2.5	1	12 ft	1,000	12	100

WATER		GALLONS		TANK FILLS	ON TARGET TOTAL SAVINGS:		
		On Target	480,000	100	<table border="1"> <tr> <td>One Season</td> <td>Five Seasons</td> </tr> <tr> <td>720,000 gallons 150 fewer refills</td> <td>3,600,000 gallons 750 fewer refills</td> </tr> </table>	One Season	Five Seasons
One Season	Five Seasons						
720,000 gallons 150 fewer refills	3,600,000 gallons 750 fewer refills						
Conventional	1,200,000	250					

LABOR		HOURS (Rate)		COST	ON TARGET TOTAL SAVINGS:		
		On Target	3,960 (\$20)	\$79,200	<table border="1"> <tr> <td>One Season</td> <td>Five Seasons</td> </tr> <tr> <td>\$46,800</td> <td>\$234,000</td> </tr> </table>	One Season	Five Seasons
One Season	Five Seasons						
\$46,800	\$234,000						
Conventional	6,300 (\$20)	\$126,000					

DIESEL		GALLONS		COST	ON TARGET TOTAL SAVINGS:		
		On Target	10,056	\$35,196	<table border="1"> <tr> <td>One Season</td> <td>Five Seasons</td> </tr> <tr> <td>\$53,004 15,144 gallons</td> <td>\$265,020 75,720 gallons</td> </tr> </table>	One Season	Five Seasons
One Season	Five Seasons						
\$53,004 15,144 gallons	\$265,020 75,720 gallons						
Conventional	25,200	\$88,200					

TOTAL SAVINGS:	ON TARGET TOTAL SAVINGS:	
		One Season
	\$99,804	\$499,020

Labor Savings Details	On Target	Conventional
Labor per row	5 mins.	6mins.
Labor required to spray field once	229.2 hrs.	275 hrs.
Tank Fills required to spray field once	100	250
Labor required to fill tank once	30 mins.	30 mins.
Total fill time	50 hrs.	125 hrs.
Acres sprayed per hour	3.6 scres/hr	2.5 acres/hr
Labor required to spray one acre	.28 hrs.	.4 hrs.
Total acrea sprayed per season	12,000 acres	12,000 acres
Total labor spent filling per season	600 hrs.	1,500 hrs.
Total labor to spray field once, including filling	279.2 hrs.	400 hrs.
Total labor spraying per season	3,360 hrs.	4,800 hrs.

Water Savings Details	On Target	Conventional
Sprayer tank fills required	100	250
Water required for one field pass	40,000 gal.	100,000 gal.

Diesel Savings Details	On Target	Conventional
Gallons of fuel required for field	838 gal.	2,100 gal.
Cost of fuel per acre	\$2.93	\$7.35
Total cost of diesel for one field pass	\$2,933	\$7,350
Total acres sprayed per season	12,000 acres	12,000 acres
Total cost of diesel per season	\$35,196	\$88,200

Materials Savings Details	On Target	Conventional
Total acres sprayed per season	12,000 acres	12,000 acres
Average material cost per season	\$720,000	\$720,000