

CITRUS

1,000 ACRES

CASE STUDY

CONTACT US

Tel : (503) 329-8120
info@OnTargetSpray.com
OnTargetSpray.com



Background

In California, managing pest control for 324,000 acres of citrus poses significant operational and environmental challenges.

Growing pains currently facing air-blast sprayers.

- ▶ Labor shortages
- ▶ Fuel prices
- ▶ Increased regulation
- ▶ Tank refill time
- ▶ Water use efficiency

This leads to higher costs and time-intensive applications.

In contrast, OnTarget sprayers offer a modernized approach designed to **optimize resources, improve efficiency, and enhance environmental stewardship.**

1,000 Acres- One Season Comparison		Air Blast	OnTarget Sprayer
Sprayer Tank Size	(Gallons)	600	600
Ground Speed While Spraying	(Miles Per Hour)	2.25	2.75
Water Used Per Acre	(Gallons)	300	50
Row Width	(Feet)	20	20
Boom Configuration	(# of Rows)	1	1
Fuel Consumption	(Gallons Per Hour)	6	3
Percentage of Label Rate Actually Used	(% Per Acre)	100%	100%

Total savings with OnTarget Sprayers:

\$245,994

Trial Operation

Average Spray Applications Per Season	#	14
Cost of Fuel	(\$ Per Gallon)	\$4.25
Cost of Material	(\$ Per Acre)	\$75
Cost of Labor	(\$ Per Hour)	\$20
Field Size	(Acres)	10,000
Percentage of Label Rate Actually Used	(Acres)	100%

Time

Air Blast     9,520 Hrs

OnTarget  3,248 Hrs

6,272 Hours Saved

Water

Air Blast     4,200,000 Gallons

OnTarget  700,000 Gallons

3,500,000 Gallons Saved

Fuel

Air Blast     \$155,064

OnTarget  \$34,510

\$120,554 Saved

Material

Air Blast   \$1,050,000

OnTarget   \$1,050,000

\$0 Saved

Labor

Air Blast     \$ 190,400

OnTarget   \$64,960

\$125,440 Saved



Time Savings Details

	Air Blast Sprayer	OnTarget Sprayer
Time Per Row	6.7 Minutes	5.5 Minutes
Time Required to Spray Field Once	184.3 Hours	151.3 Hours
Tank Fills Required to Spray Field Once	500	84
Time Required to Fill Tank Once	30 Minutes	30 Minutes
Total Fill Time	250 Hours	42 Hours
Acres Sprayed Per Hour	2.3 Acres/Hr	5.2 Acres/Hr
Acres Sprayed Per Tank	2 Acres/Tank	12 Acres/Tank
Total Acres Sprayed Per Season	14,000 Acres	14,000 Acres
Total Time Spent Filling Per Season	3,500 Hours	588 Hours
Total Time Spraying Per Season	6,020 Hours	2,660 Hours



Water Savings Details

	Air Blast Sprayer	OnTarget Sprayer
Sprayer Tank Fills Required	500	84
Water Required for One Field Pass	300,000 Gallons	50,000 Gallons



Fuel Savings Details

	Air Blast Sprayer	OnTarget Sprayer
Gallons of Fuel Required for Field	2,606 Gallons	580 Gallons
Cost of Fuel Per Acre	\$11.08	\$2.47
Total Cost of Fuel for One Field Pass	\$11,076	\$2,465
Total Acres Sprayed Per Season	14,000 Acres	14,000 Acres
Total Cost of Fuel Per Season	\$15,5064	\$34,510



Material Savings Details

	Air Blast Sprayer	OnTarget Sprayer
Total Acres Sprayed Per Season	14,000 Acres	14,000 Acres
Average Material Cost Per Season	\$1,050,000	\$1,050,000



Case study

Citrus

1,000
Acres



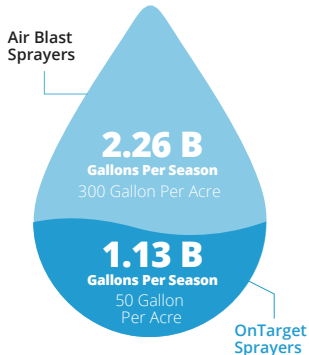
Make the Switch

Unlock Massive Savings
for the California Citrus
Industry!

01

Water Savings

1.34 B
Gallons Saved
Per Season

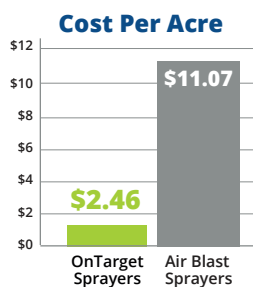


02

Fuel Efficiency

\$39 M
in Fuel Costs

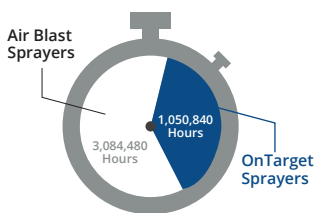
This reduction minimizes emissions and operational expenses, directly benefiting both the environment and the bottom line.



03

Labor Reduction

2 M
Hours Saved
Per Season



APPLICATION TIMES

\$40.6 M
Savings

04

Overall Cost Savings

\$79.7 M
Per Season

These savings demonstrate the financial viability and operational benefits of transitioning to OnTarget technology.





Conclusion:

The OnTarget Transformation

By switching to OnTarget sprayers, California citrus growers can significantly cut resource consumption, lower costs, and achieve sustainability goals. Outperforming traditional sprayers, OnTarget technology enhances scalability, maximizes financial savings, and establishes itself as an essential tool for modern citrus farming.

**TRY IT
FOR
FREE!**

OnTarget Spray Systems

395 South Main Street
Mt. Angel, OR 97362
Ph.: (503) 996-1101
Cel: (503) 329-8120
Willie@OnTargetSpray.com
www.OnTargetSpray.com

We extend our sincere gratitude to the following contributors to this case study:

- The Nebraska Tractor Test Laboratory for their rigorous testing and data.
- All the growers and clients using Air Blast and OnTarget Sprayers for their valuable feedback and real-world applications.
- Researchers at USDA ARS and UC ANR for confirming grower standards and providing critical validation.
- The OnTarget Sprayer calculator team for their efforts in showcasing performance differences.

