



JOHN DEERE



February 2025 Recommendations

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See & Spray Support Line (308) 856-3026

- ALWAYS CHECK YOUR CHEMICAL LABEL – THE LABEL IS THE LAW!
- STRONGLY DISCOURAGE the use of any tips less than 80 Degree fan due to the great chance of missing weeds.
- There is a strong correlation to the tips you use and how well See & Spray does. Pressure, Droplet Size, Coverage, GPA of carrier are all important.

## LandMark's Checklist for Success with See & Spray

Our focus to success is targeting weeds and killing them as the #1 priority; saving chemical is #2. We want clean fields.

### Preparing the Sprayer

- Choose the correct tips – consult your chemical label
  - Due to the concern with occlusion 100 to 120 degree tips are recommended to get effective overlap and minimize missed weeds. (See cross row occlusion on page 8.)
  - Coverage is key with tough weeds
    - 15+ GPA is best
    - Smaller droplets provide better coverage – follow the label
  - All See & Spray tips need to be facing rearward with Incline adapter (adapter not required with 3D tips)

### Build a good chemical program

- A strong / effective pre-emergent chemical program is key

### Recommended Sprayer Settings

- Spray Sensitivity
  - HIGH – for normal spraying
  - HIGHEST – for fields with velvet leaf
  - Highest is the closest to broadcast, anything less will intentionally ignore weeds.
- Buffer Settings
  - Width – Small
  - Length – Small
  - Increased based on wind. If the wind is blowing enough to carry your spray off target increase the buffer settings.
- BoomTrac
  - Adjust target boom height to 20" above the canopy height
    - Boom height is 20" above the target (ground or canopy). If the crop is 8" tall, target boom height is 28".
    - Recommend staying between 26 and 47" boom height from the ground.
  - Ultimate machines – Canopy Assist Mode is available to help in uneven canopies and cross row applications
  - Adjust responsiveness to where it stays on target best.
- Fallback Mode
  - Set to Broadcast
  - Fallback can be caused by one of the following reasons - Boom Height, Nozzle Speed, Camera Health, Nozzle moving in reverse.
    - More detail on the fallback occurrences can be found at - Menu / System / Diagnostics Center / System Diagnostics / See & Spray - Image Processor / Camera / Diagnostic History / Fallback Mode History
- Other important settings
  - Make sure you have selected the correct crop type on the Sprayer Setup App
  - Verify that the tips selected in the setup are the actual tips you are using.

# LandMark's Checklist for Success with See & Spray (continued)

## In Field Recommendations

- Don't let the crop or the weeds get ahead of you.
  - System performs better the smaller the crop canopy. Less chances for missed weeds.
    - If the crop is too large, shutting off See & Spray and going to Broadcast may be the best option, verses risking a respray when the weeds are bigger and even harder to kill.
- Pay attention to your machine speed.
  - Premium machines are limited to 12 MPH traveling with the rows or at an angle. Over 12 MPH you will go to fallback.
  - Ultimate machines are limited to 15 MPH however -
    - Traveling with the row 15 MPH is ok.
    - Traveling at an angle to the row you need to reduce your max speed to 12 MPH to have the best performance. **HOWEVER** – fallback doesn't engage until 15 MPH. If you are traveling at speeds between 12 and 15 MPH you risk missing weeds when spraying at an angle.
- Rows
  - Spacing – Minimum of 15" in soybeans is approved.
  - Cross Row Spraying
    - Soybeans - NEVER spray at more than a 30 degree angle to the row.
      - Slower speeds and lower row angles will reduce the occurrence of a camera occlusion (see page 8).
      - Spraying across rows allow weeds to partially hide behind crop
      - If the sprayer doesn't see the weed it won't spray the weed.
    - Corn – Cross Row spraying is not recommended
    - Headlands – pay attention to the row direction in your headlands especially. You could unintentionally spray some of your headlands at an angle greater than 30 degrees and cause missed weeds. Best recommendation would be to switch to broadcast or slow down to give the cameras more time.
- Record Field Conditions
  - If problems arise everything will be questioned. If you have taken the following notes it would be very helpful
    - Crop Height / Stage
    - Angle sprayed to the row
    - Wind Speed and Direction
    - Temperature / Humidity
    - Target boom height
    - Chemicals used and rates
    - Spray tips used – See & Spray boom especially
    - Any other pertinent information

## Follow Up

- Walk your fields within 24 to 36 hours after spraying.
  - Are the weeds dying?
  - Are there misses?
  - Use the weed pressure maps in Ops Center to identify areas in the field that had the most weed pressure to target the part of the field to walk and check.
- Remember, this is new technology and we want you to have the best experience possible.
  - We know it works.
  - We know little things can make a big difference.
  - It is better to catch those little things after spraying a few hundred acres instead of after thousands of acres.
  - Use our See & Spray Support Line. Please call or text us. We want to help!

**See & Spray Support Line  
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# See & Spray Recommendations

• ALWAYS CHECK YOUR CHEMICAL LABEL – THE LABEL IS THE LAW!



## Nozzles

- 100° or more recommended
  - Prefer wider fan angle to increase coverage
  - Wider angles will decrease savings
  - Choose smallest droplet size allowed by label
- •



## Rate and Chemical Programs

- For See & Spray Rate:
  - Minimum Rate of 15 GPA in See & Spray mode
  - Target higher label rate guidelines
  - Adjust spray pressure according to label and droplet size recommendations



## Chemical Program Tips:

- Strong residual program to boost contact
- Herbicide savings
- Early and often applications

## Boom Height

- 20" above canopy
- 26" to 47" above ground is ideal
- Fallback occurs near min/max
  - Low Limit: 12"
  - High Limit: 55"



## Tips:

- Lower boom height saves chemical
- Watch for varying boom height to avoid fallback
- Utilize ground with canopy assist height mode with standing crop

## See & Spray System Settings



## Spray Sensitivity:

- High sensitivity recommended to reduce weed escapes. Highest with velvet leaf pressure.

## Sensitivity Options:

- Highest Setting: Product coverage is prioritized. Closest equivalent to broadcast.
- Medium Setting: Balance of product coverage and product savings. Some targets may be ignored.
- Lowest Setting: Product savings is prioritized. Some targets will be ignored.
- Length:
  - Medium length if pushing max speed.
  - Increase length for head/tail winds
  - Increase length for rough terrain
  - Larger buffer sizes will impact chemical savings

## Buffer Size Recommendations:

- Width:
  - Small - Minimum of 3 nozzles will spray when weed is detected.
  - Increase width with cross winds.
- Length:
  - Medium length if pushing max speed.
  - Increase length for head/tail winds
  - Increase length for rough terrain
  - Larger buffer sizes will impact chemical savings



# See & Spray Capabilities

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Capability	Measurement	See & Spray Premium	See & Spray Ultimate	Notes										
<b>Maximum Target Application Speed</b>														
	12 mph	X	X	• Must use John Deere approved reverse-incline nozzles • *12 MPH on cross rows										
	15 mph		X											
<b>Minimum Crop Height</b>														
<p><i>NOTE: Ultimate and Premium options can see weeds approximately 0.635 cm (¼ in.) in diameter by 0.635 cm (¼ in.) in height.</i></p>														
	Corn ≥ V2	X	X											
	Soybean ≥ V1	X	X											
	Fallow = N/A	X	X											
<b>Maximum Crop Height</b>														
<p><i>NOTE: If the crop canopy covers the row, then cameras cannot see weeds. The system can see weeds that are approximately 0.635 cm (¼ in.) in diameter by 0.635 cm (¼ in.) in height.</i></p>														
<table border="1"> <tr> <td>Corn ≤ 16"</td> <td>X</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>Soy ≤ 16"</td> <td>X</td> <td>X</td> <td>≤ 9" for cross row</td> <td></td> </tr> </table>					Corn ≤ 16"	X	X			Soy ≤ 16"	X	X	≤ 9" for cross row	
Corn ≤ 16"	X	X												
Soy ≤ 16"	X	X	≤ 9" for cross row											
<b>Row Spacing</b>														
<p><b>Row Spacing – 30" Approved Crops</b></p>														
	With Row Travel	X	X	• 65° nozzle spray angle minimum										
	With Row Travel	X	X	• Cross row 12 mph maximum • 9" crop height • 30° row angle • Wide fan nozzle tips only (>100° nozzle spray angle)										
<p><b>Row Spacing – 15" Soybeans ONLY</b></p>														
	With Row Travel	X												

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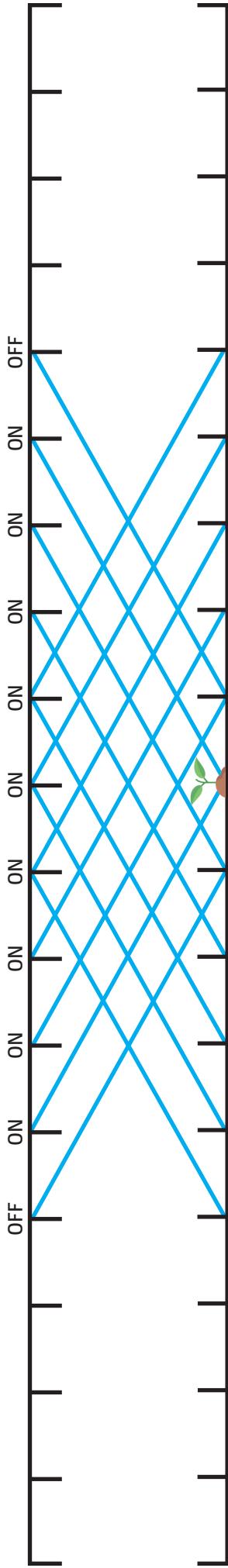
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### **9 tips on with 120° Spray Tip 36" high Target single weed directly under center tip**

- 36" boom height
- 15" tip spacing
- Small Spray Buffer Area - Width = 0" extra

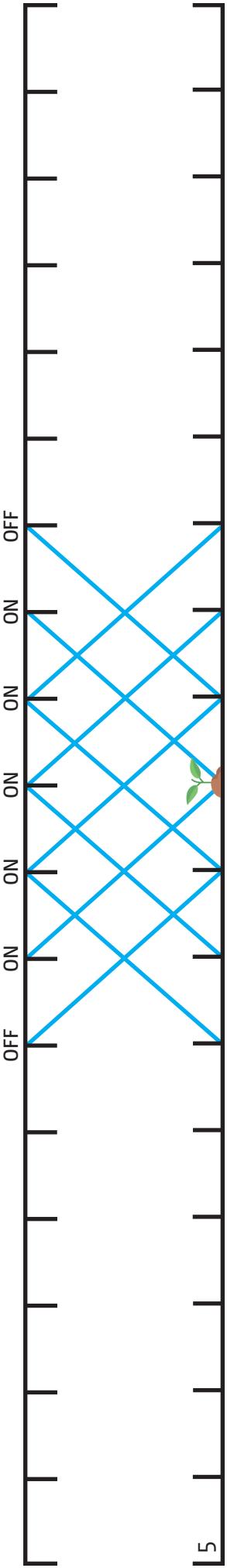
**120° Tip**



### **5 tips on with 80° Spray Tip 36" high Target single weed directly under center tip 45% savings over 120° Tip**

- 36" boom height
- 15" tip spacing
- Small Spray Buffer Area - Width = 0" extra

**80° Tip**



- In this example, at 24" boom height only 3 tips will activate. This equals chemical savings, but a much greater chance of missing the weed or not getting adequate coverage to kill the weed.



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## Red Box – LandMark Recommended Spray Tips

- These tips will give you more overlap and reduce the chance of occlusion.
- This should equal better coverage on the weed and better weed control.
- This may lead to less savings, but when killing weeds is the priority, coverage is key. Check your chemical label to make sure these tips are approved.

### Blue Box – Air Induction tip

- If certain chemicals require an air induction tip these tips are a good choice. However, the 3D and Low-Drift Max tips are the first preference due to droplet size and pattern. Check your chemical label to ensure the tips you choose are approved.

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# SEE & SPRAY™ — PREMIUM & ULTIMATE NOZZLE GUIDE



John Deere  
Targeted Spray  
Low-Drift  
TSL60

▲ John Deere Nozzles



John Deere  
Targeted Spray  
Low-Drift  
TSL80



John Deere  
3D  
3DI00



John Deere  
Ultra Low-Drift  
ULD120



John Deere  
Low-Drift Max  
LDM120

LandMark  
Recommended  
(See Above)

NARROW FAN ANGLE  
LESS OVERLAP  
LESS NOZZLES ON

CHEMICAL SAVINGS PRIORITIZED  
MORE OVERLAP  
MORE NOZZLES ON

WIDE FAN ANGLE  
MORE NOZZLES ON

▼ Other Compatible Nozzles



Teejet Visiflo®  
Flat Spray  
TP65  
Agrotop  
SpotFan  
SF40



Teejet Air  
Induction  
Flat Spray  
A180



Teejet  
DriftGuard  
DG80



Teejet  
Air Induction  
XR Flat Spray  
A1XR10

Note: Nozzles included in the above chart are the only nozzles currently tested and recommended by John Deere for targeted application with See & Spray Premium and See & Spray Ultimate. John Deere makes no guarantees of performance or product efficacy if spraying with other nozzles.



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			Nozzle Tip Needed	Incline Adaptor Needed	Gen 4 Display Input	Minimum Boom Height	
John Deere Nozzles	Contact Herbicides	Systemic Herbicides	Dicamba & 2,4-D	Cross Row			
John Deere Targeted Spray Low-Drift TS160		X	X		PSTSL6003R4, PSTSL60035R4 PSTSL6004R4, PSTSL6005R4 PSTSL6006R4, PSTSL6008R4	Yes: Included in nozzle kit part number ending in "R4" 26 in.	
John Deere Targeted Spray Low-Drift TS180		X	X		PSTSL8005R4, PSTSL8006R4	Yes: Included in nozzle kit part number ending in "R4" 26 in.	
John Deere Extended Range ER80	X	X			PSER8003, PSER8004, PSER8005, PSER8006	Yes: Use "R4" 40° incline cap for regular tips (AKK53214), ordered separately 26 in.	
John Deere 3D 3D100	X	X	X		PS3D00002, PS3DQ000025, PS3DQ00003, PS3DQ000035, PS3DQ00004, PS3DQ00005, PS3DQ00006, PS3DQ00008	PS3DQ00002, PS3DQ000025, PS3DQ00003, PS3DQ000035, PS3DQ00004, PS3DQ00005, PS3DQ00006, PS3DQ00008	26 in.
John Deere Low-Drift Max LDM120-R4	X	X	X		PSLDMQ2003R4, PSLDMQ2004R4, PSLDMQ2005R4, PSLDMQ2006R4, PSLDMQ2008R4	PSLDMQ2003R4, PSLDMQ2004R4, PSLDMQ2005R4, PSLDMQ2006R4, PSLDMQ2008R4	26 in.
John Deere Ultra Low-Drift ULD120 & ULD120-R4	X	X	X		PSULD2002, PSULD20025, PSULD2003 or PSULD2003R4, PSULD2004 or PSULD2004R4, PSULD2005 or PSULD2005R4, PSULD2006 or PSULD2006R4, PSULD2008 or PSULD2008R4	PSULD2002R4, PSULD20025R4, PSULD2003R4, PSULD2004R4, PSULD2005R4, PSULD2006R4, PSULD2008R4	26 in.
Other Compatible Nozzles					Sizes 03, 04, 05 & 06 (Source through Tee/let)	Yes: Use "R4" 40° incline cap for regular tips (AKK53214), ordered separately 15-in. Nozzle Spacing: 26 in. 20-in. Nozzle Spacing: 30 in.	
TeeJet Visiflo Flat Spray TP55	X	X	X	X	Sizes 03, 04, 05 & 06 (Source through Tee/let)	A18003L4, A18004L4, A18005L4, A18006L4	26 in.
TeeJet Air Induction Flat Spray AI80		X	X		Sizes 03, 04 & 05 (Source through Tee/let)	Yes: Use "R4" 40° incline cap for regular tips (AKK53216), ordered separately 15-in. Nozzle Spacing: 26 in. 20-in. Nozzle Spacing: 30 in.	26 in.
TeeJet DriftGuard DG80	X	X	X	X	Sizes 02, 025, 03, 04, 05 & 06 (Source through Tee/let)	Yes: Use "R4" 40° incline cap for regular tips (AKK53214), ordered separately 15-in. Nozzle Spacing: 26 in. 20-in. Nozzle Spacing: 30 in.	26 in.
TeeJet Air Induction XR Flat Spray AIXR110	X	X	X	X	Sizes 03 & 04 (Source through Tee/let)	AIXR11002R4, AIXR110025R4, AIXR11003R4, AIXR11004R4, AIXR11005R4, AIXR11006R4	26 in.
Agrotop SpotFan SF4-0					Fallow Application Only	Yes: Use "R4" 40° incline cap for regular tips (AKK53214), ordered separately 15-in. Nozzle Spacing: 30 in. 20-in. Nozzle Spacing: 33 in.	26 in.

# Cross Row Occlusion Spray & Visual



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