Dead Sure®/TTJ60 Drift Reduction System (DRS).

TTJ-60s are dual outlet nozzles that produce two 110° flat fan spray patterns. The angle between each spray pattern is 60° forward and back. They are best suited for broadcast spraying where superior leaf coverage and canopy penetration is important. They are regarded as having good drift control properties.

Dead Sure reduces the droplet fines markedly from this nozzle with a range of fallow tank mixes. In addition, the Dead Sure/TTJ60 DRS enhances both grass and broadleaf weed control with glyphosate alone or glyphosate plus 2,4-D in the same mixture.

Drift Risk of fallow herbicide mixtures depends on % Driftable Fines
Reducing the driftable fine droplets formed is a key aspect of controlling chemical spray drift. The physical weight of droplets greater than 150-200µm diameter means they will not stray far from their original trajectory.

Figure 1: % Driftable Fines -TTJ60 nozzle at 3 bar
The Dead Sure/TTJ60 DRS reduces fines by at least half from all mixtures tested.
Dead Sure Reduces Drift Potential

The drift potential of sprays is very strongly correlated with the proportion of fine droplets in a spray. The USA's Spray Drift Task Force atomization data for thousands of droplet size measurements and a large number of field drift studies forming the heart of the AgDRIFT™ model have been analyzed to produce the following equation:

\[ \text{Drift Potential} = 0.00126534 + 0.000074433 \ Dv^{0.1} - 0.00000337 \ Dv^{0.5} - 0.0000186 \ Dv^{0.9} + 0.3397122 \ F_{141}. \]  

\[ \text{[equation 1]} \]

**Results**

When the relevant spray quality data are substituted into this equation, a relative drift potential value is generated (Figure 2).


Enhanced Weed Control

The Dead Sure/TTJ60 DRS:

- gives excellent efficacy enhancement of the herbicides tested across a range of weed types despite producing very few fine droplets
- is best used at 0.25% v/v for optimum herbicide enhancement.

**Figure 3: Results Through TTJ60 nozzle**

### Key

- Glyphosate = Glyphosate CT applied at 800mL/ha
- Surpass 475 used at 415mL/ha
- Dead Sure used at 0.25% v/v
- Water volume = 50L/ha
- Assessments 29DAT in Namoi