

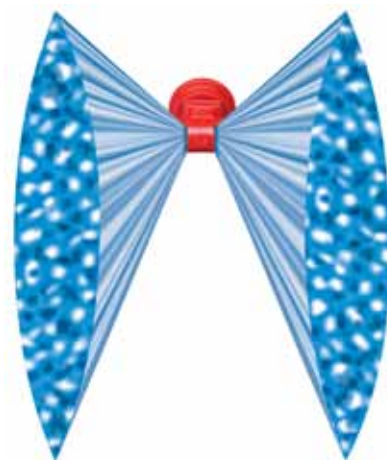
Dead Sure®/AITTJ60 Drift Reduction System (DRS).

AITTJ60s have dual air-induction tips with 110° flat fan spray patterns. There is a 60° angle between leading and trailing spray patterns. They are best suited to postemergence applications requiring a combination of coverage, penetration and minimal spray drift.

Dead Sure® reduces the droplet fines markedly from this low drift nozzle with a range of fallow tank mixes. In addition, the Dead Sure/AITTJ60 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.

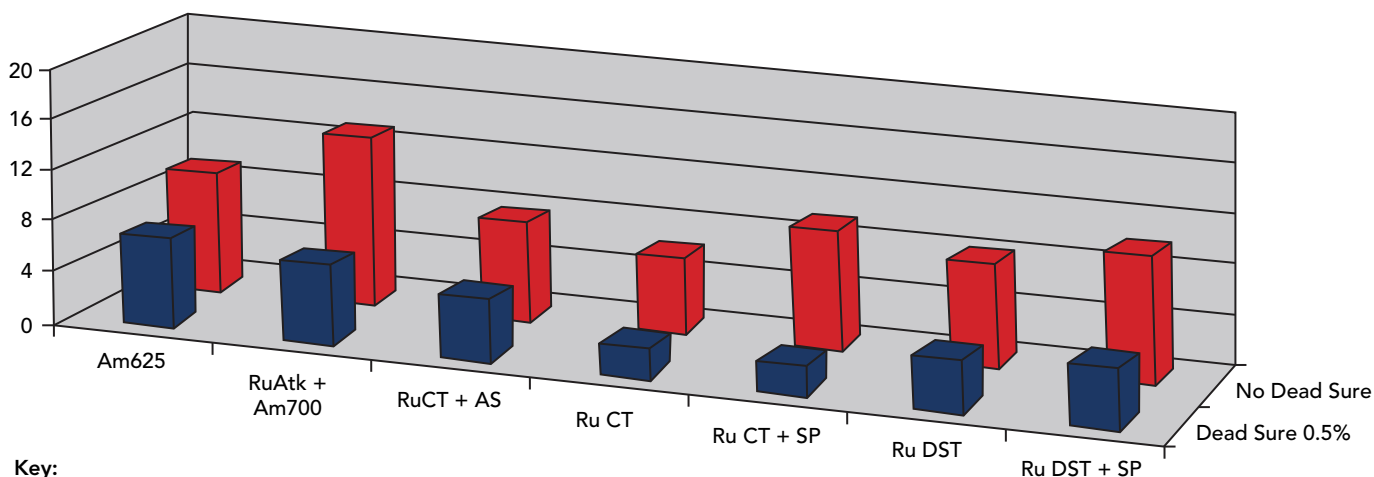
Reducing the driftable fine droplets formed is a key aspect of controlling chemical spray drift. The physical weight of droplets greater than 150µm diameter means they will not stray far from their original trajectory.



AITTJ60 Nozzle from TeeJet Technologies

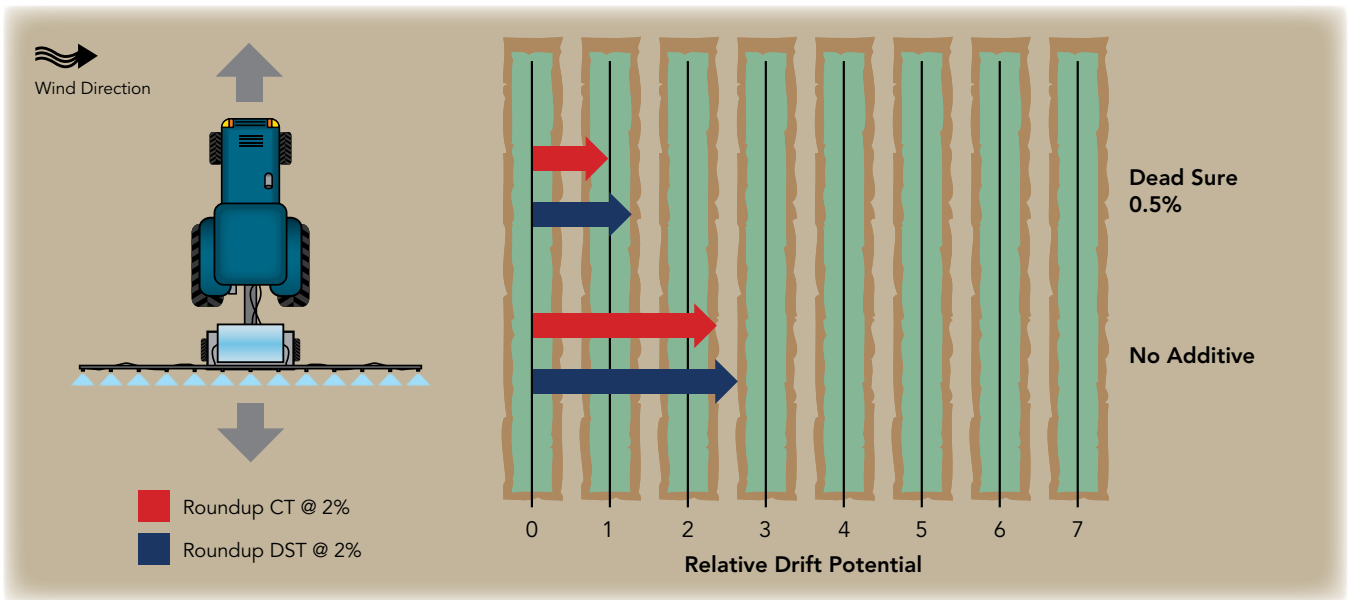
Figure 1: % Driftable Fines - AITTJ60 nozzle at 5 bar

The Dead Sure/AITTJ60 DRS produces no more than 5% of driftable fines with a range of fallow herbicide mixtures.



Key:

Am625 = Amicide 625
 Am700 = Amicide 700 at 815mL/ha
 RuAtk = Roundup Attack at 1300mL/ha
 RuCT = Roundup CT at 1L/ha
 AS = Liaise ammonium sulphate at 2% v/v
 SP = Surpass 300 at 2400mL/ha
 Ru DST = Dual Salt Roundup at 2L/ha
 Dead Sure at 0.5% v/v
 Water volume = 50L/ha



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 analyzed¹ to produce the following equation:

$$\text{Drift Potential} = 0.00126534 + 0.000074433 \text{ Dv}0.1 - 0.00000337 \text{ Dv}0.5 - 0.0000186 \text{ Dv}0.9 + 0.3397122 \text{ F141} \dots \dots \dots [\text{equation 1}]$$

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

Results (See figure above)

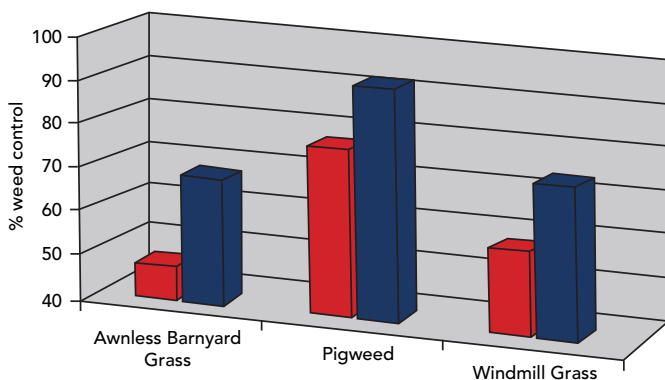
- The Dead Sure/AITTJ60 DRS reduces the drift potential by at least half with most mixtures compared to just using the AITTJ60 nozzle as the only DRT.

¹ Teske, M.E., Bird, S.L., Esterly, D.M., Curbishley, T.B., Ray, S.L. and Perry, S.G. (2001) AgDRIFT: An Update of the Aerial Spray Model AGDISP. Environmental Toxicology and Chemistry Vol. 21, pp. 659-71.

Enhanced Weed Control

The Dead Sure/AITTJ60 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 0.375-0.50% v/v for optimum herbicide enhancement.



- Glyphosate + Surpass 475
- Glyphosate + Surpass 475 + Dead Sure

Key:

Glyphosate = Glyphosate CT applied at 800mL/ha
 Surpass 475 used at 415mL/ha
 Dead Sure DRT used at 0.25% v/v
 Water volume = 50L/ha
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