

# Horticultural Nozzle Information

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In horticultural crops most applications are undertaken with air assisted spray equipment. Here the quality of the air flow is more important than nozzle election. The greater the density of canopy, the more important the air flow becomes. It becomes essential to use air assistance in the denser canopies to achieve adequate, efficient coverage.

Those types of sprayer nozzles producing a MEDIUM/FINE spray quality are providing the best coverage and deposition. Excellent results have been achieved with the TeeJet® TX Conejet range.

A combination with some high pressure air induction nozzles producing a COARSE spray quality may be of advantage if penetration is difficult, for example, when using an airblast and trying to get into the furthest top canopy.

Generally, the most effective way to reduce drift is not nozzle selection but to use equipment that directs the airflow into the canopy, for example, using a Quantum Mist™ sprayer.

In two-dimensional horticultural spraying, e.g. vegetables, the majority of boom sprays have no air assist. In those situations FINE droplets have difficulty to penetrate into the canopy. Especially in combination with high water volumes, they are prone to drift and losses.

A low-pressure air induction nozzle, such as the Airmix 02 (page 35) should be used in these circumstances to reduce the unnecessary loss of chemical through drift. The MEDIUM to COARSE spray quality produced by these nozzles will provide better penetration into the canopy than achieved with FINE droplets.

An excellent set up is to use them in combination with the Twin-Caps. The Twin-Cap is designed to take two nozzles - one on a forward angle, one facing rearwards (see more information on page 43).

Generally, high pressure air induction nozzles should be avoided as their droplet spectrum is too COARSE to provide sufficient coverage underneath the leaf.

If an air-assist boom sprayer is used in two-dimensional spraying, nozzles providing a FINE droplet spectrum are excellent. The water volume should be reduced compared to conventional applications.

**The following guidelines to Spray Quality will assist in finding the right nozzle for the job:**



TREE CROPS	VEGETABLES	
	AIR-ASSIST	NO AIR-ASSIST
TeeJet® TX Conejet [P41] FINE	TeeJet® TX Conejet [P41] FINE	Airmix 02 [p35] MEDIUM
TurboDrop [p35] COARSE	TeeJet® XR [p36] FINE	Twin-Cap Airmix [p38] MEDIUM

Disclaimer: Droplet size classifications are based on BCP specification and in accordance with ASAE Standard S-572 at the date of printing. Classifications are subject to change.

## SARDI Spray Coverage Kit

For thorough spray coverage analysis, all sprayer operators or owners of sprayers should consider investing in the Croplands SARDI Spray Coverage Kit.

Each kit contains a litre of specially formulated fluorescent dye, which is tank-mixed with water and sprayed onto the target crop. Also included in the kit is a UV torch, used in a darkened room to evaluate the coverage from sample leaves or foliage of the sprayed crop.

Full instructions on how to evaluate the results of the test are included in the kit.



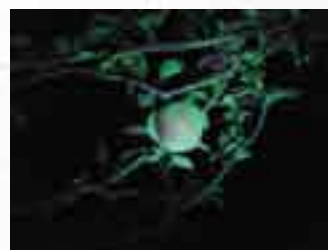
## SARDI coverage booklet

If you require more information on how to set up your sprayer from scratch, consider the SARDI Spray Coverage Booklet.

Full details of how to set up a sprayer for a range of tree & vine crops is included in the booklet.

A must for spray operators & owners.

Contact Croplands to purchase a copy.



A night shot of spray coverage using SARDI fluorescent dye on apples.

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
RP-041	Sardi Spray Coverage Kit	185.00	203.50	X