

"Scotty's Tips" Better spray coverage - Part 1

Vegetables
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By Scott Mathew, Senior Solutions Development Lead [@HortApplication](#)

A topic growers continue to raise with me is 'what is the optimum water rate to provide the best spray coverage for my crop?'

Questions around this topic are no surprise, because it is such a complex subject. The target for your spray applications can vary enormously from bare ground to upright leaf crops like onions. Next to your onions you may have a thick, dense, horizontal leaf crop like potatoes or brassicas.

Not only is the structure of the crop canopy unique for different crops, it can also change within a crop as the plants grow and develop through the season.

Clearly, 'one cap doesn't fit all' and a common misconception among growers is that more water equals a better result. This is not always the case.

For example, spraying an onion crop may appear quite straight forward; however, optimal spray volume depends a great deal on what product you are using (i.e. is it systemic or contact) and what you target you are trying to control.

Perhaps you are spraying a residual herbicide over the onions. Here, the target is the soil surface where the product can act on successive weed germinations and in this situation the vertical nature of the crop and the waxy, water repellent leaf surface offer a distinct advantage.

In this situation, you would select a nozzle that produces coarse spray droplets (350-450 μm). Coarse droplets resemble fine rain. Being heavier, large spray droplets tend to fall straight down on to the soil surface where they will provide residual weed control. Coarse droplets are less influenced by air movement as fine droplets, so the risk of off target damage due to spray drift is generally lower.

When considering an appropriate water volume for residual herbicides in a crop like onions you don't need to flood the paddock with large volumes of water to achieve a good result. With the use of coarse nozzles, water rates of 150 to 200 L/ha will do a great job in getting the product onto the soil. You can travel faster, use less water and get the job done quicker.

Next month I'll talk about spraying insecticides, fungicides and many contact herbicides in vertical crops such as onions.