Not all sprayers deliver the same result

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On 1 July 2022, WA growers were treated to a drone demonstration courtesy of Omnidrone and a fluorescent (glow-in-the-dark) night spray demonstration courtesy of Syngenta.

Berry Sweet hosted the event and provided two of their sprayers for use in the demonstration – an air induction nozzle boom sprayer, and a Silvan Turbomiser $^{\text{TM}}$ airboom sprayer.

Both sprayers were assessed for uniformity at 500L/ha

The Turbomiser™ airboom sprayer was the clear winner, providing uniform coverage of both upper and lower leaf and fruit surfaces (Figure 1).

The air induction nozzle sprayer produced variable droplet size, achieved less coverage, and did not provide coverage to the underside of leaves and fruit (Figure 2).



Figure 1. (a) Turbomiser™ sprayer in action. Photo credit: Bronwyn Walsh, Hort Innovation

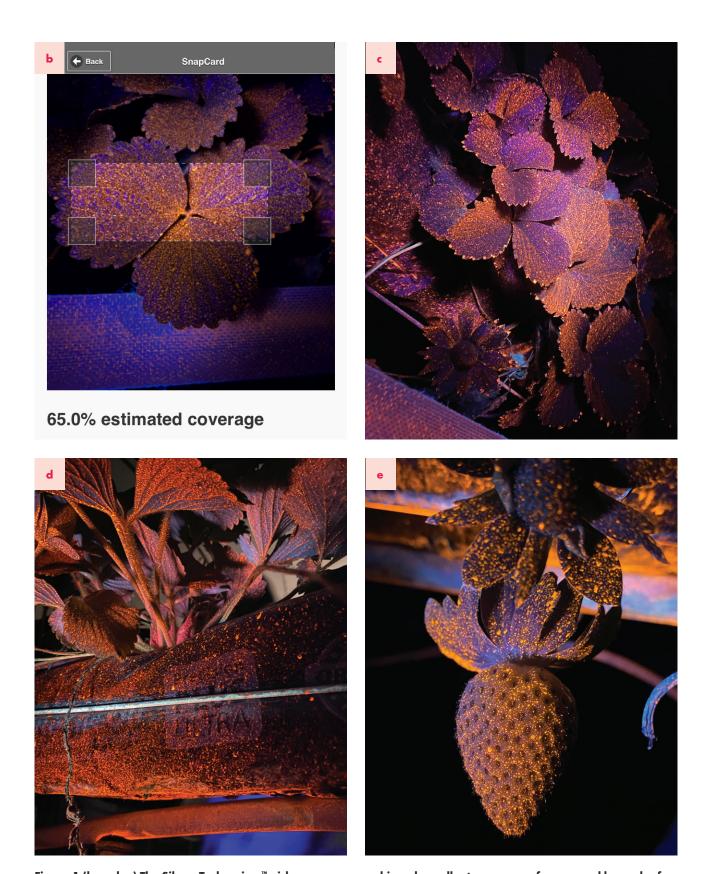
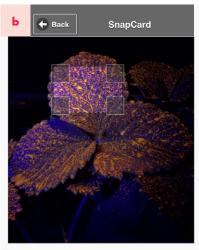


Figure 1 (b, c, d, e) The Silvan Turbomiser™ airboom sprayer achieved excellent coverage of upper and lower leaf surfaces and fruit and had uniform droplet size. Photo credit: (b, c) Malcolm Jones, Syngenta (d, e) Helen Newman, APC





35.7% estimated coverage





Figure 2 (a, b, c, d) The air induction nozzle boom sprayer did not apply spray to the underside of leaves and fruit and had variable droplet size. With the same rate of application (500L/ha) this nozzle sprayer also achieved less coverage, 35.7% compared to the 65% coverage achieved with the other sprayer (SnapCard app).

Photo credits: (a) Bronwyn Walsh, Hort Innovation (b, c, d) Malcolm Jones, Syngenta



Figure 3. The drone demonstration courtesy of Omnidrone. Photo credit: Helen Newman

