

ABSTRACT

Comparison of the Droplet Sizes And Distribution In

Two Motorized Mist Blowers

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Pesticide application and new and improved methods for pesticide application are always being developed. The aim of this study was to compare the performance of two mistblowers, the Stihl SR400 and the Efco AT 2080, at various orifice settings by examining the following parameters:

1. Droplet size
2. Droplet Distribution and Swath width
3. Volume Median Diameter/Number Median Diameter ratios

The results demonstrated that while the Stihl SR400 had two more consistent and smaller droplet sizes than the Efco AT 2080 the latter had a greater horizontal throw and swath width at other settings. The Volume Median Diameter/Number Median Diameter ratios, apart from being more consistent for the Stihl SR400 was also closer to 1 in most cases than the Efco AT2080. Further research still needs to be conducted to establish actual mortality of insects using these mistblowers under field conditions.

Keywords : Clyde Sukha; Mistblowers; Droplet size; Droplet distribution;

Swath width; Volume median diameter; Number median diameter.