

Project Title: A study of sprayer use technology (2)

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Abstract:

Recently, while the Dengue fever case was reported, the chemical control will be launched to eliminate the epidemic situation. Through the evaluation, we found that the technology of spray and the amount of insecticide were the main factors to influence the efficiency of control. The purpose of this project is to analyze the droplet size and its distribution in space by Sizing master to provide the SOP of space spray to local government. The results showed that, there were significant difference ($P<0.05$) between water and insecticide sprayed by sprayers in the homology height and distance, respectively. Spray distance and height would influence the droplet size and showed the negative regression correlation($r^2\sim 1$). While, in the same flat, the droplet size were the same and would not influenced by the jet angle. Therefore, stand by the door and keep nozzle upward $0\sim 30^\circ$, swing to spray indoors is the best technology to avoid poisoned by insecticide and less interference to residences.

Keywords: droplet size 、 distance 、 drift 、 sprayer