

Chemical Control of Smaller Brown Planthopper by Helicopter to Prevent Rice
Stripe Disease¹

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Abstract

The rice stripe virus disease was a major disease in southern part of Taiwan six years ago. The stripe virus was transmitted by Laodelphax striatellus Fallen. with a persistent manner, and the virus could be passaged through the egg of the active transmitter to their progenies. The result of this study was summarized as follows.

To investigate the percentage of stripe disease infective hill was 0.23% in aerial area, 0.20% in spray area and 0.77% in check area. The control rate of rice stripe disease for aerial area was 70.88% whereas 74.56% for knapsack spray area, there was no significant difference in control rate between aerial and spray area. Most effective date was 21 days after spray with 40% Applaud SP to control SBPH, the control rate of SBPH for third investigation was up to 98.5% in aerial area as compared with 97.8% in spray one. There was predominant difference in control rate of SBPH between treated and untreated area. Chemical droplet was determined by 8 cm³ size. the average droplets were 135.5 points below 1,000 μ in diameter. There were 29 species of vegetable and fruit crops used as toxicity test. It showed that all tested crops were normal except for sward pumpkin which had a moderate level of toxicity. The symptom of toxic was a little wilted appearance on margin.

Key words : Aerial spray, Smaller brown planthopper, Stripe disease.

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