

[Available Issues](#) | [Japanese](#)
[>> Publisher Site](#)

 Author: [ADVANCED](#) | Volume Page
 Keyword: |

[TOP](#) > [Available Issues](#) > [Table of Contents](#) > [Abstract](#)

ONLINE ISSN : 1883-2261

PRINT ISSN : 0389-1763

Japanese Journal of Farm Work Research

Vol. 44 (2009) , No. 4 pp.233-239

[\[PDF \(850K\)\]](#) [\[References\]](#)
Control Method and Effect of Low Volume Pesticide Application to Mulberry Scale, *Pseudaulacaspis pentagona* (Targioni), Using Mist Blower in Tea Field
[Daisuke MIYAMA](#)¹⁾, [Osamu SUMIKAWA](#)¹⁾, [Takuya ARAKI](#)¹⁾, [Yasushi SATO](#)¹⁾,
[Chikara ISHIJIMA](#)¹⁾ and [Katsuji TERADA](#)²⁾

1) National Institute of Vegetable and Tea Science

2) TERADA SEISAKUSHO CO., LTD.

(Received June 1, 2009)

(Accepted August 22, 2009)

Abstract

The effectiveness of low volume pesticide application using a mist blower against mulberry scale in tea cultivation was investigated. The pesticide adhesion to the branches and the effectiveness in controlling mulberry scale was tested using 2 types of blow heads of the mist blower and 2 application rate levels : 400 and 600L/10a. One of the blow heads was a downwash type, which directs the mist flow downward from above the canopy, and the other was a crosswind type, which directs the mist flow horizontally from both sides of the tree. The application rate of power sprayers used in conventional pest control methods exceeds 1000L/10a. The use of the downwash type blow head resulted in greater adhesion on the upper branches inside the canopy than on the lower branches. Further, the difference in the application rate didn't affect the degree of chemical adhesion. Both application rates were found to be effective against mulberry scale. On the other hand, when the crosswind type blow head was used, chemical adhesion at the center of the canopy was found to be insufficient under both application rate conditions. Further, less chemical adhesion was achieved when 400L/10a was applied as compared to when 600L/10a was applied. The efficacy against mulberry scale was confirmed only with the application rate of 600L/10a. On the basis of these results, we concluded that low volume pesticide application using the mist blower and the downwash type blow head was effective against mulberry scale.

Key words

[Tea field](#), [Mulberry Scale](#) *Pseudaulacaspis pentagona* (Targioni), [Mist Blower](#), [Low Volume Application](#)

[\[PDF \(850K\)\]](#) [\[References\]](#)

Download Meta of Article [\[Help\]](#)

[RIS](#)

[BibTeX](#)

To cite this article:

Daisuke MIYAMA, Osamu SUMIKAWA, Takuya ARAKI, Yasushi SATO, Chikara ISHIJIMA and Katsuji TERADA (2009): Control Method and Effect of Low Volume Pesticide Application to Mulberry Scale, *Pseudaulacaspis pentagona* (Targioni), Using Mist Blower in Tea Field . Japanese Journal of Farm Work Research 44: 4 233-239 .

doi:10.4035/jsfwr.44.233

JOI JST.JSTAGE/jsfwr/44.233

Copyright (c) 2010 Japanese Society of Farm Work Research



[Japan Science and Technology Information Aggregator, Electronic](#)

