

# Czech Academy of Agricultural Sciences



Open Access Agricultural Journals

**Plant  
Protection  
Science**

[home](#) [page](#) [about us](#) [contact](#)



[us](#)

**Table of  
Contents**

**IN PRESS**

**PPS 2015**

**PPS 2014**

**PPS 2013**

**PPS 2012**

**PPS 2011**

**PPS 2010**

**PPS 2009**

**PPS 2008**

**PPS 2007**

**PPS 2006**

**PPS 2005**

**PPS 2004**

**PPS 2003**

**PPS 2002**

**PPS Home**

---

**Editorial  
Board**

**For Authors**

- **Authors  
Declaration**
- **Instruction  
to Authors**
- **Guide for  
Authors**
- **Copyright  
Statement**
- **Submission**

**For  
Reviewers**

- **Guide for  
Reviewers**
  - **Reviewers  
Login**
- 

**Subscription**

Plant Protect. Sci., 42 (2006): 26-33

[ [fulltext](#) ]

The effects of droplet spectra, spray volume, and the addition of an adjuvant to the spray solution against *Phytophthora infestans* were evaluated using contact fungicides, mixtures of contact and systemic fungicides, and a contact fungicide + an adjuvant. Six droplet spectra, ranging from VMD = 183  $\mu\text{m}$  to VMD = 939  $\mu\text{m}$ , were used. The spray volumes were 300, 450 and 600 l/ha for the contact fungicides, and 300 l/ha was used for the mix of contact with systemic fungicides. No significant differences in efficiency were observed between different droplet spectra when used for the mix of contact with systemic fungicide treatments. However, the efficiency of treatments with a contact fungicide significantly increased with smaller droplet spectra. The larger droplet spectra required larger spray volumes for greater efficiency. The addition of the adjuvant (pinolene, 96%) to the spray solution of the contact fungicide caused the

efficiency to be similar for all droplet spectra. The effect of droplet spectra is more pronounced in contact compounds. The translocation of the systemic compounds and the ability of the surfactant to improve the coverage with contact compounds may be the main mechanisms that counteract the effects of larger droplet spectra and lower leaf coverage.

**Keywords:**

*Phytophthora infestans*; fungicides; water volume; droplet size; droplet density

[ [fulltext](#) ]

---

© 2015 [Czech Academy of Agricultural Sciences](#)

XHTML1.1 VALID

CSS VALID