

## Comparative analysis of the capture of leafhoppers (Cicadellidae: Cicadellinae), for different strata in plum orchards in the municipality of Videira, Santa Catarina, Brazil

**Natalia A. Schneider<sup>1</sup>; Gabriela Vignatti<sup>1</sup>; Wilson S. de Azevedo Filho<sup>1</sup>; Fabio Giacomelli<sup>2</sup>; Cristiane Muller<sup>3</sup>; João R. S. Lopes<sup>3</sup>; Marcos Botton<sup>4</sup>; Cristiano J. Arioli<sup>5</sup>**

<sup>1</sup>Universidade de Caxias do Sul - UCS / CARVI. Alameda João Dal Sasso, 800, 95700-000, Bento Gonçalves, RS, Brasil. [naschneider@ucs.br](mailto:naschneider@ucs.br). <sup>2</sup>Pittsburg State University – PSU. 1701 South Broadway Street, 66762, Pittsburg, Kansas, EUA. <sup>3</sup>Universidade de São Paulo - USP/ESALQ. Av. Pádua Dias, 11, 13418-900 Piracicaba, SP, Brasil. <sup>4</sup>Embrapa Uva e Vinho. Rua Livramento, 515, 95700-000, Bento Gonçalves, RS, Brasil. <sup>5</sup>Empresa de Pesquisa Agropecuária e Extensão Rural de Santa Catarina - EPAGRI. Rua João Zardo, 1660, 89560-000, Videira, SC, Brasil.

Leafhoppers, belonging to Cicadellinae, are known as insect vectors of the bacterium *Xylella fastidiosa*, which is the cause of Plum Leaf Scald (PLS) disease. Within Cicadellinae, the tribes Cicadellini and Proconiini show conspicuous morphological features and different behavioral patterns. This study aimed to analyze the capture rate of Cicadellinae at higher and lower portion of the vegetative strata in two plum orchards variety “Letícia”. The orchards (1 ha each, containing 10 years old plants) were located in the municipality of Videira, state of Santa Catarina, Brazil. Sampling was carried out from December 2010 to December 2012 using yellow sticky cards (8.5 x 11.5 cm), installed in 10 equidistant points (35 x 35 m). At each point, two traps were installed and replaced monthly; low (B) at 0.5 m above the ground and high (A) at 1.7 m above the ground. During the survey, 25 species were identified, included in 18 genera: Cicadellini - *Bucephalogonia* sp.; *B. xanthophis*; *Caragonalia carminata*; *Diedrocephala* sp.; *D. variegata*; *Dilobopterus costalimai*; *D. dispar*; *Erythrogonia dorsalis*; *Hortensia similis*; *Macugonalia* sp.; *M. cavifrons*; *M. leucomelas*; *Pawiloma victima*; *Parathona gratiosa*; *Sibovia sagata*; *Spinagonalia rubrovittata*; *Tettisama quinquemaculata* and *Torresabela fairmairei*; Proconiini - *Aulacizes* sp.; *A. obsoleta*; *Homalodisca ignorata*; *Molomea personata*; *Oncometopia facialis*; *O. fusca* and *Phera carbonaria*. Cicadellini had a capture rate of 86.48% in low traps, which were located in the lower stratum of the vegetation; this corresponds to the behavior observed in other studies. However, Proconiini had a capture rate equal to 73.48% in low traps and only 26.52% on traps located on the tree stratum of the orchard; this is different from what was found in other cultures already evaluated. The development of wild vegetation present in the orchards possibly plays a part in the occurrence of leafhoppers in the lower stratum.

**Keywords:** Cicadellinae, plum, sampling.

**Support:** UCS; FAPERGS; CNPq.