



### ***Drosophila suzukii* arrived in Chile.**

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*Drosophila suzukii* is a major pest that has colonized Japan, India, Europe, and North America (Davis, 2014; Dilip *et al.*, 2014; Rota-Stabelli *et al.*, 2013). In South America it has been found in Brazil (Paula *et al.*, 2014; Bitner-Mathé *et al.*, 2014). *D. suzukii* females deposit the eggs on fresh fruits still hanging from the trees and on native bushes. Here, we report that *D. suzukii* is colonizing Central Valley of Chile 32°3'47"S and 36°49'37"S. More specifically, we report that males and females of the species have been collected in the wild near the principal port Valparaíso 33°3'47"S.

We collect *Drosophila* species by using traps. The traps were set up hanging from Chilean wild bush and shrubs typical of the Central Valley (Table 1). The plants grew in humid, gloomy habitats located in ravines and gullies around Valparaíso. The bushes Lluvia de Oro -Rain Gold- (*Teline monspessulana*), and Tayú (*Dasyphyllum excelsum*) were used to hang traps (Table 1). Some of the traps (N = 8) contained some pieces of banana, the other ones (N = 8) pieces of mature plum (*Prunus domestica*, D'agen variety).

Table 1. List of plants growing in ravines and gullies where *D.suzukii* refuge in the fields around Valparaíso port. The places provide shadow and wind protection to *D. suzukii* adults.

| Vernacular name               | Scientific name             |
|-------------------------------|-----------------------------|
| Palito negro (Black stick)    | <i>Adiantum chilensis</i>   |
| Lluvia de oro (Rain gold)     | <i>Teline monspessulana</i> |
| Quila (a type of Bamboo)      | <i>Chusquea quila</i>       |
| Eucalipto (Eucalyptus)        | <i>Eucalyptus globulus</i>  |
| Tayú (a Chilean endemic bush) | <i>Dasyphyllum excelsum</i> |
| Zarzamora (wild Blackberry)   | <i>Rubus ulmifolius</i>     |

traps. Perhaps, in *D. suzukii* larvae hatched out days after the females deposit eggs. In *D. melanogaster* incubation of eggs takes a few hours, but in *Drosophila pavani* it takes 48 hours (Godoy-Herrera *et al.*, 2005).

Many ships with merchandise arrive in Valparaíso from Asia, particularly Japan, South Korea, and China. These commercial activities could have provided circumstances to some specimens of *D. suzukii* from Asia had arrived in Valparaíso. Like in Chile, in those countries there are plum orchards. The results of our collections suggest that *D. suzukii* adults prefer plum to banana. This last fruit is imported principally from Ecuador. The fly seems to have adapted well to humid, gloomy micro-habitats located nearby Valparaíso. Perhaps, *D. suzukii* is in preparation to invade fruit orchards near the ravines and gullies where it is living at the moment.

References: Bitner-Mathé, B.C., J. Victorino, and F.S. Faria 2014, Dros. Inf. Serv. 97: 136 - 137; Davis, A.J., 2014, Dros. Inf. Serv. 97: 156 - 159; Dilip, A.S., P. Sujaymeendra, R. Alexander, K. Avinash, S. Phalke, and M. Javashankar 2014, Dros. Inf. Serv. 97: 29 - 30; Godoy-Herrera, R., B. Burnet, K. Connolly 2005, Heredity 124: 33 - 40; Paula, M.A., P.H.S. Lopes, R. Tidou 2014, Dros. Inf. Serv. 97: 113 - 115; Rota-Stabelli, O., M. Blaxter, and G. Anfora 2013, Curr. Biol. 23: R8 - R9.

Most of *D. suzukii* adult flies (97.01 %) were found within the plum traps: 1) plum traps: females = 16; males = 49; 2) Banana traps: females = 0; males = 2 (2.98 %). Other *Drosophila* species were also collected: *Drosophila simulans*, *Drosophila melanogaster*, *Drosophila immigrans*, and *Drosophila busckii*. About 70% of adults of these last four species were in the banana traps, and 30% in the plum traps. *D. suzukii* eggs were not observed in banana traps, but 10 eggs of this species were in the plum traps. The data suggest that females of *D. suzukii* prefer plum to lay the eggs. *D. suzukii* larvae were not detected in the plum