

## 130 - Diversity of mites on Vitaceae in the São Francisco River Valley, Brazil

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Grapevine, *Vitis vinifera* L., has is one of the main crops of "Vale do Rio São Francisco" in northeast Brazil, which accounts for 95% of the exportation of fresh grapes by the country. This crop is attacked by several pests, some of the most important of which are the mites *Tetranychus urticae* Koch and *Polyphagotarsonemus latus* (Banks). Little is known about mite diversity on grapevine in that region. This study aimed to document that diversity. Samples of grapevine leaves of the varieties Festival (09°12'43.9"S, 40°29'12.7"W) and Italia (09°23'2"S, 40°20'46.5"W) were collected monthly from September 2008 to August 2009. Additional samples were collected twice a year at 20 different locations for those as well as for the following varieties: Chena Black, Benitaka, Thompson Shiraz. In each survey, samples were taken from 12 plants for each variety. From each plant, a leaf was taken from each region (basal, middle and apical) of a branch taken from each part of the plant (basal, middle, and apical); thus, in total, 9 leaves were taken from each plant. Each leaf was placed in a separate bag for transport to the laboratory, where

leaves were kept at 10°C for a maximum of seven days until processed. Immature (larvae and nymphs) and adult mites were counted under a stereoscope, collected, slide-mounted with Hoyer's medium and identified. The analysis of the mite distribution on the plant was performed using the average of mites found per plant. The data were submitted to tests for normality and homogeneity of variance before analysis. A total of 24,726 mite specimens were found. Tetranychidae represented 69.1% of all mites sampled; *T. urticae* represented 57.7% and *Oligonychus mangiferus* (Rahman & Punjab) represented 42.3% of the mites of this family. Tarsonemidae accounted for 23%, being represented only by *P. latus*. Tenuipalpidae accounted for 1.7%, being represented only by *Brevipalpus phoenicis* (Geijskes). The Phytoseiidae totaled 6.5%; *Euseius citrifolius* Denmark & Muma and *Neoseiulus idaeus* Denmark & Muma corresponded to 79.0 and 10.2% of the phytoseiids collected. *Oligonychus mangiferus* was often associated with the Italia variety, while *T. urticae* and *P. latus* were associated with the Festival variety. *Neoseiulus idaeus* was found only in association with *T. urticae*, whereas *E. citrifolius* was found in greater numbers in association with *O. mangiferus*. No significant differences were observed between branches for either Tetranychidae, Phytoseiidae or Tarsonemidae, or between leaves for either Tetranychidae or Phytoseiidae; however, tarsonemids were more numerous on apical leaves.