Thresholds/Monitoring

Campylomma verbasci Economic Thresholds for Newer Apple Cultivars

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Abstract: Trees of the cultivars ‘Golden Delicious’, ‘Delicious’, ‘Fuji’, ‘Gala’, ‘Granny Smith’, ‘Braeburn’, and ‘Cameo’ were selected in orchards in north central Washington in 2002 and 2003. Flower clusters were infested with one (2002) or two (2003) C. verbasci nymphs. In both years, none of the ‘Braeburn’ fruit in the trial sustained any damage. The percentage of fruit damaged in trials of ‘Gala’, ‘Fuji’, and ‘Granny Smith’ appeared to be intermediate between the percentage damaged in trials of ‘Golden Delicious’ and ‘Delicious’. Results for ‘Cameo’ were inconsistent between the two years. The greater susceptibility of ‘Golden Delicious’ may be due in part to the lower density of trichomes that cover the fruitlets during bloom compared with the density on fruitlets of other cultivars. In 2003 and 2004, six ‘Gala’ trees were selected from a block at the TFREC, Wenatchee, WA, and 45-cm sections of branches were infested with a range of C. verbasci population densities. Regression analysis of data from both years indicated that the economic threshold for ‘Gala’ is intermediate between that of ‘Golden Delicious’ and ‘Delicious’.