counteracted the implications of the micro-jet coefficient. Despite the ambiguity of these last results, the implication of a beneficial influence of drip irrigation on residues appears quite strong.

Higher residues were associated with shorter growing seasons in both tomato and strawberry General Practice models. This refuted the hypothesis that earlier maturing varieties and earlier harvests would help avoid pest infestations. It had also been reasoned that the longer a crop was in production prior to testing, the more pesticide treatments it would have likely received, thus increasing potential residues. Apparently, late season growing conditions are less conducive for pest infestations and/or more conducive to the breakdown of residues.

Distance between plants within the row was significantly associated with residues for both commodities. A negative relationship with respect to fungicide residues was expected, but this was confirmed only for tomatoes. The positive relationship between distance and insecticides in both tomatoes and strawberries was not anticipated. Possibly the greater spacing allows for better coverage with insecticides increasing the amount of residues on the fruit. These results should be viewed cautiously since distance between rows could not be included in the analysis.

Variety or cultivar selection is an important component in pest management and residue levels in strawberries and tomatoes. Both fungicide and insecticide residues were significantly influenced by variety in strawberries. The use of Selva and Chandler cultivars were positively associated with fungicide residues but negatively related to insecticide residues compared to the base variety of Oso Grande. A statistical base could not be established for cultivars of tomatoes. SolarSet tomatoes were positively related to aggregate and fungicide residues, while the Sunbeam variety showed reduced aggregate residues. The SolarSet relationship may be due to its susceptibility to Alternaria stem canker and early blight. This disease is often treated with fungicides applied to the soil. Generally, any relationship between variety and residues would probably be due to specific genetic resistance, or lack thereof, to certain pathogens and insects. Also, characteristics related to the timing of fruit set and maturity of different varieties may influence pest infestations and the environmental fate of residues once pesticides are applied.

There is very little that can be generalized about the results of the Specific Practices regressions. While more than half of these 15 regressions were significant at the 0.05 level, each experienced problems that raise doubts about its results and implications. Seven of these regressions could not be completely specified due to zero variances or linear dependencies among the explanatory variables (this does not include the exclusion of overhead irrigation in tomato regressions). Perhaps the most disappointing outcome was the poor performance of the weighted active ingredient rate variable. The regression coefficient for this variable was significant in only six of the 15 specific practices regressions and only four of these six significant coefficients had the expected positive sign. The overall mediocre performance of the Specific Practices models is believed to be due in large part to inaccurate and insufficient data. This particularly appears to be the case for the rate and timing of pesticide applications. Since the half-life of many pesticides can be a matter of