APPLE: Malus sylvestris
Apple aphids: Aphis pomi DeGeer
Codling moth: Laspeyresia pomonella (L.)
Tarnished plant bug: Lygus lineolaris (Palisot de Beauvois)
San Jose scale: Quadraspidiotus perniciosus (Comstock)

APPLE, INSECT CONTROL, 1978: Plots consisted of five single-tree replicates in a randomized complete block design using Red Delicious, Golden Delicious, and Stayman cultivars. Treatments were applied with handgun at 2-wk intervals after May 1 spray for Penncap-M and parathion and at 2-wk intervals for Guthion treatment. Aphids were counted on 4 occasions for a total of 15 min/count using all 5 trees/treatment. Because of a light crop, all fruit on each tree replicate was inspected at harvest (Aug. 26). Aphids were counted on 4 occasions for a total of 15 min/count using all 4 trees/treatment. Insect damage at harvest (Aug 23) was determined from 400 fruit (100 fruit/tree replicate). A. fallacis data includes all stages.

North Carolina State University, Raleigh, North Carolina 27650
Fred C. Swift, Department of Entomology and Economic Zoology, Rutgers University, New Brunswick, New Jersey 08903

APPLE, INSECT CONTROL, 1979: Plots consisted of four single-tree replicates in a randomized complete block design using Red Delicious, Golden Delicious and Stayman cultivars. Codling moth, Leafrollers, primarily Platynota idaeasalis (Walker), and European red mites/leaf**

Insecticide and Acaricide Tests 5:26

APPLE: Malus sylvestris
Apple aphids: Aphis pomi DeGeer
Codling moth: Laspeyresia pomonella (L.)
Tarnished plant bug: Lygus lineolaris (Palisot de Beauvois)
Leafrollers; primarily Platynota idaeasalis (Walker)

APPLE, INSECT CONTROL, 1979: Plots consisted of four single-tree replicates in a randomized complete block design using Red Delicious, Golden Delicious, and Stayman cultivars. Codling moth, Leafrollers, primarily Platynota idaeasalis (Walker), and European red mites/leaf**

Insecticide and Acaricide Tests 5:26

European red mite: Panonychus ulmi (Koch)
Predatory mite: Amblyseius fallacis (Garman)

APPLE, TEST OF ACARICIDES, 1979: Tests were applied on Jul 11 and 12 to single-tree plots, cultivar Sungold, replicated 3 times and arranged in a randomized complete block design. Treatments were applied at the rate of 10 gal/tree using a hydraulic sprayer equipped with a handgun. Prior to the test the trees had been sprayed with endosulfan and captan as needed to control white apple leafhopper and apple scab, respectively. Mite population estimates were made by randomly picking 25 leaves/replicate, pooling the leaves for each replicate, then brushing the mites onto glass plates and counting all stages. The egg counts are not included in the data presented for the European red mite. A. fallacis data includes all stages.

With the exception of the lower rate of UC 55248 and Vydate, all compounds provided a moderate to high initial reduction in European red mite populations; the greatest reduction occurred on trees sprayed with the higher rate of Plichran. After the first week the lowest counts were recorded in the Vendex 3W treatment, followed by Vendex L, Omite E, the higher rate of CGA 79596, Omite W, and Plichran. Although A. fallacis populations were reduced by several treatments, either through direct toxicity or reduction of the predator's food supply, Vydate L was the only treatment which showed a low degree of toxicity to the European red mite coupled with a high toxicity to the predator.

European red mites/leaf**

Amblyseius fallacis/100 leaves**

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<th>Treatment and oz/100 gallons</th>
<th>Jul 11</th>
<th>Jul 12</th>
<th>Jul 18</th>
<th>Jul 18</th>
<th>Aug 15</th>
<th>Jul 18</th>
<th>Jul 18</th>
<th>Jul 26</th>
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<tr>
<td>UC 55248 4EC 4.0,***</td>
<td>13.6</td>
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<td>17.2</td>
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</table>

* Average number of adult mites/leaf over season (5 counts).

(continued Reed and Mauzin)