II. Pome Fruits
d. Chemical Control
1. Apple Maggot on Hawthorn

Apple Maggot on Native Hawthorn
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Spray plots were established in stands of native hawthorn (<u>Crataegus rivularis</u>) to compare Guthion efficacy on Apple Maggot (<u>Rhagoletis pomonella</u>) with various spray schedules. Hawthorn thickets were selected for the research plots since the local AM biotype only utilizes hawthorn as a host and has never been found infesting Western Colorado apples.

Yellow AM traps were placed in the research area to determine the time of adult fly activity and thus the onset of egg laying. The first AM flies were trapped on July 17 therefore, beginning July 19th Guthion 50 W was applied at the rate of 0.6 lbs/100 gal. of water on 14, 21 and 28 day intervals. When fly activity ceased, hawthorn fruit was harvested from each plot and placed in rearing chambers to allow infesting larvae to pupate.

No AM pupae were recovered from fruit that received the Guthion treatments regardless of the treatment schedule. Fifteen pupae were recovered from fruit in the untreated check, Table 1.

Table 1. Native hawthorn (<u>Crataegus rivularis</u>) treated with Guthion 50W at 0.6 lb/100 gallons on a 14, 21 and 28 day schedule. Collbran, Colorado, 1990.

## Apple Maggot Pupae Recovered\*

Control 14 Days+ 21 Days= 28 Days=
15 0 0 0

<sup>\*</sup>Treated on July 19, Aug. 2, 16, 30, 1990.

<sup>≈</sup>Treated on July 19, Aug. 9, 30, 1990.

Treated on July 19. Aug. 16. 1990.

<sup>&</sup>lt;sup>4</sup>Fruit harvested Sept. 13, 1990.