WALNUT BLIGHT CONTROL STUDIES

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A Bordeaux rate trial was conducted on Ashley walnuts in an effort to continue gathering information on optimum Bordeaux rates and to evaluate different spray timings.

Spray timing starting in the early catkin stage was not significantly better than spray timing starting at early bloom. Spray timing ending well past post bloom (5/27) was not significantly better than spray timing ending shortly after bloom was complete (5/6). This indicates that in 1980 the pistillate bloom period was the most important time for blight control measures, with pre- and post-bloom spray applications providing little additional benefit.

Doubling the rate of copper sulfate applied per acre from 16 to 32 pounds in a Bordeaux mix did not significantly decrease the amount of walnut blight present on trees sprayed at the same frequency. Also weekly Bordeaux sprays containing 16 lbs. of applied copper sulfate per acre gave significantly greater walnut blight control than Bordeaux rates applied at 2-week intervals containing 4 times this amount of copper sulfate (64 lbs/A). As in past years, this illustrates that the frequency of spray application is more important than the amount of copper sulfate applied.

Monitoring of non-blighted nuts starting in early June indicated that by the end of August 5% of these nuts on trees which had control applications applied became blighted. On untreated trees 15 percent of the monitored nuts became blighted, indicating that blight infection does continue to develop during the summer months but to a much greater extent on trees where no control measures had been applied.

From an economic standpoint all spray treatments resulted in a greater net return to the grower over the untreated check except the 64 pound/A copper sulfate Bordeaux spray applied every 2 weeks for a total of 3 applications. Net returns for this treatment were $120/A less than the untreated check.

The untreated check in this trial averaged 25% blighted nuts.