Effects of Whitewash on Yield and Quality of Walnuts: F. Perry

During the past three seasons we have experienced an improvement in quality of $40-70 per ton of walnuts as a result of whitewash sprays on the Ashley variety. Tests conducted on Ashley and Lompoc show only the Ashley variety to give a worthwhile response. Tests with Hartley have been inconclusive. The greatest improvement in nut quality occurred during the coolest season. In each year a single spray applied by mid-June gave the highest net return per acre. During the past season, yields were measured and crop load was hardly affected by whitewash treatments.

Importance of Adequate Irrigation in a Whitewash Program: F. Perry

During the past season, it was obvious that trees stressing for moisture were not capable of responding to whitewash treatments on both the Hartley and Ashley varieties. Although hulls had not severely collapsed under any of the treatments, kernel color was much darker where the trees were growing under a moisture stress. Also, based on internal kernel color, oils did not accumulate properly in the moisture stressed trees. Since exposed nuts benefit most from whitewash treatments, it was obvious that moisture stress nullified any benefit from whitewash.

Application of Whitewash Sprays: F. Perry

Best results occur when sprays are applied from above the trees. In 1970, a boom was devised in which a grower could use his existing air carrier spray rig. A description of this device is included in a progress report titled "Walnut Whitewash Spray Equipment--MA-32. This will need to be revised as the smaller 3-4 gallon per minute flat cone T-jets should be used in place of the large OC types. It's believed that good coverage could be achieved with lower volumes of water. In a closely spaced orchard of mature trees, it usually takes around 500 gallons of water to provide good coverage.