An experiment was set up with Payne walnut to determine effects of harvest timing on kernel quality and networth per inshell pound. Early harvest, utilizing foliar Ethrel® sprays at packing tissue brown (maturity) to advance hullability and normal timing, resulted in significantly higher kernel quality in terms of light color, total edible, and less off grade than harvesting 21 days later. Early and normal harvest resulted in a highly significant improvement in value per inshell pound when compared with delayed harvest.

An experiment was conducted to determine effects of timing Payne walnut harvest on insect (primarily Navel Orangeworm) damaged kernels. Earliest possible harvest, using foliar applied Ethrel® at packing tissue brown to advance hullability, significantly reduced insect damage when compared with normal harvest time (12 days later) or delayed harvest (21 days later). Normal harvest timing was also significantly better in terms of insect damaged kernels than was delayed harvest nine days later.

This experiment consisted of four treatments with 15 replications. Ethrel was applied to 15 trees per treatment at packing tissue brown and at seven days prior to harvest. In addition there was an early untreated and a late untreated picking.

This harvest season was very easy. The nuts ripened early and dropped easily. There was little difference in percent removal between treatments. The earliest date of first picking was September 6 and the latest date was September 24. Almost no navel orange worms were found in these Payne nuts at any harvest date. The highest percent infested nuts was 0.43% in the 9/24/73 picking. The second pick of this treatment was 10/4/73 and this resulted in 0.50% infested nuts. The percentage of navel orange worm infestation was too low to allow us to draw any definite conclusion from this work.