HIGH DENSITY HEDGEROW PLANTING


Chico walnut trees planted in 1974 near Vina 11'x22' in a hedgerow with 2 mechanical hedging systems (hedged on 2 sides each year vs. alternate hedging one side each year) are being compared with trees conventionally spaced (22'x22') and pruned. The differential hedgerow treatments were started in March, 1979 by hedging the trees on either one or both sides in a north-south direction at 4' to 5' from the trunk with a slight inward angle at the top. The single side hedged treatment was arranged so that half of the ten replicates in the experiment were trimmed on the west side of the row and the other half on the east. All of the hedgerow trees were topped by removal of about half of the previous year's growth to promote greater height.

Data collected in 1979 showed no difference in individual tree yields, but a significant difference between the three treatments when compared on a per acre basis. The 11'x22' spaced trees hedged on one side yielded 4343 pounds compared to 3757 pounds for the trees hedged on two sides and 2020 pounds for the 22'x22' hand pruned trees. Trunk circumference measurements taken at the end of the 1979 season also showed a significant difference between treatments with the 22'x22' spaced trees the largest, the 11'x22' trees hedged on one side intermediate, and those hedged on two sides the smallest in size. There was no difference in yield/trunk cross sectional area between the two hedging treatments, but both were significantly greater than the conventional trained trees at the 22'x22' spacing.