Herbicide evaluation trials were continued in Butte, Solano, Tehama and Yolo counties. The diversity of locations provides an adequate range of weed control and plant tolerance information on differing soil types, climatic conditions and weed species. Walnut orchards from three to fifteen years old have been employed to generate efficacy data in the non-bearing and bearing tree categories. In addition, Chico, Serr, Ashley, Hartley and Gustine varieties on Paradox and California rootstocks were given identical treatments to evaluate for possible differences in herbicide tolerance.

Nine preemergence herbicides (four serving as standards) and five post-emergence (three considered standards) were applied in the combination annual and perennial weed control trials. The preemergence herbicides performed as predicted; but the diuron (@ 2 lbs/A) plus simazine (@ 2 lbs/A) treatment, considered one of the standards, provided the most superior annual weed control. The most extensive perennial weed control was produced by the glyphosate (@ 4 lbs/A) plus oryzalin @ 4 lb/A treatment which destroyed the mature perennial plant structures and suppressed the seedlings. Phytotoxic symptoms were not present on any of the treated walnut trees.