Abstract

The juvenile pecan tree produces vigorous apical shoots which limit the induction and development of lateral shoots, a characteristic that delays the initiation of the productive stage and stimulates considerable development of the canopy with the consequent problem of shading between trees, especially in high-density orchards. This study was carried out to evaluate the effect of tipping on growth reduction of apical shoot growth and the generation of lateral bud break, necessary aspects for limiting the excessive development of the canopy in juvenile pecan trees. Five year-old pecan trees were selected from a high-density orchard established in Viesca, Coahuila. In the spring of 2007, three treatments were established consisting of tip pruning, leaving 5, 10 and 15 formed buds on fully active growing shoots. A control without tip pruning was included. Tip pruning to five developed buds increased the percentage of lateral shoots by 55%, while tip pruning to 10 and 15 buds increased percentage of laterals by 53 and 50%, respectively. Relative to the control, treatments reduced length, leaves number, leaf area and dry weight of new shoots.

Keywords

Days to regrowth, percentage of developed lateral shoots, shoot number, shoot length, leaf number, leaf area, growth dynamics, lateral shoots.