Potassium nitrate plus surfactant sprays suppressed pecan aphid populations.

The aim of the study was to verify if early season spraying of pecan solely with potassium nitrate/surfactant (PN+S) would increase nut yield. The treatments did not influence yield components, foliar K nutrition or net photosynthesis, but they did suppress “yellow-type” aphid populations in pecan trees. Water sprays alone suppressed aphid populations and the addition of KNO_3 (0,5%) plus surfactant (0,15%) provided an additional level of suppression (Figure 1).

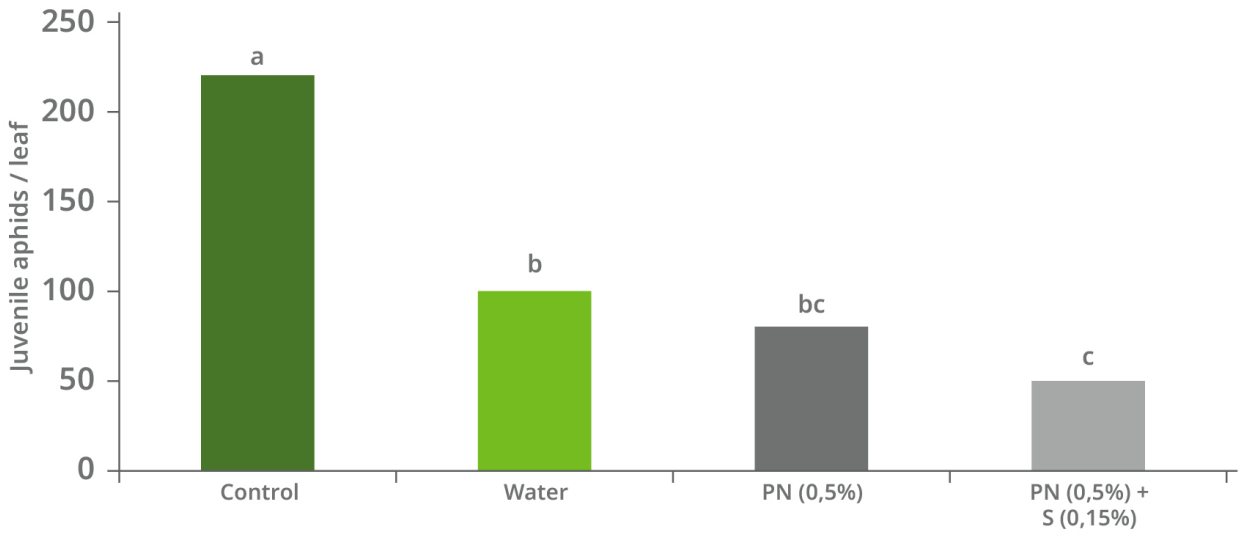

Figure 1. Influence of foliar sprays on juvenile yellow-type pecan aphid populations on pecan foliage 1 day after spraying. Treatments: control (unsprayed), water, PN (potassium nitrate) and S, surfactant, trisodium-phosphate-based Sears detergent.

Wood, B. W., J.A. Payne and M.T. Smith. 1995. Suppressing pecan aphid populations using potassium nitrate plus surfactant sprays. HortScience, 30 (3): 513-516.