

### **Abstract**

The most effective nutritional, fungicidal, and biological control treatments previously evaluated for control of postharvest decay in pear were evaluated for 3 years as factorial treatments to determine the best combinations for an integrated program. Calcium chloride sprays during the growing season reduced incidence of side rot in each year and of blue mold in 1 year, while ziram was effective against side rot in 1 year and blue mold in 2 years. Ziram, but not calcium chloride, provided control of gray mold and bull's-eye rot. Application of the yeast *Cryptococcus infirmo-miniatus* to pear fruit 1 week before harvest at a concentration of  $1.0$  to  $1.5 \times 10^8$  CFU/ml resulted in establishment of large populations of yeast on fruit surfaces, but did not reduce postharvest fungal decay incidence in 3 years of testing. In 1 year, ziram sprays applied 2 weeks before harvest significantly reduced yeast populations on fruit subsequently treated with *C. infirmo-miniatus*. Sequential treatments with calcium chloride and ziram are indicated in an integrated program to take advantage of their differential effectiveness to broaden the range of control of pear postharvest decay pathogens.