Report on use of Dosatron D200RE injectors  
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NOTE: The use of trade names in the report does not imply endorsement of the product named or criticism of similar ones not mentioned.

Test Location: University of Arizona Campus Agriculture Center Greenhouse (approximately 1,000 sq feet)

Application: Injecting concentrated nutrient solution for hydroponic tomato plants

Procedures: The Dosatron D200RE units were set injecting at 1:100 ratio. Irrigation was made once in 15 to 20 min from 8 am to 5 pm everyday from September to October 2003. This test was particularly focused to see if Dosatron units exhibit a traditional problem of using injectors for fertigation, such as inaccuracy, inconsistency, and clogging. Specifically, in this short term test, we have focused on whether the Dosatron units require undesirable frequent “re-adjustment” of injection rates to achieve constant nutrient concentrations.

Results: During the test period (from September to October 2003), both Dosatron units performed very satisfactorily at a constant and accurate injection rate. This was confirmed through the consumption rates of two nutrient solutions in tanks. During the period, we replenished the nutrient solution several times. In addition to the accuracy of the injection, there are several things to be noted.

1. Scale for the injection rate of Dosatron stays facing to front regardless of the injection rate settings, which should be recognized as an advantage (user-friendly).
2. Clogging was not observed during the two month usage. A longer term performance will be evaluated in the next planned crop study from January to October 2004 and the performance will be reported accordingly.

Overall, the Dosatron injectors performed satisfactorily.