

Chlorine may reduce emitter clogging

With water shortages facing many homeowners, urban gardeners may want to shift to drip or subsurface irrigation to save water.

Those who do shift will find that chlorine in city water is not only harmless, it may be a boon to the gardener using such systems, a U.S. Department of Agriculture (USDA) researcher finds.

Kenneth R. Davis of USDA's Agricultural Research Service, Riverside, Calif., reported these findings at the International Plastics in Agriculture Congress in San Diego April 11-16 at the Town and Country Hotel.

Drip irrigation meters small amounts of water to individual plants by emitters — tiny "nozzles" — daily instead of large amounts weekly. Subsurface systems are lines

buried to meter water to the root zones of crops.

Clogging of lines and emitters by bacterial growth is often a problem with drip and subsurface irrigation systems. Chlorine is a promising method for controlling such emitter clogging, Davis said. At least one manufacturer recommends chlorine treatment to restore flow rates diminished by biological reactions.

Agricultural producers — irrigators — have the means of adding chlorine to irrigation systems if they desire. Gardeners and lawn enthusiasts using drip or subsurface lines may, however, find it impractical to own equipment to add the chemical to their water.

But, a recent study by Davis indicates that irrigators using city water may not have to be concerned

about adding chlorine, since most city water contains about .2 or more parts per million chlorine, an effective rate to hold down most bacterial growth.

Thousands of acres are drip irrigated commercially in Arizona, California, Hawaii, Texas, and several other states. Australia, Israel, New Zealand, South Africa, and several other countries also have extensive drip irrigated acreages, all totaling about 270,000 acres. Projections are that by 1980 nearly 850,000 acres of the world's crops are expected to be under drip irrigation.

The Plastics Congress attracted about 2,000 persons from around the world to attend. Theme for the international gathering was "Food for World Survival." □

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