

Is Leaching Necessary?

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Water quality and availability are major concerns of our society. Contamination and shortage of water are now a reality. Water use efficiency should be a high priority for those growers who are looking to the future. Water and fertilizer are not inexpensive and contribute to the cost of producing a crop.

Leaching of root media in the greenhouse is a means of removing any soluble salts. In a recent paper, Dr. Richard Poole (1) states that good quality foliage plants can be grown with no leaching of water or fertilizer. This results in a saving of water, fertilizer and labor. In addition to saving money, it reduces contamination of the environment from wasted nutrients.

Water use efficiency is of special concern to growers in Florida and other parts of the country where water is scarce and quality is a problem. Most growers in Connecticut have not had these problems. Leaching has seldom been necessary.

Dr. Poole conducted experiments comparing plants with and without leaching. They were supplied with the recommended fertilizer rate and grown in root media with good aeration and cation exchange properties. His research found that good quality plants were produced without leaching when compared to plants grown in media that were leached.

The article by John Bartok in the July, 1983 issue (#116) describes how to calculate water application rates. These calculations will reduce excessive leaching. By reducing the amount applied by 10%, leaching may be reduced to a minimum or eliminated.

In conclusion, growers should be looking to the future to assess their water needs as water certainly will be a limiting factor in plant production. Leaching of greenhouse