



## **USDA-CSREES 2007 National Water Quality Conference**

### [Copper Levels in Drinking Water from Private Household Wells](#)

Copper is an essential nutrient in the diet. However, too much copper in drinking water can cause flavor changes and health concerns. Thus, the U.S. Environmental Protection Agency (EPA) has set drinking water standards to regulate copper levels in the drinking water supply. Water test results obtained by the Agricultural and Environmental Services Laboratories (AESL) indicated that about 5% of the household well waters submitted for analysis contained copper at concentrations above EPA's maximum contaminant level (MCL) of 1.3 mg L<sup>-1</sup>. Most of these were detected in Sand Hills and Southern Piedmont provinces. Under Georgia conditions, copper occurs in drinking water primarily due to corrosive water and the subsequent corrosion of copper pipes. These corrosive waters were characterized by being soft (hardness <50 ppm), slightly acidic (pH <6.5), and less buffered owing to low alkalinity (<50 ppm CaCO<sub>3</sub>).

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