**Title: Survey of *Escherichia coli* Isolates from Surface Waters for Shiga-like Toxin Production**

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**Abstract:**

Surface water sources in Taylor County were sampled for the presence of *Escherichia coli (E. coli)* using several media that selectively isolate and differentiate coliforms and *E. coli*. Colonies indicated to be *E. coli* were purified and then identified using the BIOLOG™ MicroStation™. Of the 56 isolates indicated to be *E. coli* by appearance of their growth on selective and differential media, all but one was identified as E. coli by BIOLOG™. Of those identified as *E. coli*, 32 listed the highly-virulent *E. coli* O157 H7 variety as either the primary or secondary identity choice. Five of the 6 strains with a prime identification as O157 H7 were recovered from a creek, and one was obtained from a small lake. An ELISA test for the presence of Shiga-toxin was performed on all 32 strains either identified as *E. coli* O157 H7 or with that as the second identification option. None of the strains tested positive for either the stx 1 or stx 2 toxin, suggesting the common practice of equating the presence of *E. coli* O157 H7 with the most pathogenic strains of E. coli may not be valid when testing surface waters.