



Laboratory Guidebook Notice of Change

Chapter new, **revised**, or archived: MLG 5B Appendix 2.01

Title: Morphologies of Representative Strains from Six non-O157 Shiga Toxin-Producing *Escherichia coli* (STEC) Grown on Modified Rainbow Agar

Effective Date: 6/4/12

Description and purpose of change(s):

Larger photos featuring isolated colonies were added.

The methods described in this guidebook are for use by the FSIS laboratories. FSIS does not specifically endorse any of the mentioned test products and acknowledges that equivalent products may be available for laboratory use. Method validation is necessary to demonstrate the equivalence of alternative tests. FSIS provides guidance at:

[http://www.fsis.usda.gov/PDF/Validation Studies Pathogen Detection Methods.pdf](http://www.fsis.usda.gov/PDF/Validation_Studies_Pathogen_Detection_Methods.pdf)

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Procedure Outline

A5B.1 Introduction

A5B.2 Strain Color Variation

A5B.1 Introduction

The morphology or phenotypes of non-O157 STEC cultures plated onto modified Rainbow Agar may vary between strains from the same serogroup. Additionally, colony colors for the same strain may vary when target colonies are grown in proximity to competitor organisms. Analysts shall not rely solely on colony coloration when choosing colonies from modified Rainbow Agar to test by serological agglutination assays.

A5B.2 Strain Color Variation

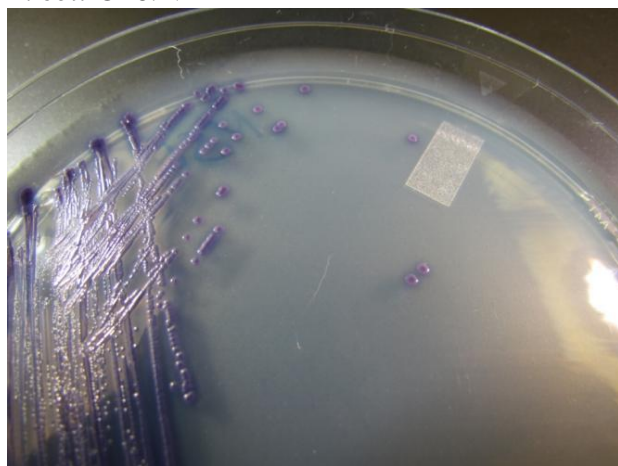
The following photographs show the variation of colors of representative strains from each of the six non-O157 STEC serogroups grown in pure culture on modified Rainbow Agar plates. In the photos, strains were streaked for isolation to demonstrate colony color.

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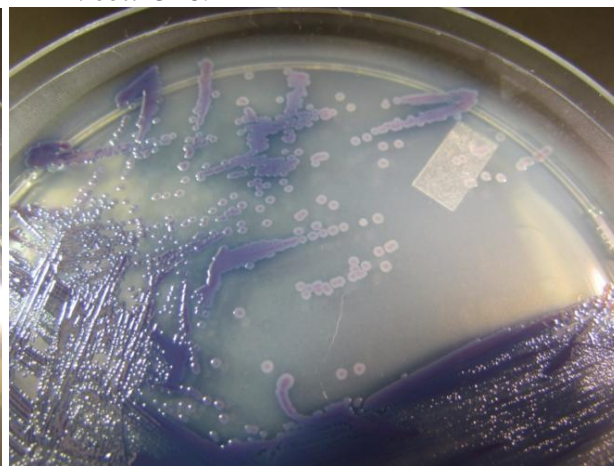
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Serogroup O26

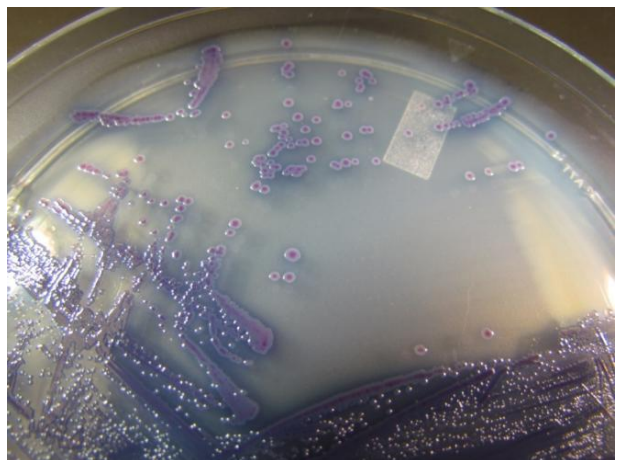
E. coli O26:NM



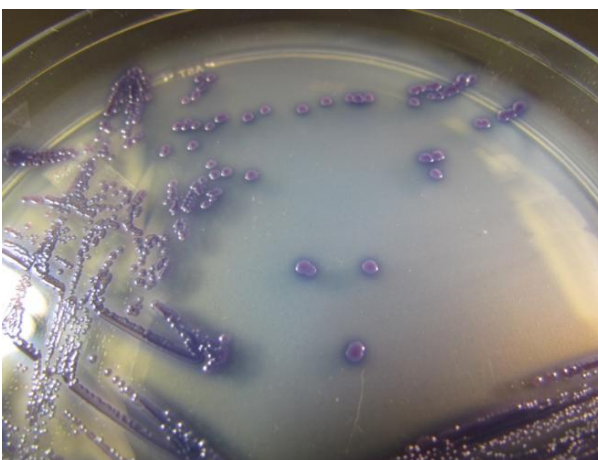
E. coli O26:H11



E. coli O26:H11



E. coli O26:NM



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Serogroup O45

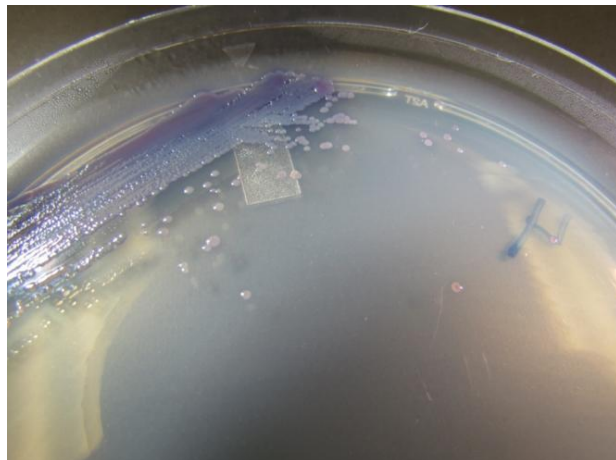
E coli O45:NM



E coli O45:H2



E coli O45:H2



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Serogroup O103

E. coli O103:H25



E. coli O103:H2

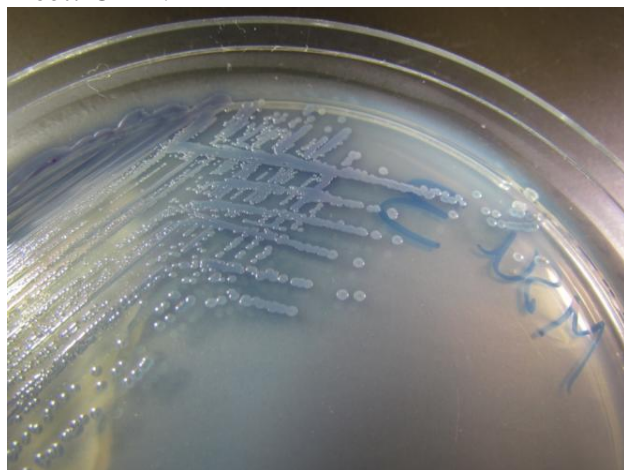


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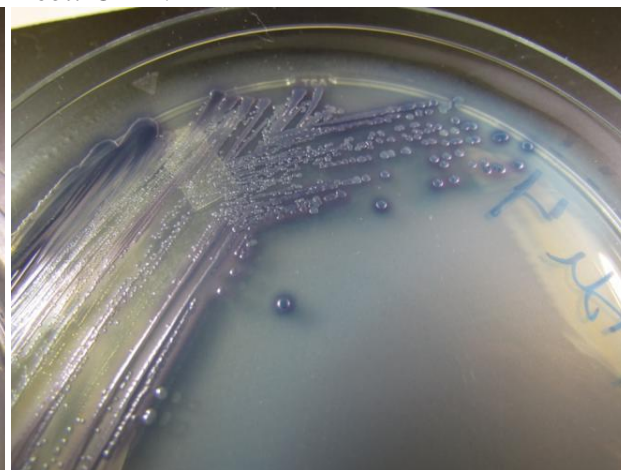
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Serogroup O111

E coli O111:H-



E coli O111:H-



E coli O111:H8



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Serogroup O121

E. coli O121



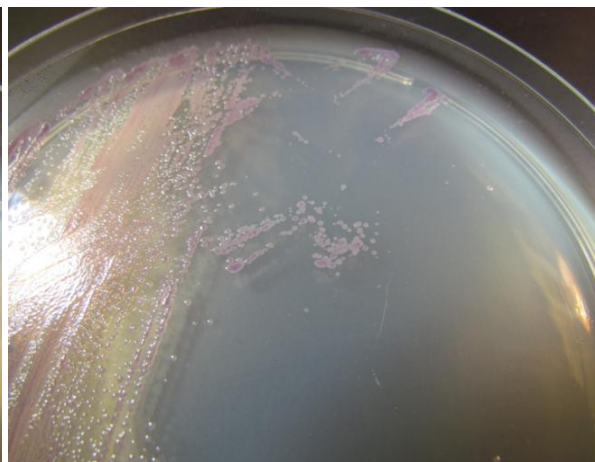
E. coli O121:H19



E. coli O121:H19



E. coli O121

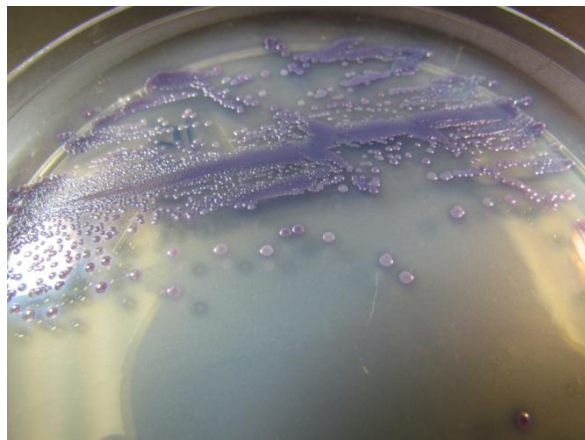


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Serogroup O145

E. coli O145:NM



E. coli O145:NM

