Food Safety and Inspection Service

Laboratory Guidebook Notice of Change

Chapter new, revised, or archived: MLG 5C Appendix 2.00

Title: Morphologies of Representative Strains from Six non-O157 Shiga Toxin-

Producing Escherichia coli (STEC) Grown on Modified Rainbow Agar

Effective Date: 02/04/2019

Description and purpose of change(s):

This Appendix is a catalogue of phenotypes for various non-O157 STEC targeted in method MLG 5C Detection, Isolation and Identification of Top Seven Shiga Toxin-Producing *Escherichia coli* (STECs) from Meat Products and Carcass and Environmental Sponges.

QD-F-Micro-0004.08 Page 1 of 1 Effective: 11/15/18

MLG 5C Appendix 2.00		Page 1 of 7
Title: Morphologies of Representative Strains from Six non-O157 Shiga Toxin-Producing <i>Escherichia coli</i> (STEC) Grown on Modified Rainbow Agar		
Revision: Original	Replaces: NA	Effective: 02/04/2019

Procedure Outline

A2 5C.1 Introduction A2 5C.2 Strain Color Variation

A2 5C.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.

A2 5C.2 Strain Color Variation

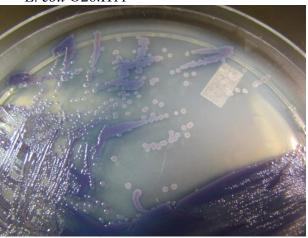
The following photographs show the variation of colors of representative strains from each of the six non-O157 STEC serogroups grown in pure culture on modified Rainbow Agar plates. In the photos, strains were streaked for isolation to demonstrate colony color.

MLG 5C Appendix 2.00		Page 2 of 7
Title: Morphologies of Representative Strains from Six non-O157 Shiga Toxin-Producing <i>Escherichia coli</i> (STEC) Grown on Modified Rainbow Agar		
Revision: Original	Replaces: NA	Effective: 02/04/2019



E. coli O26:NM

E. coli O26:H11



E. coli O26:H11

... Coll O20:H11

E. coli O26:NM



MLG 5C Appendix 2.00		Page 3 of 7
Title: Morphologies of Representative Strains from Six non-O157 Shiga Toxin-Producing <i>Escherichia coli</i> (STEC) Grown on Modified Rainbow Agar		
Revision: Original	Replaces: NA	Effective: 02/04/2019

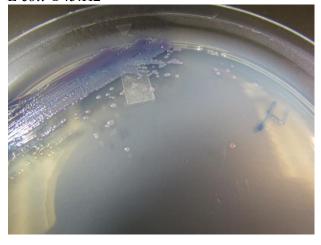
Serogroup O45

E coli O45:NM





E coli O45:H2



MLG 5C Appendix 2.00		Page 4 of 7
Title: Morphologies of Representative Strains from Six non-O157 Shiga Toxin-Producing <i>Escherichia coli</i> (STEC) Grown on Modified Rainbow Agar		
Revision: Original	Replaces: NA	Effective: 02/04/2019

E. coli O103:H2

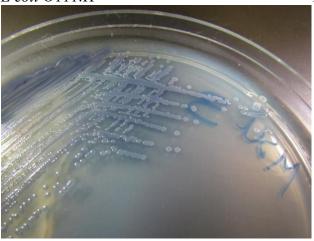
Serogroup O103

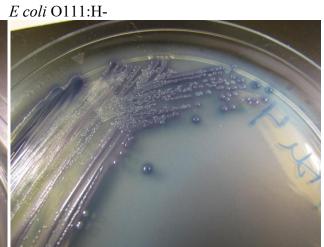
E. coli O103:H25



MLG 5C Appendix 2.00		Page 5 of 7
Title: Morphologies of Representative Strains from Six non-O157 Shiga Toxin-Producing <i>Escherichia coli</i> (STEC) Grown on Modified Rainbow Agar		
Revision: Original	Replaces: NA	Effective: 02/04/2019



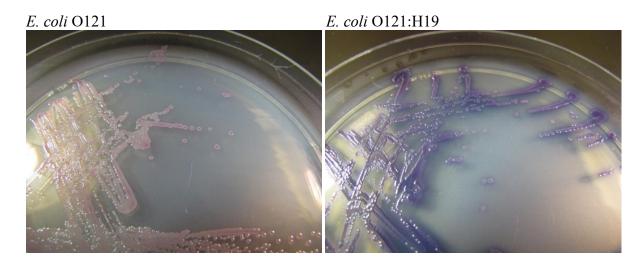


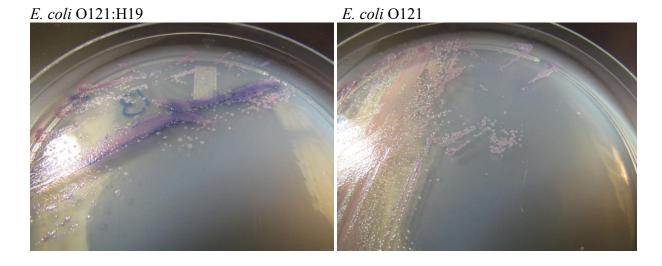


E coli O111:H8



MLG 5C Appendix 2.00		Page 6 of 7
Title: Morphologies of Representative Strains from Six non-O157 Shiga Toxin-Producing <i>Escherichia coli</i> (STEC) Grown on Modified Rainbow Agar		
Revision: Original	Replaces: NA	Effective: 02/04/2019





MLG 5C Appendix 2.00		Page 7 of 7
Title: Morphologies of Representative Strains from Six non-O157 Shiga Toxin-Producing <i>Escherichia coli</i> (STEC) Grown on Modified Rainbow Agar		
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