

**United States Department of Agriculture
Agricultural Marketing Service, Science & Technology
Microbiological Data Program**

SOP No.: MDP-QA-02		Page 1 of 5
Title: Proficiency Test Samples		
Revision: 02	Replaces: 03/01/06	Effective: 03/01/08

1. Purpose

To provide standard procedures for the analysis of proficiency samples by laboratories participating in the USDA/AMS Microbiological Data Program (MDP).

2. Scope

This Standard Operating Procedure (SOP) shall be followed by all laboratories conducting microbiological studies for MDP, including support laboratories conducting non-routine activities that may impact the program.

3. Outline of Procedure

Proficiency Testing Program	5.1
Test Sample Preparation	5.2
Test Sample Analysis	5.3
Test Sample Reporting	5.4

4. References

- 4.1. Current MDP Semi-Annual Program Plan
- 4.2. Current MDP SOPs

5. Specific Procedures:

5.1. Proficiency Testing Program

- 5.1.1. Proficiency Testing (PT) samples shall be analyzed according to the current MDP Semi-Annual Program Plan and the specific test protocol supplied by the USDA Monitoring Program Office (MPO).
 - 5.1.2. PT samples shall be prepared by the laboratory Quality Assurance Unit (QAU) and transferred to the Technical Program Manager (TPM) or designee for analysis.
 - 5.1.3. PT samples shall be analyzed in the same manner as regular samples.
-

**United States Department of Agriculture
Agricultural Marketing Service, Science & Technology
Microbiological Data Program**

SOP No.: MDP-QA-02		Page 2 of 5
Title: Proficiency Test Samples		
Revision: 02	Replaces: 03/01/06	Effective: 03/01/08

5.2. Test Sample Preparation

- 5.2.1. Fresh produce shall be purchased as specified in the test protocol by either the technical group or the QAU. The produce shall be obtained from a terminal market or grocery store for use as substrate. If purchased from a grocery store, attempts shall be made to purchase a box of produce as it arrives from the terminal market or warehouse rather than individual fruit or vegetables that have been placed on public display for purchase.
- 5.2.2. The QAU may delegate sample preparation responsibilities to other laboratory staff so long as that person is not a member of the laboratory's MDP technical staff and so long as the QAU ensures that the proficiency samples are received by MDP technical staff as blind samples.
- 5.2.3. Inocula for the specified test organism shall be supplied by an approved vendor to the laboratory QAU by MPO.
- 5.2.4. The QAU or designee shall reconstitute and dilute the inocula according to the specific test protocol supplied by MPO.
- 5.2.5. Each of the purchased items shall be prepared and washed according to the procedures specified in SOP MDP-LABOP-02, Sample Receipt, Elution, Preenrichment, and DNA Extraction. The preparation and wash steps may be performed by the technical group or the QAU or designee.
- 5.2.6. Each sample bag shall be uniquely labeled according to the provided test protocol.
- 5.2.7. Each sample wash shall be inoculated (or designated as a blank) by the QAU or designee according to the test protocol.
- 5.2.8. Each inoculation scheme shall be documented by the QAU or designee.
- 5.2.9. The QAU or designee shall transfer the labeled test samples to the TPM or designee for analysis.

5.3. Test Sample Analysis

- 5.3.1. Sample analysis shall begin the same day that the produce washes are inoculated.
 - 5.3.2. Samples shall be analyzed according to the applicable MDP method SOP(s) for the specified test organism.
-

**United States Department of Agriculture
Agricultural Marketing Service, Science & Technology
Microbiological Data Program**

SOP No.: MDP-QA-02		Page 3 of 5
Title: Proficiency Test Samples		
Revision: 02	Replaces: 03/01/06	Effective: 03/01/08

- 5.3.3. Each sample shall be analyzed individually. Pooling of samples is not permitted.
 - 5.3.4. Routine media and cultural controls shall accompany the analysis. Produce controls shall be handled according to the particular test protocol supplied by MPO.
 - 5.3.5. Laboratories shall attempt confirmation of any presumptive positive samples according to the appropriate cultural procedures for that test organism.
 - 5.4. Test Sample Reporting
 - 5.4.1. Results shall be reported within the timeframe specified by the particular test protocol.
 - 5.4.2. Laboratories shall report results via the electronic forms supplied with each test round.
 - 5.4.3. Results shall be reported to MPO following final QA review.
-

**United States Department of Agriculture
Agricultural Marketing Service, Science & Technology
Microbiological Data Program**

SOP No.: MDP-QA-02		Page 5 of 5
Title: Proficiency Test Samples		
Revision: 02	Replaces: 03/01/06	Effective: 03/01/08

Revision 02 February 2008 Monitoring Programs Office

- Revised to allow technical group or QAU to purchase produce for PT rounds

Revision 01 December 2005 Monitoring Programs Office

- Updated to reflect current PT practices and requirements.

