MQIP LAB Standard Operating Procedure		
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Determination of Silage pH

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SECTION 1 INTRODUCTION

1.1 Purpose

The purpose of this document is to set forth standard guidelines for performing pH measurements on silage

1.2 Scope

This SOP applies to the Milk Quality Improvement Program (MQIP) Lab

1.3 Definitions

DI water – Dionized water

Silage – Refers to all types of fermented animal feed including, but not limited to; corn silage and hay silage.

SECTION 2 MATERIALS

- **Balance**
- **DI Water**
- **pH Meter**
- **Stomacher and stomacher bags**
- **Beaker**

SECTION 3 PROCEDURES

3.1. Sample preparation

3.1.1. Weigh 5g of silage into a stomacher bag.
3.1.2. Add 45mL of DI water to the silage in the stomacher bag.
3.1.3. Stomach the silage and DI water at 230 rpm for 60 seconds.
3.1.4. Allow the stomached silage to sit undisturbed for 30 minutes prior to taking pH measurement

3.2. pH Measurement

3.2.1. Take pH measurement of silage slurry according to the pH meter manufacturer's instructions.

SECTION 4 TROUBLESHOOTING

SECTION 5 REFERENCES