Risky business? Conducting a risk assessment of postharvest operations using washing machines for leafy greens

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The Problem

- Post-Harvest: Washing machines for spinning greens is a very common practice
- No established research to inform growers on the development of specific best practices

Figure. Image of a field site of a postharvest processing that dries leafy greens. Image sourced from https://tinyfarmblog.com/spin-cycle/.
NECAFS NETWORK

The Northeast Center to Advance Food Safety

• 2019 NECAFS Steering Committee
  – Regulators
  – Extension agents
  – Producers and buyers

• Discussion –
  – Challenges with sanitation design and management.
  – DIY converted washing machines
Project Objectives

- **Objective 1:** Identify, source and build converted washing machines for drying leafy greens using the “DIY” resources provided from industry that are applicable for small scale leafy green operations.

- **Objective 2:** Conduct a science-based risk hazard identification assessment that will investigate the harborage and sanitation risks of using DIY converted washing machines for drying leafy greens.

- **Objective 3:** Develop and design a mixed-media portfolio of extension-based tools, which will focus on the principles of cleaning and sanitation, sanitation design and sanitation management.
Objective 1: Identify, source and build “DIY” washing machines

• Activity: Investigate available resources for DIY converted washing machines

• Activity: Source and build DIY washing machines converted greens spinners.
Objective 2: Conduct a science-based risk hazard identification assessment

- What is the overall contamination risk of using DIY converted washing machines for drying leafy greens?
- Can DIY converted washing machines for drying leafy greens be cleaned and sanitized to effectively manage microbial risk?
Objective 3: Develop and deploy extension-based tools

Activity: Extension programming may include-

- Brief video tutorials
- Downloadable pdf Fact Sheets
- Face-to-face workshops/speaking events
- Real-time (and recorded) webinars
Current Status

• Objective 1: COMPLETE
  – UVM Extension – Washing Machines Greens Spinner Workshop – November 2019
  – Assembled 4 Units at UMASS
  – Purchase – Industry leafy green dryer

• Objective 2: In-Process
Building Washing Machines
Greens Spinner
Building Washing Machines
Greens Spinner
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