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Good Agricultural Practices Document Review and Recommendations
"Documenting a Risk Based Approach to Applying GAP Metrics/Standards"

Proposed GAP Standards and Metrics

A risk assessment can improve the setting of standards and make them more acceptable to the fresh produce industry and more effective when applied. Farmers can determine risk fairly easily if they can identify threats to crop safety, and analyze and quantify the current level of protection. In such an analysis, it is possible to assign a risk value to farms based on existing conditions. Such values provide an additional validating step by providing a risk based system for applying the standards.

We can define threats as any situation condition or activity that brings hazards, such as microbial pathogens closer or in contact with crop. Farmers can evaluate threats including nearness to cattle operations, size of the cattle operation, contiguous land, up slope/down slope topography, evidence of wildlife intrusion into crops, distance to manure and composting, prevailing weather patterns such as prevailing wind, biological and chemical quality of watercourses, drainage patterns on the farm or nearby, and susceptibility to flooding.

Farmers then document the controls: fences, berms, flood control, well construction, and the protection of water bodies used for irrigation and other safety measures that are in place now.

By analyses of threats and controls, investigators can assign numeric values and classify farms into three risk categories:

Risk Categories High, Medium and Low

We propose a system of classification of farms based on a risk assessment, a system of that classifies farms into High, Medium and Low risk. The classifications proposed are subject to change as better science or regulations come into full effect. But what initial classification could provide are logical methods for applying testing regimens and time tables for compliance, with farmers applying the most critical and immediate interventions, testing, etc., to farms in the **High** risk category and less stringent time tables for compliance and preventive measures applied to those with **Low** classifications.

New scientific investigations will soon be underway, farmers must be aware of the evolving science as it affects risk assessment. Newly released goals of research include:

1. Identify new mitigation strategies and technologies to reduce the potential for E. coli O157:H7 to contaminate leafy green produce.
2. Conduct field studies to identify sources, vehicles and factors that affect the degree of contamination or extent of contamination of leafy green produce by E. coli O157:H7.
3. Determine the ability of E. coli O157:H7 to multiply in the presence of normal background flora following the harvest of produce such as lettuce or spinach.
4. Determine the ability of E. coli O157:H7 to survive composting processes.

Science Gaps in GAP Metrics

Current research as listed above will influence many of the standards and therefore farmers should expect that the standards would change as a result. Therefore, the document would benefit from the following language:

“The current standards reflect the best available science. These standards are subject to change as new scientific evidence about risk becomes available.”