Key Takeaways
"Tales from the Trenches: Building and Implementing Effective
Environmental Monitoring Programs"
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Top 5

1. EMPs build on existing programs and are an early warning system for hazards that predict a loss of control in the food safety practices in your operation.
2. Swabbing for enumeration of indicator organisms (APC, *E. coli*, coliforms) can be useful to help validate and verify cleaning and sanitation programs in your facility, and these organisms can be found in higher concentrations on hard-to-reach or rarely cleaned and sanitized equipment.
3. Swabbing for *Listeria* spp. can be informative about whether the conditions for survival of *L. monocytogenes* are present in your facility, and these organisms are found more often on or near equipment surfaces used in washing, waxing, fan drying, or wet processes or at entry points to the packinghouse.
4. Positive identification of *Listeria* spp. in a packinghouse should initiate a root cause analysis (including vector swabbing) to identify the source of the isolate and determine its spread, corrective action procedures, and appropriate documentation.
5. If wax is used for postharvest applications on fresh produce, it is fundamental to remove wax residues from equipment surfaces. An effective cleaning and sanitation event should (1) clean/wash surfaces by effectively removing wax residues, (2) rinse cleaner residues, and (3) sanitize at the appropriate concentration for adequate reduction of microorganisms.

Acronym Key
EMP: Environmental Monitoring Program
APC: Aerobic Plate Count

Additional Reading

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Wang P, Quansah JK, Pitts KB, Chen J (2021). Hygiene status of fresh peach packing lines in Georgia. LWT 139:110627. https://doi.org/10.1016/j.lwt.2020.110627.

Williamson K, Pao S, Dormedy E, et al (2018). Microbial evaluation of automated sorting systems in stone fruit packinghouses during peach packing. Int J Food Microbiol 285:98–102. https://doi.org/10.1016/j.ijfoodmicro.2018.07.024.

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