

Leafy Greens and Food Safety

After a history of recent disease outbreaks related to California grown fresh-cut processed spinach, lettuce, and salad mixes, feverish attention is being given to new requirements aimed at preventing future problems. As public health officials, regulators and industry organizations geared up, CAFF also became involved. CAFF was concerned that the new rules under discussion were encouraging farms to take out their conservation plantings; were setting up expensive and uncoordinated testing efforts; and were not focused on the most important risks.

On February 27, 2007, the Joint California State Assembly and Senate Committees on Agriculture held an *Informational Hearing on Farming and the Environment: An Overview of the 2006 E. coli Outbreak*. CAFF was invited to attend, representing our members. The following is a summary of the main points made by Judith Redmond, CAFF's president at the joint meeting (see the complete testimony at www.caff.org/policy/leafygreen.shtml).

Limit the Scope of the New Rules to Processed, Fresh-Cut Greens

The sense of urgency around *E. coli* in leafy greens has resulted in an approach that does not target the most significant risks and mistakenly encompasses issues that are not risks at all. Since bagged salads and spinach were the most common vehicle for produce-linked outbreaks of 0157 during 1990 to 2004, our effort should focus on them as known risks.

Foods that are grown to be bagged and sold in their raw form as “ready to eat” need to be produced using good agricultural practices. Centralization of washing and packaging is a major risk factor, since greens from many locations are chopped and mixed together. The product is then enclosed in a packaged environment that can reach high humidity and provide favorable conditions for microbial growth. Then it is distributed nationwide, which vastly increases the risk of contamination. Because bagged mixes and salads are highly perishable, there is consensus that they must be distributed, stored and displayed under refrigeration. Even a temperature gap of a few hours can cause a problem. These products travel extensive distances, with many possible ways that there could be gaps in temperature control.

Industry standard for most fresh-cut salads is a shelf life of 15 to 17 days once the product leaves the processing plant, up from 5 to 10 days just a few years ago. This is too long because even an inconsequential presence of the pathogen can multiply in this time frame into a serious dose. Committee members should *consider reducing the allowable shelf life of bagged spinach and salads*. Committee members should also *consider a requirement that bagged salads be labeled with the statement that the consumer keep the product refrigerated and wash it before eating*. The “Ready to Eat” label is misleading.

Work on the Problem at Its Source

A second area of high-risk focus is the interface between the salad mix and livestock industries. It may be that the salad mix industry is unable to do this alone and will need support from the livestock industry. Domestic cattle are the primary source of microbial pathogens like *E. coli* 0157. Tainted irrigation water is the most plausible cause of crop contamination in the field.

There are a number of feed-related and animal husbandry risk factors that contribute to the presence of 0157 in livestock. *We must develop methods to reduce 0157 infections and to contain 0157 in manure. Crops for bagged salads should not be grown in fields that are at risk of contamination from nearby livestock grazing or feeding operations.*

Don't Dismantle the Public's Investment in Environmental Stewardship

Conservation Plantings—A primary effort of the Community Alliance with Family Farmers has been the introduction of conservation plantings and installation of many miles of buffer strips, grassed waterways, filter strips and hedgerows on farms up and down the state. Much of this work is funded with public dollars in a national effort to improve our nation's water quality and reduce the use of toxic chemical fertilizers and pesticides. In many cases conservation plantings have been shown to reduce the presence and transport of water-borne bacteria and pathogens and can be specifically designed to address food safety issues.

In the proposed production guidelines, deer, geese and feral pigs are identified as animals of significant risk. However, dozens of studies across the U.S. have surveyed *E. coli* 0157 infection rates in various wildlife populations. In all cases, infection rates are very low—less than one animal in 1000. In contrast, while the prevalence of 0157 in domestic cattle is highly variable, tests in many different environments show from 3% to 40% of cattle test positive. This misguided focus on wildlife diverts attention from much more important things. If conservation plantings are included as a food safety risk *at all*, we can assure you that many farmers will abandon their efforts and millions of dollars of public investment will be put at risk. Even if the rule only applied to bagged salad and spinach, it would cast a pall far beyond those crops. *The limitations on the use of conservation plantings need to be completely removed from the draft metrics.*

Compost— Another good practice that may be mistakenly snared in these rules is the use of fully composted animal manures to improve soil health. It is important that the record is set straight here: The National Organic Standards forbid the use of un-composted animal manures less than 120 days prior to harvest. We endorse the provisions in the proposed regulations to limit the use of raw manure. This brings non-organic agriculture up to the standards that the organic industry must meet.