

## **Emerging Pathogens Institute**

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September 30, 2013

National Organic Standards Board Crops Subcommittee

Re: Petition to remove the existing expiration date of October 21, 2014, for Streptomycin and replace it with a new one of October 21, 2017, for apples and pears

Dear Colleagues,

I would like to indicate my strong opposition to the petition cited above: specifically, I do NOT support the proposed three year delay in implementation of the expiration date for use of streptomycin for organic apples and pears.

Speaking as a physician/epidemiologist and specialist in Infectious Diseases, I would note that streptomycin remains an important drug in human medicine. Reflecting current World Health Organization recommendations, it continues to play a key role in the treatment of tuberculosis, particularly in the developing world, with perhaps the greatest value in treatment of multi-drug resistant TB. Development of resistance to streptomycin may be accompanied by development of resistance to other aminoglycoside antibiotics (i.e., other drugs in the same drug class), which also continue to be used here in the United States for treatment of serious gram-negative infections. The very real, and ongoing, treat of antimicrobial resistance in clinical medicine is underscored by the recent CDC report "Antibiotic Resistance Threats in the United States, 2013," which can be downloaded from <a href="https://www.cdc.gov/drugresistance/threat-report-2013/">www.cdc.gov/drugresistance/threat-report-2013/</a>.

A key driver in development of antimicrobial resistance is antibiotic use. While use of antibiotics in human medicine is a critically important element in development of resistance, there is a growing scientific consensus that use in agriculture plays an important role in this process. Our research group here at University of Florida has been involved for many years in work assessing the impact of antimicrobial use in agriculture on development and transmission of antibiotic resistance to human populations. Based on available data (as well outlined in the petitioned material checklist), there is some degree of risk that continued use of streptomycin, as proposed in the petition, will result in further development of streptomycin resistance in bacteria in the immediate orchard environment, with, in turn, the potential for further spread within the environment and ultimate transfer to humans.

In summary: continued use of streptomycin in management of organic apple and pear orchards poses a small, but real, risk for further development and selection of streptomycin resistance, with, in turn, the risk that these resistance elements will be transferred to humans. I concur with the data and arguments presented in favor of denying the petition, and add my own strong opposition to the proposal to further delay the existing expiration date for streptomycin.

Sincerely,

J. Glenn Morris, Jr. MD, MPH&TM

Professor and Director

UF Emerging Pathogens Institute Fellow, Infectious Diseases Society of America