



September 30, 2013

Ms. Michelle Arsenault
National Organic Standards Board
USDA-AMS-NOP
1400 Independence Avenue, SW
Room 2648-So., Ag Stop 0268
Washington, DC 20250-0268

Docket: AMS-NOP-13-0049

RE: Crops Subcommittee – Streptomycin

Dear Ms. Arsenault:

The Organic Trade Association¹ (OTA) thanks you for this opportunity to provide comment on the Crops Subcommittee proposal on Streptomycin. The Subcommittee proposes to remove the existing expiration date of October 21, 2014, for streptomycin and replace that with a new expiration date of October 21, 2017. This would be for use in both apples and pears for control of fire blight.

In summary:

- **OTA is committed to ending the use of antibiotics in organic apple and pear production.** We agree that antibiotics should be phased out of organic production, and we support all efforts to develop effective alternatives. Researchers and orchardists have committed years of research into developing alternatives to antibiotics for fire blight control. These developments have been supported by over \$600,000 in grower-funded research for non-antibiotic, organic-compliant controls and practices, along with over \$5 million in research support from USDA's Agricultural Research Service. Excellent progress has been made, but more time is needed in order to support the widespread adoption of newly emerging alternatives. We expect that **by 2017**, recently funded research and field-testing and a resulting grower publication (expected out in 2016) will provide organic growers new tools allowing them to end the use of antibiotics.
- **A 2017 expiration date will support current research and testing, and allow for grower education and success.** The most sensible course is to extend for a limited amount of time the ability for growers to use streptomycin as restricted under NOP standards while the new alternative materials are fully proven. Based on the status of emerging alternatives and existing research funded under USDA, **the reasonable expiration date that will support product**

¹ OTA is the membership-based business association for organic agriculture and products in North America. OTA is the leading voice for the organic trade in the United States, representing organic businesses across 49 states. Its members include growers, shippers, processors, certifiers, farmers' associations, distributors, importers, exporters, consultants, retailers and others. OTA's Board of Directors is democratically elected by its members. OTA's mission is to promote and protect the growth of organic trade to benefit the environment, farmers, the public and the economy.

registration and availability, commercial scale-up, and grower experience is 2017. We believe this is an extremely rigorous timeline. However, it does to a great extent take into account the time needed for grower education and experience based on the results of a critical USDA-funded Organic Research and Education Initiative (OREI) research project running through 2015 that will help validate the newly developed practices. OTA does not support any further allowance beyond 2017.

- **Expiration dates need to be based on research-based timelines, not political compromise.** Expiration dates that are the result of compromise will continue to fail. They will continue put us in the exact situation we're in. The 2014 expiration date was not based on scientific evidence or a research-based timeline. We knew when the recommendation passed in 2011 that it would fall short of the time needed to develop commercially viable alternatives. We knew it would fall short not for lack of trying, but because of the known amount of time it takes to move from the development of a material to its widespread adoption. OTA urges NOSB to pass a time-limited extension based on the OREI research-supported time-frame we have described in our comments.
- **OTA supports the subcommittee resolution.** In accordance with existing organic regulations, the use of streptomycin must *continue* to be highly regulated. As stated in the organic regulations, producers may only apply synthetic materials when physical, biological, and cultural practices and biological or botanical substances are not effective, provided conditions are documented and approved in their organic system plan. We expect that growers will be trialing the new and emerging alternative materials if they haven't done so already. Such use and activity are required to be documented in their organic system plan and approved by certifying agents.
- **OTA recognizes the role organic agriculture can play in developing an approach that will ultimately be adopted in conventional orchards.** The phasing-out of antibiotics by allowing development of effective alternative solutions offers the opportunity for NOSB to engage agriculture experts, growers, and consumers, and to lead a public-private effort to foster the adoption of these new techniques in conventional orchards and non-antibiotic controls by other growers on many thousands of acres.
- **The Organic Center is actively working to assist the phase-out of antibiotics.** The Organic Center launched a project in July in collaboration with David Granatstein and Harold Ostenson to provide critically needed information on how to prevent fire blight from decimating apple and pear orchards without the use of antibiotics. The report will include a publication on lessons learned from a systems approach to non-antibiotic fire blight control that has been successfully used by dozens of Pacific Northwest organic orchardists who were maintaining compliance for export to the European Union. The strategies used along with then-available materials provide a "lessons learned" knowledge base for other organic orchardists to refer to as they are required to move to non-antibiotic control, and can be combined with results from ongoing research with several new materials as they become available. The project will be published as a report written for growers, going over methods for controlling fire blight holistically, and covering issues such as sanitation, vigor control, sequence and timing of control materials, spray coverage, and varietal susceptibility. The goal is to help fill the "knowledge gap" created by the 2014 sunset of oxytetracycline and to encourage growers to begin testing alternatives now.

We offer the following more detailed comments.

OTA is committed to ending the use of antibiotics in organic apple and pear production.

The organic sector recognizes that this issue is highly controversial due to concerns about the use of antibiotics in livestock production and the general prohibition of their use in organic agriculture. We understand and share this concern. Therefore, we support the efforts being made to transition the current practice to an alternative but effective approach—one that does not include antibiotics.

Research on biological controls of fire blight has been ongoing since the 1980s. Instrumental products such as Blight Ban A506 and Serenade were introduced in the 1990s, Bloomtime Biological in the 2000s, and Blossom Protect in 2012. New copper products are currently being tested, and research on the biology of fire blight and other possible controls are ongoing. These developments have been supported by over \$600,000 in grower-funded research for non-antibiotic, organic compliant controls and practices, along with over \$5 million in research support from USDA's Agricultural Research Service. A system referred to as LAMP (loop-mediated isothermal DNA amplification) is also under development for in-field monitoring of fire blight. This system would enable growers to refrain from treatment if bacterial levels were low despite weather conditions favorable for infection.

A critical component that has recently accelerated efforts is a USDA-funded Organic Research and Education Initiative (OREI) research project running through 2015 that will help validate the newly developed practices. Growers need the results of the OREI project, and then time to test and integrate them into their management. A grower guidance publication that builds upon the research is expected to follow in 2016. This publication is necessary to support grower education, bolster grower confidence, and, ultimately, foster the adoption of a non-antibiotic approach to controlling fire blight. We expect that by **2017**, this research and field-testing will provide organic growers new tools allowing them to end the use of antibiotics.

A 2017 expiration date will support current research and testing, and allow for grower education and success. OTA urges NOSB to accept the subcommittee recommendation and set an expiration date that can be tied to a fact-based research-supported timeline as we have described above. Great strides have been made towards the adoption of a non-antibiotic approach, and success is on the near horizon. However, a 2014 deadline falls short of critical research that will validate newly developed practices. Many growers have not tried the new and emerging alternatives, and are concerned about the risk of catastrophic disease in the absence of proven controls. The most sensible course is to extend for a limited amount of time the ability for growers to use streptomycin as restricted under NOP standards, while the new alternatives are fully proven in a number of different growing climates and regions.

The reasonable expiration date that will support product registration and availability, commercial scale-up, and grower experience is **2017**.

Growers need effective and proven alternatives.

In a 2012 organic grower survey, 93 percent of growers said they would reduce organic apple or pear production or exit it entirely (return to conventional farming) with the loss of antibiotics without proven consistent alternatives because of the high potential to lose *entire orchards* to fire blight. New orchards cost \$12,000-20,000 to establish per acre. It also takes five to seven years to bring an organic orchard to maturity, making it economically devastating for farmers to lose an orchard to disease.

It's important to realize many growers, including the 93 percent responding to the survey, only use antibiotics during periods of high risk. Treatments are not applied in situations when disease models do not indicate sufficient risk. However, although used infrequently, without alternatives it may be

essential when disease models indicate high risk of infection.

Once an orchard is infected with fire blight, there are no curative methods other than cutting out infected limbs or trees and removing them from the orchard. Most growers are not willing to risk this loss. Thus, they need not only access to alternative materials but also the time and experience to be confident they work. If growers exit organic production due to fire blight risk, we expect to see a significant reduction in the supply of U.S.-grown organic apples and pears, and a corresponding increase in price for consumers. Premature loss of streptomycin will undermine the tremendous expansion in organic apple and pear production that has occurred.

Growers need alternative tools to control fire blight, and they need to be confident they will work. As new materials, practices, and genetics become available, researchers validate them under different conditions and within overall orchard management systems to reduce the risk of failure or unanticipated side effects in grower orchards. This process is then followed by a period of education and grower experience to again refine their use in the diverse settings and environments encountered in commercial orchards. The process of moving a material from being available, to proving its efficacy, to integrating its use into an overall management system, to educating growers, is a multi-year effort, often five or more years. **Understanding this process is a key consideration when setting timelines to phase out existing key pest control tools.**

Expiration dates need to be based on realistic timelines, not political compromise.

We understand that NOSB's recommendation in 2011 on streptomycin represented a compromise between the petitioner's request to drop the date from the annotation and NOSB Crop Committee's recommendation to let the use of the material expire in October 2012. We also understand that the NOSB proposed a time-limited extension for streptomycin to allow for the continued use of the material while encouraging the industry to increase its efforts to research and develop commercially viable, cost-effective alternatives to the use of antibiotics in the organic pear and apple industry. The recommendation essentially conveyed the urgency of consumer and public interest groups' advocacy of eliminating the use of streptomycin in organic tree fruit production. The recommendation did not take into account the time it would actually take to develop and adopt effective alternatives.

Expiration dates that are the result of compromise will continue to fail. However, if we make decisions based on fact, everyone is likely to stick to them. The 2014 expiration date was not based on scientific evidence or a research-based timeline, and we knew when the recommendation passed that it would fall short of the time needed to develop commercially viable alternatives. We knew it would fall short, not for lack of trying, but because of the known amount of time it takes to move from the development of a material to its widespread adoption. This has unfortunately led to unwarranted media attention containing inaccurate information that is harming the entire organic sector.

Our goal should be to successfully transition as many organic growers as possible to a non-antibiotic control regime. This will minimize disruption to the organic sector and, most importantly, will support overall decreased usage of antibiotics. We should be working to retain every organic acre currently in organic production, rather than penalizing organic growers that have, in good faith and full organic compliance, built their livelihoods around the production of organic apples and pears.

Organic apple and pear producers have been allowed to use streptomycin as a last resort material since the implementation of the National Organic Program, and even earlier under private standards. Some growers may rarely use it, and other growers may never use it. However, the material has at least been available in the case that an orchard is faced with devastating fire blight conditions. There are some growers, early adopters for example, that have recently transitioned their mature orchards to a non-

antibiotic control system, but they have been able to do so knowing they have the last resort option of streptomycin.

Organic growers need to know they have materials that will provide the same level of protection against fire blight. Otherwise, they are likely to move to conventional production. Therefore, OTA urges NOSB to pass a recommendation that supports a time-frame that will allow for the greatest number of organic farmers to successfully transition to non-antibiotic management of fire blight. While it's difficult to accurately predict a single-best expiration date prior to the results of the OREI project, if we assume success, we can expect that by **2017** research and field-testing will provide organic growers new tools allowing them to end the use of antibiotics.

OTA supports the subcommittee resolution.

We commend the subcommittee for declaring its commitment to phasing out of streptomycin and for putting forth a resolution. USDA organic standards have allowed the use of the antibiotics tetracycline and streptomycin as last resort preventive controls for fire blight since the establishment of federal organic standards in 2002. The use of these materials, as with all pest control materials, in organic orchards is highly regulated. Current NOP standards as written prohibit producers from relying solely on the use of any materials for disease control, and fire blight management is no different. Producers may only apply synthetic materials when physical, biological, and cultural practices and biological or botanical substances are not effective, provided conditions are documented and approved in their organic system plan.

In support of the Resolution and the organic sector's commitment to end the use of antibiotics, we support any extra efforts that can be made to encourage certified operators to try as many alternative practices and materials as possible. We also support increased USDA-funded support for research into alternative practices and materials. With respect to the certification process, we expect that certifiers will *continue* to uphold the NOP regulatory requirements described above as the course of the annual certification process. The certification processes effectively verifies that growers are following their farm plan, and are operating in compliance with organic requirements.

Conclusion

Once again, OTA urges NOSB to recommend an expiration date that can be tied to a fact-based research-supported timeline as we have described in our comments. The reasonable expiration date that will support product registration and availability, commercial scale-up, and grower experience is **2017**.

There is undeniable evidence that growers (small and large) across the country, packers and handlers, and many other stakeholder organizations are committed to developing and implementing a non-antibiotic approach to controlling fire blight in apple and pear production. University and grower research has been ongoing for over 20 years. Current efforts to find effective alternatives are moving as fast as possible for a perennial tree system with limited abilities for multiple trials per year. Given the substantial progress that's been made, OTA is optimistic that by 2017, we can end the use of antibiotics without serious loss of organic acreage, and we are committed to this expiration date.

Organic production continues to lead all of agriculture in the development of natural and sustainable pest control solutions. The phasing-out of antibiotics by allowing for development of effective alternative solutions is no difference. Successful adoption of a non-antibiotic control regime on a commercial scale not only supports existing organic producers and handlers, it also offers the opportunity for NOSB to engage agriculture experts, growers, and consumers, and to lead a public-

private effort to foster the adoption of these new techniques in conventional orchards and of non-antibiotic controls by other growers on many thousands of acres.

Again, on behalf of our members across the supply chain and the country, OTA thanks the National Organic Standards Board for the opportunity to comment and for your commitment to furthering organic agriculture.

Respectfully submitted,



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Organic Trade Association (OTA)

CC: Laura Batcha
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References

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