

sufficient scientific rationale for the NOSB to take precautionary action and support the expiration of oxytetracycline for use in organic apple and pear production.

### **Conclusion**

CFS urges the NOSB to vote against extending the use of oxytetracycline to 2016. Increasing, documented incidence of antibiotic resistance and the threat of losing oxytetracycline as a tool for combating infections in humans, alone, is reason enough to prohibit its use in organic at the earliest opportunity.

### **Polyoxin D Zinc Salt**

CFS supports the Crops Subcommittee recommendation to deny the petition for listing polyoxin D zinc salt to be used as a fungicide. We agree with the Crops Subcommittee that the zinc salt added to the compound should be considered synthetic because its origin is not specified as mined or recycled. Polyoxin D zinc salt (PDZ) fails to meet the criteria for listing on the National List because it has negative environmental impacts, it is incompatible with organic systems, and it is not essential. CFS believes that the compound is inconsistent with organic production.

PDZ inhibits the chitin synthetase in fungus and can have detrimental impacts on other beneficial insects.<sup>26</sup> As it is a broad spectrum fungicide, CFS has real concerns about its residual negative effects in soil and its adverse impacts on beneficial soil organisms. Fungi serve important functions within soil ecosystems, particularly as decomposers that help to maintain soil structure and break down organic matter and in making nutrients available to crops. These crucial soil organisms would also be affected by the use of products that inhibit chitin formation, even if they are targeting plant pathogenic fungi. PDZ has been shown to affect chitin synthetase in studies on cockroaches as well, suggesting a potentially negative impact on beneficial insects that have a chitin exoskeleton.<sup>27</sup> Without the full ability to synthesize chitin, insects that rely on chitin as a major exoskeleton component will be adversely affected because their structure will not develop properly.

Organic pest management systems rely on interactions of beneficial organisms to provide controls for plant pathogens in a system that “promotes and enhances biological diversity, biological cycles, and soil biological activity.”<sup>28</sup> Introducing the synthetic PDZ input would unnecessarily and adversely affect these natural cycles. Polyoxin D zinc salt is also not essential for organic production in that there are several readily available alternative products and practices identified in the technical review. These include crop rotation, nutrient management, sanitation, and selection of resistant species and varieties.<sup>29</sup>

We urge the NOSB to reject the petition for listing polyoxin D zinc salt.

<sup>26</sup> NOSB. 2013. Crops Subcommittee Petitioned Material Proposal: Polyoxin D Zinc Salt. Jan. 29. 2013.

<sup>27</sup> The Organic Center for NOP. 2012. Technical Evaluation Report: Polyoxin D Zinc Salt. Lines 257-262.

<sup>28</sup> NOSB. 2001. Principles of Organic Production and Handling; Section 1.1. October 17.

<sup>29</sup> The Organic Center for NOP. 2012. Technical Evaluation Report: Polyoxin D Zinc Salt. Lines 367-382.