## Ron Figlar-Barnes

I am not supportive of the use of Imidacloprid for ghost shrimp! This is the use of a pesticide that has been found to impact bee populations, and birds.

There have been studies (Pesticide Information Project of Cooperative Extension Offices of Cornell University, Michigan State University, Oregon State University, and University of California at Davis) showing Imidacloprid is toxic to upland game birds--what about the ducks and other bird species associated with Willapa Bay and Grays Harbor? Imidacloprid may be very toxic to aquatic invertebrates besides ghost shrimp. In the same work mutagenic effects were noted as well as teratogenic effects on growth and skeletal structure of rats.

Imidacloprid in water is a question mark. No one can point to certainty that this pesticide will not cause harm to the Willapa Bay and Grays Harbor ecosystems. It would be prudent to use a small plot area to test the spread and the effects of imidacloprid.

My suggestions;

Use harrowing instead of a pesticide. Use fresh water to reduce the ghost shrimp population. Grow your product in naturally rocky sub-straight areas.

Specific Questions

What is the effect of imidacloprid on Dungeness crab? What is the status of natural rocky sub-straight in Willapa Bay and Grays Harbor? Have investigation been undertaken regarding predators and ghost shimp? What direct investigations have been undertaken to understand the effects of pesticides use in the past in both bays? What is the effect on salmonid populations during out migration? What has been the effect of dredge-harvesting on ghost shrimp?