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January 29, 2015

Dr. Matthew Allen
New Zealand EPA
Level 10 215 Lambton Quay
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Wellington 6140, New Zealand
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Re: **Submission of non-confidential summary of non-GLP Translational Field-to-Lab Study to Assess the Residual Toxicity of Acephate Applied as a Foliar Application on Honey Bees (*A. mellifera*) in Response to Acephate Reassessment and EPA proposal [OPC reassessment (APP202142)] on altering the bee controls (non-contact periods) for acephate.**

Dear Mr. Allen,

Arysta LifeScience would like to take the opportunity to submit a non-confidential summary of Laboratory Project ID 14080.4102 [*Non-GLP Translational Field-to-Lab Study to Assess the Residual Toxicity of Acephate Applied as a Foliar Application on Honey Bees (A. mellifera)*] that Arysta LifeScience has generated in a semi-field pollinator study to address data gaps with the active ingredient acephate and the proposed non-contact period for pollinators.

Study Summary:

Non-GLP Translational Field-to-Lab Study to Assess the Residual Toxicity of Acephate Applied as a Foliar Application on Honey Bees (A. mellifera)

The objective of the study was to determine the LD50 on honey bees for acephate applied as Orthene on a pre-flowering crop of cucumbers as a surrogate crop for lemon trees. The outcome was intended to define the acceptable non-contact period between pre-bloom application and flowering on lemon trees to create minimal impact on honey bees during active foraging at bloom time.

This lab study consisted of 1 rate of Orthene applied to cucumber as a foliar application. Flower buds were sprayed from 7 days prior to bloom until 1 day prior to bloom, with each day acting as a treatment. Bees were exposed to flowers until the LD50 had been achieved. Bees were caged in small containers and monitored for a 72 hour time period after the beginning of each exposure. Prior to exposure, adult honey bees were captured and placed in to containers approximately 24 hours before application.

Based on the results of the attached study, if a bee were exposed to a flower sprayed two days before bloom with Orthene 75 WP at 1600g/ha, it could be expected to produce mortality in half of the bees that come into contact only after exposure for more than 2 days. This exposure is not realistic in a natural setting as the pollinating bees would not be exposed to the test material for a

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continuous 48-hour period. Therefore, an application of Orthene 75 WP two days before bloom should be sufficient timing to provide adequate protection to any foraging bees after bloom.

We trust that you will find this response in order; however, should there be any questions please contact me at 919-678-4865 or via email at tim.wilson@arysta.com

Sincerely,

Timothy E Wilson, Ph.D.
Global Regulatory Affairs Manager
Arysta LifeScience, LLC