

Progress Report Template

Project Title:	Integrating energy efficiency and pest management of vegetable covered crops.
Project Number:	06/057
Report for Period Ending:	28 March 2009

Note: If any material supplied in, or attached to, this report contains confidential information, or is otherwise unsuitable for wider dissemination, please clearly mark accordingly and highlight directly with your Project Adviser (including the reason for wishing to treat the material in this manner).

1. Overall Progress

Milestone Summary Table

Milestone Number	Milestone [As per SFF contract schedule]	Completion Date		Percent Complete
		Original	Est. or Actual	
1	Planning year 1 including identifying trial sites Review previous energy efficiency projects	Feb 2007	March 2007	100%
2	Year 1 work set-up and technology transfer agreed upon Project introduced via an article in the 'Grower'	March 2007	March 2007	100%
3	First draft of resistance management strategy Survey results of new insect incursions compiled and analysed Models of temperature effects identified CO ₂ and light use reviews completed Technology transfer via website, articles and meetings Identification and desk-top evaluation of possible use of new biologicals and new chemicals for pest/disease control	June 2007	June 2007	100%
4	Results of Year 1 analysed and transferred Planning for Year 2 Prioritise biological control candidates for introduction	July 2007	July 2007	100%
		Aug 2007	Aug 2007	100%
		Aug 2007	Aug 2007	100%
5	Develop and implement NZ wide protocols to minimise dispersal of whitefly Year 2 data collected Evaluate of resistance management strategy and incorporate feedback Transfer year 2 results	Nov 2007	Nov 2007	50%
		April 2008	April 2008	100%
		June 2008 Aug. 2008	June 2008 Aug. 2008	100% 50%
6	Identify remaining work Evaluate new biologicals and chemicals Evaluate technology transfer mechanisms and make required changes Investigate the option of an industry development officer	Sep 2008	Sep 2008	80%
7	Analyse results, prepare comprehensive final report and publish key findings			

	Best practise use of new chemicals identified Finalise and disseminate pesticide resistance management strategies	April 2009	April 2009	50%
	Release of new biocontrol agents by commercial companies for general release Finalise protocols to ensure ongoing technology transfer	June 2009	June 2009	0%

Project Summary Outline

Provide an update on the project's overall progress. Also include any activities not specifically related to contracted milestones, but that are still relevant to the project.

Note: *If suitable, project teams may use this section as their Web Update (see Appendix 1).*

A major achievement in this reporting period has been the successful importation into containment of *Tamarixia trizoe*. The colony has established and is shown good parasitism rates. Progress in other areas continues to be hampered by the distraction of psyllid and *Liberibacter* which remains a major concern for industry and is occupying a significant proportion of our key researchers time. The project is indirectly assisting these activities by providing a working group for discussing responses to the issue and disseminating information. For these reasons the project is behind on some milestones and the budget is underspent.

2. This Period

Milestone Progress

Outline progress with respect to the relevant milestones over this reporting period.

Milestone Number	Activities and Progress
5	Sub-Project One: New Incursions A final report with recommendations on how to respond to the issue of sweet potato whitefly on poinsettias is close to completion but has been delayed due to staff illness.
6	Sub-Project One: New Incursions Monitoring of the distribution of the psyllid and associated reports of <i>Liberibacter</i> infection continues. Options for expediting the release of the whitefly information have been discussed with the research provider. Sub-Project Two: Biological control agents The major point of progress in this reporting period has been the successful importation of <i>Tamarixia trizoe</i> . The team used the period prior to importation to establish rearing methods with an unidentified species of <i>Tamarixia</i> that was found in New Zealand in 1997. Despite a 13 day transit period to New Zealand the colony of <i>T. trizoe</i> has established well in containment and successful parasitism is being observed. The experiment to assess key entomopathogens is still suffering from technical problems with only two of three replicates completed. Sub-Project Three: Chemical Control Options Three key compounds to pursue have been identified and the project team is in discussion with the associated companies to achieve registration.

Sub-Project Four:– Energy Efficiencies

A final report on this work was tabled at the last project team meeting and options for transfer of the information to industry are being discussed.

Sub-Project Five: Technology transfer

The project has been regularly communicated to industry via Product Group meetings and informal communications in the Grower magazine. At their last meeting the Project Team agreed that the concept of an industry development officer would not be pursued.

Project Management & Governance

List all management meetings held in this period (including dates and locations). Outline any significant management decisions taken in this period.

A Project Team meeting was held in Auckland on the 26th of November. Progress to-date was reviewed and priorities going forward agreed upon as noted above.

Project Communications, Connections and Extension

For this reporting period, comment on progress with respect to:

- *Liaison with key stakeholders / groups.*
- *New or on-going linkages with other projects or research programmes*
- *Information dissemination*

Include information on the impact / success of these events (e.g., numbers attending a meeting or field day, feedback received, impact achieved, etc).

This project has provided a launching pad for incredibly valuable work on the psyllid including monitoring of psyllid numbers in and around affected crops. The project team is acting as a default discussion group for ongoing issues with the psyllid which is proving valuable in assisting the vegetable issue to respond to this major issue

*Please **append any key outputs to this report** — include any commissioned reports (e.g., technical / R&D reports), publications, presentations, posters, media articles, etc.*

Any other matters [if applicable]

Highlight any other issues relevant to this project.

3. Next Period — Proposed Activities

Outline key activities planned for the next reporting period, including dates/venues of key field days or other extension initiatives.

Key activities during the next period include:

- Implement a communication strategy to limit dispersal of sweet potato whitefly
- Compare efficacy of *Tamarixia triozae* with native *Tamarixia* on capsicums and tomatoes and initiate host-range testing on native psyllids. A decision relating to proceeding with the application for full release will be made at the conclusion of this work
- Complete evaluation of entomopathogens and report back to the project team

- Complete discussions with chemical companies in relation to obtaining additional label claims
- Report results of light quality research in the Grower magazine

4. Variations to Milestones *[if applicable]*

As noted in the last report the milestone relating to the 'Release of new biocontrol agents by commercial companies for general release' will depend on the outcome of work described above.

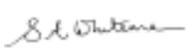
5. Financial Update

Comment on current status of the project's budget.

- *If finances are in-line with contracted projections please simply note: 'On Track'.*
- *Highlight the amount, reason and proposed remedy for any significant current, or anticipated, variations to the budget. If necessary, attach a proposed revised budget.*

Final invoicing of the cash contributors will occur in the next reporting period. Limited activity has resulted in less invoicing from Plant & Food Research than expected. It is difficult to estimate what the next invoice will be as this depends on the results of the *Tamarixia triozae* evaluation, however it is expected that \$90,000 will need to be carried forward into the next financial year. In-kind contributions for this period are 30% of what was expected (reflecting the limited direct activity by industry this period).

6. Report Confirmation

Name <i>[Project Manager]</i>	Confirmation	Date
Sonia Whiteman	I hereby confirm the above information is true and correct: 	13/02/09

Submission Note — By the due dates Progress Reports should be sent:

1. Electronically to the SFF Fund Administrator and copy/cc. your Project Adviser (usually in the same e-mail as the completed Request for Payment (R4P) form for the reporting period).

Please ensure you put your project number in the e-mail's subject line:
e.g., 06/999 Reporting: Period 2, 2007.

2. In hardcopy, together with any associated attachments, to both the Fund Administrator and your Project Adviser.

Appendix 1. Web Update

Please provide an update on your project's progress that is suitable for inclusion on the SFF's web site. If you wish to use the same text as in Section 1: "Project Summary Outline", please copy and paste this text into the section below.

It is important that you provide meaningful, and user-friendly, information on your project's findings and progress as the SFF web site is a widely used resource.

For guidance on writing effectively for web-based communication please see the SFF Project Management Guidelines: <http://www.maf.govt.nz/sff/project-management-guidelines/index.htm>

A major achievement in this reporting period has been the successful importation into

containment of *Tamarixia trizoeae*. The colony has established and is shown good parasitism rates. Progress in other areas continues to be hampered by the distraction of psyllid and Liberibacter which remains a major concern for industry and is occupying a significant proportion of our key researchers time. The project is indirectly assisting these activities by providing a working group for discussing responses to the issue and disseminating information. For these reasons the project is behind on some milestones and the budget is underspent.