

FOR DISCUSSION

SWFSPP Steering Committee Annual Meeting 2020

Agenda Item 1.1

last updated: 20 October 2020

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Update on 2019 Action Item #7**RECOMMENDATION**

1. That the SWFSPP Steering Committee **NOTE** and **DISCUSS** this update in relation to 2019 Action Item #7: Develop PNG insectocutor project proposal further for consideration by committee and AHA.

BACKGROUND

2. Returning livestock vessels are identified as a pathway for incursion of OWSWF¹ with several examples from South East Asia and Middle East demonstrating that adult flies are attracted to livestock or lights on the vessel and may remain once livestock are discharged, with the risk that pupated larvae may hatch on return to Australia.
3. Insectocutors are routinely set and cleared on livestock vessels whilst in Australian waters as part of a mitigation strategy to significantly reduce risk of SWF incursion into Australia from SWF endemic countries importing our livestock. Whilst endemic fly species are often trapped (including other *Chrysomya* and *Cochliomyia* spp.), it is unknown whether SWF are specifically attracted to UV light and thus whether insectocutors are sensitive as a mitigation strategy.
4. Plans for a positive control in a SWF-endemic area were discussed at the 2018 and 2019 SWFSPP meetings, however incursions of ASF and COVID-19 have hampered efforts to progress the project thus far in 2020.

DISCUSSION

5. A suitable site was identified at a cattle feedlot with a SWF treatment pen in Kimbe, West New Britain, PNG. However, using this site would rely on NAQIA to help with logistics of trap placement and sample collection, and they don't currently have the capacity due to ASF response and COVID restrictions.
6. A second site has been identified in the Markham Valley, near Lae. This is a commercial beef operation with 24,000 head of cattle spread over 3 different locations. The manager has confirmed they get SWF (estimated 100 cases per year) and has indicated they are happy to participate in a trial involving screwworm fly trapping.
7. Logistics and costs for transporting a LP440 insectocutor identical to those used on livestock vessels have been established (see FINANCIAL IMPLICATIONS). Trap contents can be frozen for at least 7 days and couriered to Australia.
8. **Questions for discussion:**

¹ Rajapaksa, N & Spradbery, P, 1989. 'Occurrence of the Old World screw-worm fly *Chrysomya bezziana* on livestock vessels and commercial aircraft', *Australian Veterinary Journal*, vol. 66, no. 3, pp. 94-96.

- a. Rajapaksa & Spradbery's AVJ article details 10+ instances from 1985-1988 where SWF were found in light fittings or insectocutors – how often since then? If rare/none then what has changed since the 80s?
- b. How long should the trap be set in PNG? Easy if SWF are trapped within first week or so, but how long to set if not trapping SWF, especially if intermittent/cyclical/seasonal or any chemical control used on the property.
- c. Is it worth setting a Bezzilure at the opposite end of the pen as positive control? Or set prior to insectocutor so that not competing as attractant?

FINANCIAL IMPLICATIONS

- 9. Cost of identical trap is \$990; smaller version is approx. \$450; non-industrial (i.e. Bunnings) type is approx. \$100.
- 10. Cost of freight for trap from Perth to Markham Valley is approx. \$1000
- 11. Costs of sample collection/sample transport/ID by DAWE SSG – to be discussed.

CONSULTATION/COMMUNICATION

- 12. NAQS has consulted with DAWE's Offshore team regarding a suitable trap site and capability/capacity within NAQIA for fly ID.
- 13. NAQS consulted with Animal Health Australia in gaining support for the project.

NEXT STEPS/ACTIONS

- 14. If agreed by the committee, progress the trial:
 - a. Complete trial design
 - b. Confirm financial and logistical arrangements.

Attachment A: Map of proposed site for insectocutor trial

Attachment B: Models of insectocutors used on livestock vessels (LP440)

Attachment A: Map of proposed site for insectocutor trial



Figure 1 Map of suggested site for insectocutor placement at Gusap, near Lae in Morobe Province

Attachment B: Models of insectocutors used on livestock vessels (LP440)

LP440 Insect Killer	L40 Insect Killer
 An outdoor light with the strength to reassure time outside will not be interrupted by flying insects. This robust weatherproof design is ideal to provide coverage in horticultural settings, parks and gardens. • Zinc-anneal frame 'built to last' construction - we only use the best quality components • Fully compliant with all required Australian and European certified safety standards • Easy installation Dimensions H: 71cm W: 52cm D: 52cm Weight • 57kg Coverage • Wall mounted / Freestanding: 3 hectare Finish • White Tube Data • 4 x 40 Watt Starkeys Compact tubes	 Easy to install and with low running costs this weatherproof design is perfect for use in outdoor patio and BBQ areas. Both robust and strong its performance cannot be challenged by chemical resistance. • Zinc-anneal rust resistant frame 'built to last' construction - we only use the best quality components • Low running costs - easy to install - Slide out tray at bottom to clear dead insects & change UV tube • Fully compliant with all required Australian and European certified safety standards Dimensions H: 40cm W: 30cm D: 30cm Weight • 5.05kg Coverage • Suspended / Freestanding: 0.50 hectare Finish • Black Tube Data • 1 x 40 Watt Starkeys Compact tube