

Title: Reducing Disease Spread and Neighbour Complaints by Integrated Fly Control on Egg Farms

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Summary

A number of issues relating to fly populations in Australia is beginning to impact upon commercial egg farms. These include flies' propensity to disperse to other properties which makes them a significant biosecurity and food safety risk and a reservoir and vector for avian and human disease.

In addition, complaints from neighbours and local government authorities of flies are a major issue for egg producers in peri-urban areas. Integrated Pest Management (IPM) approaches to fly control, underpinned by monitoring of fly numbers, are widely used overseas but have seen little use in Australia.

As a recent survey of egg producers indicated a significant interest in more information on fly control, this project was developed to investigate the species, population dynamics and dispersal of flies breeding on three commercial egg farms. The efficacy of five fly monitoring systems was also tested.

Based on the results determined from analysis of species composition, monitoring systems and dispersal patterns, IPM recommendations and fly control guidelines for egg farms were developed as well as an integrated program designed to suit Australian conditions. These guidelines include:

- Monitor fly numbers
- Keep manure dry
- Clean out and dispose of manure strategically
- Remove other fly breeding sites
- Enhance natural populations of fly predators and parasites
- Use insecticides strategically
 - Use only registered products
 - Time applications for maximum impact
 - Treat surfaces where large numbers of flies rest
 - Don't spray the manure with chemicals that kill predators and parasites
 - Avoid contaminating feed, water, eggs or birds
 - Rotate chemical groups to minimise resistance

An extension manual on fly IPM was also prepared to provide a technical overview of the program, implementation procedures for egg farms and recommendations for incorporating fly control guidelines into QA programs. It is available on the AECL website at <http://aecl.org/r-and-d/activities/completed-activities/reducing-disease-spread-and-neighbour-complaints-by-integrated-fly-control-on-egg-farms/>.
