
EGGSTRA!
EGG INDUSTRY MATTERS SEPTEMBER 2020
PAGE 5
THE POWER OF PUBLIC RELATIONS
PAGE 6
CONSUMER ATTITUDES ABOUT EGGS
PAGE 8
BIOSECURITY TOOLKIT
PAGE 16
GOVERNMENT BACKING FOR EGG TRACEABILITY
Australian eggs

Black soldier fly (Hermetia illucens).

Flying in the face of waste

Australia's egg industry is in investing in novel research looking at converting agricultural wastes into high quality fertiliser and animal feeds, resulting in higher productivity and profits for farmers.

The $1.7 million joint project between Australian Eggs and Australian Pork Limited is focused on the potential of Black Soldier Fly (BSF) larvae to break-down a range of natural waste products, and using its casting residue (known as frass) as a protein source for livestock.

The BSF may also be able to out-compete Stable Fly as an alternative biosecurity measure and for manure spreading in currently prohibited areas.

This project is part of the Round Four Commonwealth Government 'Rural Research and Development for Profit Program' and involves collaboration with:

- The University of Western Australia
- Future Green Solutions
- The Department of Primary Industries and Regional Development in Western Australia
- Scolexia Consulting Ltd
- The Department of Agriculture and Fisheries Queensland
- Dairy Australia
- Agrifutures
- The Fisheries Research Development Corporation and
- The Australian Meat Processing Corporation.

BSF is a non-biting, non-invasive fly species and its larvae consume food, animal and abattoir wastes, biosolids and manures found in nature.

This consumption by the larvae is estimated to have potential to reduce agricultural waste volumes by up to 80 per cent, significantly cut environmental problems of odour, pathogens and pests and divert organic waste fraction from landfill.

Mature BSF larvae can be harvested and may be able to be converted to high-value protein and oil sources that are suitable for use as aquaculture, pet food and potentially livestock feed.

The BSF larval castings waste has also performed well in preliminary manure research trials and could be developed as a fertiliser or compost product for the agriculture, landscaping or home garden sectors.

The multi-agency BSF project aims to investigate whether the flies and associated transformational technologies developed by researchers can be adopted to increase egg, pork and wider agricultural productivity and profitability by reducing input costs, generating alternative revenue streams and improving use of waste as fertilisers to reduce reliance on synthetics.

During the project, researchers hope to further develop and test larvae and frass as a low-cost, economically-competitive, slow-release, tailored granulated fertiliser product that is safe to handle, store, transport and apply.

This will include quantifying any biosecurity and environmental risks associated with the use of insect larvae and fras-based alternative products and ways to overcome any barriers to adoption by involving policy makers and farmers during trials.

There will be support for early adopters through a range of extension activities.

Overall, the project will fully assess the agronomic and economic value of BSF products and any biosecurity, environmental and food safety risks.

More information: Dr Sasha Jenkins, The University of Western Australia, 0433091555, Sasha.jenkins@uwa.edu.au