

**Media Release**

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**Closing the gap on pesticide run off in sugarcane**

The Department of Agriculture and Fisheries (DAF), together with industry partners, is developing ways of reducing runoff of imidacloprid, a key pesticide used to control grubs in the sugarcane industry, and also dissolved inorganic nitrogen (DIN).

Double disc opener applicators are commonly used for applying both imidacloprid and urea based fertilisers in sugarcane ratoon crops. DAF Senior Agronomist John Hughes identified that proper closure of the open slot behind double disc openers was critical in reducing runoff of the pesticide and nitrogen into waterways.

“Closing the slot behind double disc openers helps to minimise sunlight degradation and runoff of imidacloprid, as well as nitrogen losses through runoff and volatilisation,” explained DAF project leader John Hughes.

In 2016, DAF provided \$110,000 in funding for the design, fabrication and testing of a prototype assembly that would fix the open slot issue to improve the efficacy and retention of pesticide and nutrient inputs.

EHS Manufacturing was commissioned to develop a practical ‘slot closing wheel’ for the sugar industry. The apparatus – now dubbed ‘StoolZippa’ – has been developed and field tested in a range of soil types and crop conditions.

Rainfall simulation trials to determine variations in runoff with and without the new StoolZippa have been conducted. Results to date have been very positive with improved retention of these key inputs with effective closing of the applicator slot.

There has been considerable interest in the project with significant in-kind extension and project support received from Mackay Area Productivity Services, Bayer, EHS Manufacturing, IncitecPivot, Reef Catchments and Sugar Research Australia.

Bayer is leading trials to determine the improvements in insecticide efficacy when using the newly developed StoolZippa, compared to treatment without.

Three StoolZippas manufactured by EHS, and funded by Bayer, have been showcased to selected grower groups at the NextGen Conference in Mackay. Growers will test out the StoolZippas and provide feedback on their performance across variable cane production environments.

DAF’s arrangements with EHS Manufacturing to design and fabricate the closing wheel ensures the design/blueprints will be freely available to the sugar industry.

View the StoolZippa here

<https://www.youtube.com/watch?v=Kuhqy9uhEa0&feature=youtu.be>

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