and received under refrigeration each year. About 18 t was applied from 1997–1999, at rates of 5 and 10 g/m in 1997 and 5 g/m only in subsequent years.

Changes have been made to the product and its packaging during the R&D program to improve its stability and handling characteristics. Modifications to the metering shafts of granule boxes have reduced the possibility of the product sticking to the fluted surface. Recent research has shown that BioCane™ is more sensitive to exposure on the soil surface than was previously thought, and immediate coverage with soil is now recommended.

BioCane™ is only the second fungal-based biopesticide registered in Australia. It lends itself to an integrated pest management approach, and its commercial availability will greatly widen the options for management of greyback canegrub.

STUDIES OF AGROCHEMICAL TRANSPORT FROM SUGAR PRODUCTION SYSTEMS IN THE BUNDABERG DISTRICT—METHODOLOGY

By

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AGROCHEMICAL transport from cane production systems to the environment have raised a number of questions. How are chemicals transported from cane plots, and in what quantities? Are some compounds more prone to transport than others? Does soil type, application method, and cultural practice influence chemical breakdown and availability for transport from farms to the environment?

In order to gain some understanding of these processes, a suite of projects are being conducted to secure quality data sets from sugar cane farms with representative soil types in the Bundaberg district of Queensland. Interpretation of these data will provide management tools for producers to minimise off-site transport risk.

Conducted by Queensland DNR and supported by industry funding bodies (SRDC, ACIAR, BSES, CRC Sugar), the projects are of an overlapping and collaborative nature. Data collection involves designing experiments and installing equipment covering plot to catchment scale. The experiments have been established on commercial cane farms with significant grower cooperation.

Field equipment includes a network of pluviometers (digital rain gauges) and refrigerated automatic water samplers. Flumes, weirs, waterways and culverts are used for runoff measurement and sample collection. Water and soil samples are analysed at the Resource Sciences Laboratories (DNR) in Brisbane for chemical residues and sediment content.

Methodologies and materials used to collect data in these projects are outlined, with an emphasis on the equipment used and the form of data collected.