

A legacy of innovation and growth



With more than 20 years of progress, River Bioscience has gained great momentum.

By Rob Elfick

In the last two years, River Bioscience has exceeded even its most ambitious goals, thanks to a dedicated team, a robust distribution network, and the invaluable support of growers. Together, we are pushing boundaries by delivering innovative and holistic solutions for pest challenges in orchards, further solidifying our role as leaders in sustainable farming.

River Bioscience has made significant investments to provide growers with essential pest management tools that address immediate challenges, as well as promoting long-term sustainability. Our products integrate seamlessly into comprehensive Integrated Pest Management (IPM) programmes, offering growers the tools they need to ensure agricultural success while maintaining environmental stewardship. Additionally, the River Bioscience Customer Service Unit has expanded, adding more team members on



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the ground to meet growing demand from our distributors and growers. This expansion ensures that we continue to provide the best support and service to our customers.

River Bioscience new products - leading the way in sustainable pest management

River Bioscience is proud to celebrate several new products that push the boundaries of sustainable pest control and enhance farming efficiency. Each product has been developed with the goal of supporting growers in managing pests while promoting both environmental and financial sustainability.

1. MultiMax™ A patented biopesticide targeting tortricid larvae, including false codling moth (FCM), macadamia nut borer (MNB), and Litchi Moth (LM). This virus-based solution offers an effective, low-risk way to control pest populations, minimising infestation as fruits and nuts become vulnerable to larvae. MultiMax™ is a vital tool in IPM programmes, helping growers manage pest pressure while reducing chemical input.

2. CodlMax™ A revolutionary patented biopesticide formulated to control codling moth larvae in pome fruit using virus-based technology. By targeting and suppressing codling moth populations, CodlMax™ offers an environmentally friendly alternative to chemical pesticides, reducing pest pressure and safeguarding crops during critical growth stages.

3. Codlgran™ It is another virus-based biopesticide designed to combat codling moth larvae. Newly-hatched larvae ingest the virus while feeding on the fruit surface, leading to death before they penetrate the fruit. This makes Codlgran™ an excellent preventative tool for growers looking to integrate it into their IPM programmes for effective management of codling moth in pome fruit.

4. TrichoMax™ Introduces *Trichogrammatoidea cryptophlebiae*, a highly effective egg parasitoid for suppressing Tortridae moth pest populations. These tiny beneficial wasps parasitise pest species eggs, significantly reducing false codling moth and macadamia nut borer infestations in orchards. As a core component of IPM strategies, TrichoMax™ enables growers to maintain healthy crops with minimal chemical input.

5. Apis Bloom™ An innovative pollination tool that boosts bee activity, improving flower visitation and increasing successful pollination. Through its unique blend of terpenoids, Apis Bloom™ mimics natural bee markers to attract bees to high-value nectar sources.

These products embody the commitment of River Bioscience to innovation, providing growers with sustainable, effective pest management tools while enhancing their profitability and crop health.

Expanding *Trichogramma* production capacity

During the 2023/4 season, River Bioscience provided over 30 000 ha of *Trichogramma* to macadamia and citrus growers. To keep up with increasing demand, we expanded our production facility, upgrading the room size to accommodate more raw materials and reworking the layout to improve efficiency and to increase floor space. Investments in new equipment, such as enhanced storage tables and production infrastructure, have bolstered production capacity. As a result, we are already reaping the benefits of these upgrades in our microbial production facility.

Internal product development and innovations laboratory upgrades

With a dedicated team working in our microbial and macrobial laboratory, we are consistently researching new innovative pest management solutions for the grower. Our upgraded laboratory now includes the conversion of three rearing rooms into a larger, more efficient facility. Various product

development projects on the go have necessitated an increased number of environmental chambers, as well as an investment in more specialised equipment in our genetics lab. These changes have further optimised our innovation processes, allowing us to better meet the demands of an evolving market.

River Bioscience production facility upgrades - enhancing efficiency and capacity

At our Addo production facility, recent upgrades have revolutionised workflow and increased our capacity to meet the growing demand for sustainable products. These improvements reflect our commitment to innovation and our drive to deliver high-quality, sustainable pest management solutions.

1. Insectary renovations for bollworm and litchi moth We optimised the insectary's workflow by establishing new production flows for bollworm and litchi moth rearing. This streamlining improves efficiency across various stages of insect rearing and handling.

2. Despatch area upgrade With increasing product volumes moving through the system, the despatch area was upgraded to enable more efficient handling of finished goods and support ISO implementation, further ensuring secure, hygienic handling of products before shipment.

3. Semio-chemical area renovations We restructured the semio-chemical area to improve efficiency and safety by creating distinct clean and dirty zones. This new set-up supports a smooth flow of materials and personnel throughout the facility.

4. Expanded storage area Our expanded storage space now accommodates a larger volume of raw and chemical materials, enabling us to increase production capacity and to meet the demands of a growing market.

5. Cold storage upgrades A new cold room was added to store more finished goods, while the previous infrastructure was converted into a freezer room, enhancing our ability to preserve products under optimal conditions.

6. Water reticulation and drainage upgrades

We upgraded the water reticulation system to improve drainage and added a new water purification line, ensuring efficient water use while meeting environmental standards.

7. Fresh air and extraction improvements

Our insectary now features a new fresh-air modification and extraction unit, providing better air quality and controlled conditions for sensitive biological production processes.

These upgrades attest to the forward-thinking approach River Bioscience to optimising production, maintaining quality, and meeting the needs of growers.

River Bioscience stands at the forefront of pest management innovation, providing sustainable solutions that empower growers while being conscious about the environment. Our recent product launches, facility upgrades, and expanding customer support demonstrate our commitment to delivering value to the agricultural community. As we continue to innovate and grow, we remain dedicated to offering high-quality, sustainable products that help growers succeed in an ever-evolving landscape. This is only the beginning of our journey toward a more sustainable future in pest management.

