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New CEO, New Vision, New BioProspect.



CEO Peter May
(profile on pg 2).

Welcome to BioNews, our new investor newsletter aimed at keeping you informed on all the latest activities at BioProspect. 2008 was a groundbreaking year for the company, and we have even more exciting plans in store for 2009 as we take the company forward to the next level.

When I accepted the role of chief executive late last year it was with a sense of excitement and great anticipation. Having worked with the company in the past I was aware of its products and their potential, but wondered if this could be achieved.

The answer for our investors and supporters was revealed in September 2008, when the company successfully delivered a completed data package and application for active constituent registration of natural termite solution, TERMILONE®, to the Australian regulatory authority.

A month later, we announced an Australian patent for the use of TERMILONE® in pest control. And in January 2009, we signed an agreement with US-based research and pest control supply company Ensystem for them to undertake a self-funded two-year international testing program with the product.

Ensystem's testing will complement continued research by the CSIRO and the University of Western Sydney, providing additional data to support registration of TERMILONE® in Australia as well as in the lucrative termite control markets of the United States and Japan.

The message to our over 3,000 shareholders is clear. We have a new vision and clear pathway towards commercialisation that will benefit not only shareholders but also the community and environment.

I'm not going to pretend that this is an easy process, particularly when operating in a highly regulated and competitive business environment. But experience makes a difference and I have had considerable experience in Australian and overseas product registration and market development, including in Asia, Europe and the United States.

Significant international markets have been identified for both TERMILONE® and the Bioeffectives® range of plant extracts for animal health and nutrition.

Our business planning is focused on capturing some of the growing demand for environmentally friendly, safe and natural solutions in these markets. Having already enlisted international partners and collaborators, we are well on track to seize these opportunities and turn them into sustainable, cash-flow generating products.

We have a new vision and clear pathway towards commercialisation

Financially, BioProspect is in a strong position, with sufficient funding to pursue the development of TERMILONE® and Bioeffectives® over the next 12 months. Helped by an extensive network of collaborators and corporate partners, we are able to get maximum bang for our R&D buck.

When evaluating investment opportunities, there are some important questions to ask. Is the business sustainable? What is the strength of the management team? What is the long-term potential of its product pipeline?

On all of these criteria, BioProspect makes an outstanding case for your investment dollar. I look forward to your continued support as we move forward together towards a brighter future.

Yours sincerely



Peter May

Chief Executive Officer

Did you know?

Respected US biotech forecaster G. Steven Burrill has given some promising predictions relevant to BioProspect for 2009:

- *There will be a clean tech boom in non-food crops, and clean tech companies will attract financing in record amounts, helped by US President Obama's energy policies.*
- *Agriculture and animal health will see an increase in interest and funding, driven by the ongoing world food crisis.*
- *China, India and other economies will continue to finance biotech companies.*
- *The US biotech industry will achieve market value of US\$500 billion, and top biotech companies will outperform the overall market.*



Who is Peter May?

Appointed BioProspect CEO on November 3, 2008, Peter's career has included stints with CFL, Incitec and Crop Care Australasia, as well as running his own consulting business. An active member of the Australian Environmental Pest Managers Association, Peter has strong international agribusiness connections. Educational qualifications include a Bachelor of Applied Science degree with first class honours from Queensland University and an MBA (majoring in international marketing) from the Queensland University of Technology.

What motivated you to become BioProspect's CEO?

As a former consultant to a range of agribusinesses I could see the potential of BioProspect's natural and low toxicity products. The chance to take the lead in progressing these products to commercialisation and thereby making a real difference to the environment was more than enough motivation.

What's been your biggest career success?

The successful product registration and overseas market development of the suSCon range of products has probably been my biggest success to date. But even after managing multi-million dollar portfolios of products in local and international markets, I hope to make BioProspect my greatest career success!

What inspires you?

My family has always been a source of strength to me. My wife and three sons are always there to provide support and encouragement. I've also benefited from some great mentors and teachers, including Professor John Harden (University of Queensland), who first introduced me to the environmental and safety benefits of integrated pest management, and also Rob Fryatt, currently Director General of the European Pest Management Association and a believer in the importance of shaping pest management on a global industry level.

What do you do in your spare time?

I enjoy people and travel and the challenges of bringing new ideas to fruition. For relaxation, watching a good game of rugby or quality movie or reading a novel is always enjoyable.

PROJECT UPDATE – TERMILONE®

Pathway to Commercialisation

Once a secret of outback farmers, TERMILONE®'s discovery traces back to observations that 100-year-old fence posts in rural Queensland had successfully withstood termite attacks in an active termite area. While farmers believed the wood from the native Australian *Eremophila mitchellii* (False Sandalwood) trees was termite-proof, researchers actually discovered the tree's oil was the hidden ingredient.

BioProspect launched an extensive research program to test the properties of the Eremophilone oil extracted from the trees, which it trademarked as TERMILONE®.

After a rigorous and independent testing process, the company announced a major breakthrough in April last year. Bioassay results had showed that TERMILONE® outperformed the industry standard in protecting timber from termite attack, while lab results confirmed its effectiveness as both a toxicant and repellent to termites when applied to soil.

Importantly, TERMILONE® possessed extremely low human and environmental toxicity, making it safe for pest control workers, domestic pets and others who could come into contact with it.

The milestone test results allowed BioProspect to determine a pathway to commercialise TERMILONE® as a termite control and timber treatment product within a two to three year timeframe.

Subsequent mammalian toxicity tests produced a "no toxicity" rating, allowing for the September 2008 submission of a data package to the key domestic regulatory body, the Australian Pesticides and Veterinary Medicines Authority (APVMA), for registration of the active ingredient, Eremophilone oil.

A month later, BioProspect secured a 20-year Australian patent for Eremophilone and Eremophilone derivatives for pest control, which will help protect the discovery's intellectual property.

"The APVMA review process is rigorous and will take around 12-18 months," Peter May said.

"Once completed, successful registration here will assist registration in key overseas markets such as the United States and Japan.

"BioProspect has already submitted patent applications in both these countries, which represent the world's largest termite control markets, followed by Australia."

The company's efforts to develop an environmentally safe termite solution haven't gone unnoticed.

Last October, the Seven Network's top-rated "*Today Tonight*" show ran a positive report on TERMILONE® that prompted a surge of inquiries over its market release.

BioProspect's efforts to commercialise TERMILONE® received a further boost in January 2009, with the signing of an evaluation agreement with Ensystem.

Under the deal, the US-based research and pest control supply company will conduct an extensive two-year testing program in countries including Australia, the United States and Japan, evaluating TERMILONE®'s effectiveness as a soil applied termiticide.

The program will complement testing by research collaborators such as the CSIRO and the University of



TERMILONE® field trial of timber treatment at Narrandera, NSW

Western Sydney, generating additional data to support TERMILONE®'s registration in Australia and overseas.

Further trials are planned this year in support of end use product registrations, as well as data confirming the safety of specific product formulations.

"We're continuing to identify strategic partners for TERMILONE®, including companies involved in timber treatment – the other major target market for the product," Mr May said.

It's all systems go for TERMILONE® – and as the *Today Tonight* reporter noted, "That's bad news for termites, but good news for us."

Billion-Dollar Pest

Termites are the most economically destructive wood and cellulose-consuming insect in the world. In Australia, the pests invade over 650,000 homes every year, causing \$900 million worth of damage.

Species found in Australia such as *Mastotermes darwiniensis* also cause severe damage to agriculture, including vegetable crops and even tractor tyres!

Spending on termite control and building repairs due to termite damage exceeds more than US\$4 billion a year internationally, with most of this being spent in the United States and Japan.

With governments increasingly restricting the use of certain chemical treatments for environmental and health reasons, the market for an environmentally friendly and safe solution for termite control is set to keep growing.



Improving Animal, Human Health

Plant extracts derived from coniferous trees may hold the key to improving the health of animals and humans. Under a licensing agreement signed with Melbourne biotech Solagran, BioProspect has been researching whether specific Bioeffectives® can improve the health of horses and poultry. The real winner, though, may be humans rather than animals.



Chickens in an intensive animal housing and feeding operation

Growth in food demand resulting from global population increases is putting pressure on the agricultural industry to boost productivity.

One of the ways this has been achieved is through intensive animal housing and feeding operations, and the use of medicated products such as antibiotics and synthetic growth hormones in animal feed to increase meat production.

Most antibiotics used on farms are not given to treat sick animals, but instead to attack bacteria

and help the animals grow more quickly and improve the conversion of feed into meat.

But experts have warned against the excessive use of antibiotics in animal feed, arguing it reduces the effectiveness of antibiotics used to treat humans.

BioProspect has been researching a natural alternative – Bioeffective® A, a galenical complex extracted from the green needles of Scotch Pine and Norwegian Spruce trees.

Bioeffective® A already has Therapeutic Goods approval in Australia, which will assist the overall regulatory approval process in animal health and nutrition.

BioProspect's exclusive licence is for the development and commercialisation of a range of Bioeffectives® in the international animal health, nutrition and agricultural markets.

And these are big markets to target.

The current global market for livestock performance enhancing products and medicated animal health compounds is an estimated US\$6.7 billion a year, with medicated products accounting for around US\$2.3 billion of the total.

The companion animal market for dogs, cats and horses is also large, estimated at around US\$1 billion a year.

The market continues to grow as animal nutrition becomes of greater importance in maintaining the well-being of farmed and domestic animals.

Horses for Courses

Million-dollar Arabian horses in the United Arab Emirates were treated with Bioeffective® A last year in a screening trial aimed at determining the product's effects on equine gastric ulcer syndrome (EGUS).

The trial was conducted at the Albidayer Stud in Sharjah, owned by Sheikh Mohammed Bin Saud Al Qasimi, a prominent member of the UAE royal family and an internationally recognised breeder of Arabian bloodstock lines.

One of the horse industry's most common complaints, gastric ulceration is said to affect up to 90 per cent of performance horses, particularly those housed on a continual basis. EGUS is believed to be caused by a combination of diet and stress-related activities, resulting in poor performance and behavioural problems for the animals.

Current treatments for EGUS are synthetically derived, expensive for full courses and have varying levels of success. By contrast, Bioeffective® A is a natural treatment with low toxicity which can be safely used in conjunction with other medicines.

Bioeffective® A was administered over a three-month period to three horses with pre-existing ulcer complaints. The results announced in August 2008 were encouraging, with clear signs of improvement detected.

The next step will be larger scale trials to test dose rates and formulations over bigger groups and types of horses. If the breeders love the product as much as the horses, it's hard to see Bioeffective® A not making every post a winner.

Feeding the Chooks

Bioeffective® A's potential as an animal feed supplement and replacement for antibiotics was also tested last year.

The study of broiler chickens by the University of New England tested Bioeffective® A against a commercially available antibiotic feed additive.



The results showed that the natural product performed as well as standard antibiotics and has potential to help animals resist infection and recover faster, with no drug resistance or toxicity issues for the animal or its human consumer.

Further trials are planned this year at the university, with BioProspect targeting collaborators involved in commercial animal feed production seeking a natural alternative.

Did you know?

Naturally sourced and derived products have long been the wellspring of new drugs and compounds. A US study found 61% of the 877 small-molecule new chemical entities introduced as drugs worldwide from 1981-2002 came from natural sources.

Read all about it! The media have started catching on to BioProspect's pioneering work in recent months. Here's some of the latest coverage:

Australian Financial Review:

"BioProspect" (April 24, 2008)

Australian Life Scientist:

"Patent for BioProspect"
(October 20, 2008)

Channel 7 Today Tonight:

"Termites on the march"
(October 10, 2008)

Ethical Investor:

"Fighting off the termites, naturally"
(April 17, 2008)

Gold Coast Bulletin:

"Patent for new pest control substance"
(November 21, 2008)

Northern Star:

"SCU scientist helps develop new termite control product"
(September 18, 2008)

Pest Management Professional:

"Ensystex to test BioProspect's natural termite solution"
(January 14, 2009)

Peter May's appointment also made it on *BioTechnologyNews.Net's* list of top 10 stories for 2008, showing the industry interest in the company.

Solid Investment Outlook

Sharemarket investors will be all too aware of the recent market volatility and the biotechnology sector has not escaped the fallout. However, a spate of capital raisings and merger and acquisition activity in early 2009 has shown that investors haven't lost interest in biotech.

Recent Australian deals have included a \$429 million takeover bid by US company Thoratec for Australia's Heartware; a \$318 million bid by US biopharma major Cephalon for Arana Therapeutics; and venture capital firm AusFirst's launch of a \$10 million life sciences investment fund. In the United States, multi-billion dollar takeover bids have been launched by Merck, Pfizer and other industry giants for their rivals.

What does this mean for investors in ASX-listed BioProspect?

"Despite the recent sharemarket volatility, BioProspect remains focused on getting products to market as quickly and efficiently as possible," Mr May said.

"While grouped in the biotechnology sector, it's more accurate to describe BioProspect as an 'agritech' company with product markets in the relatively stable agricultural and pesticide sectors.

"These are multi-billion dollar international markets which are showing growing demand for the low toxicity, natural and safe products BioProspect is developing."

Mr May said BioProspect was in a strong financial position in the current market environment, with \$2.9 million in cash at the end of the December quarter 2008.

This means the company has sufficient funding to further develop TERMILONE® and Bioeffectives® products over the next 12 months.

"When you look around the stockmarket, it's hard to find a company that hasn't suffered from the recent sell-off," Mr May said.

"But BioProspect has all the right elements in place for investors seeking long-term returns that produce both a financial and environmental benefit."

"Amid the financial crisis, we must not forget the pivotal role science, technology and education play in our long-term survival and prosperity"

Biotech Investment: Why it's Important

Amid constant media reports of gloom and doom, the global financial crisis and economic recession in much of the developed world, it's hard not to simply bury your head in the sand and forget all about investing.

But investing in biotech isn't about instant returns – it's about generating a long-term financial gain that also yields benefits for society and the environment.

Dr Anna Lavelle, CEO of peak industry body AusBiotech, says investing in biotechnology is more important now than ever before.

"Amid the financial crisis, we must not forget the pivotal role science, technology and education play in our long-term survival and prosperity," she wrote in an opinion piece published in *BiotechnologyNews.Net* on February 10, 2009.

Dr Lavelle pointed to Australian discoveries such as penicillin, hearing implants, cervical cancer vaccine and sleep apnea devices as evidence of the country's biotechnology potential, in addition to the nine Australian Nobel Prize winners in medicine and related fields.

Dr Lavelle noted that the global population is still growing and ageing, and demand remains for the innovative products and services being developed by Australian biotechnology companies.

BioProspect couldn't agree more.

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We look forward to your feedback.

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