

Fighting fit

A new range of performance apparel developed for martial arts has been created from a revolutionary fabric that blends the strength of polyester with the diverse properties of Merino wool. Our New Zealand correspondent Wendy Mill reports.

It is brave to take a century-old tradition and turn it on its ear, but that is what New Zealanders Lavinia Calvert and Grant Scott of Gimono Limited have done with their new range of martial arts fight-wear.

Gimono - taken from *gi* meaning uniform and *mono* meaning article or thing - is the name given to their range of fight-wear, designed for martial arts, including judo, jiu jitsu, aikido and karate. Traditionally, martial arts garments have been made from single or double-weave cotton but Scott, like an estimated 70 million martial arts participants throughout the world, knew only too well the garments' shortcomings.

During a visit to Tokyo in July 2005, Scott, a judo black belt and instructor trained in a variety of fight styles, was training daily at the Kodokan, the world headquarters of judo, and was experiencing lots of problems with his cotton gi. It was too hot, too abrasive, too heavy and took too long to dry. He and partner Calvert began to wonder why there wasn't a better garment.

"Given all the advances in textile technology, particularly in sportswear and performance apparel, we couldn't understand why nobody had come up with a lighter weight, more breathable gi," explains Calvert.



Grant Scott, co-founder of Gimono, with model Brooke Anderson wearing Alexandra Owen's fencing-inspired look made from Fortitude.



(Pictured left to right) Gimono co-founder Lavinia Calvert, model Brooke Anderson wearing Alexandra Owen's fencing-inspired look made from Fortitude, fashion designer Alexandra Owen and Gimono co-founder Grant Scott.

On their return to New Zealand, Calvert and Scott established Gimono Limited and embarked on an extensive research and development journey to find an alternative. They examined and experimented with a wide range of fabrics available in the market, sourcing fabrics from all around the world.

"We looked at everything from Kevlar to hemp-based fabrics but could not find anything that ticked all the boxes. That is when we came up with the idea of designing and developing our own fit-for-purpose textile," Calvert says.

"From there we researched various sustainable fibres including organic cotton, hemp, bamboo and wool. We concluded that the qualities which are inherent in Merino went a long way to fitting our brief.

"We knew that Merino would work well for its thermal- and moisture-management properties, its breathability and odour management, because in New Zealand we are quite accustomed to the benefits of Merino, but the biggest challenge was to determine what we could put with it to achieve the required strength."

The pair then commissioned AgResearch, based near Christchurch in New Zealand's South Island, to help develop a Merino-based fabric which would have the strength necessary for the gruelling field of martial arts.

"We wanted a fabric which was strong, comfortable, breathable, and lightweight," says Calvert.

This proved to be a challenge from the outset, requiring a fabric of opposing qualities, she explains.

"It had to be soft but strong, have a nice drape but not too much stretch and so we had to get the balance right. As a performance textile, function was more important than form per se."

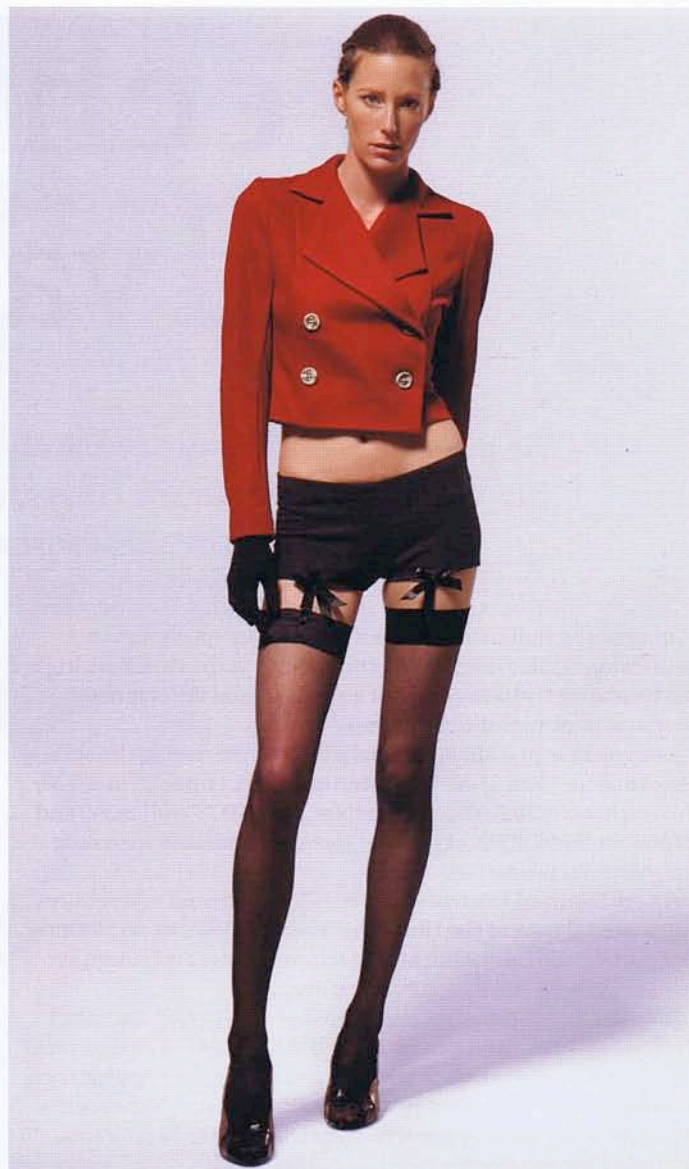
'In New Zealand we are quite accustomed to the benefits of Merino, but the biggest challenge was to determine what we could put with it to achieve the required strength'

As with all grappling martial arts, the uniform is integral to the action and although many of the earlier prototype fabrics had wonderful qualities, they were not quite right for such a highly technical garment, says Calvert.

Five years later, the pair now own the intellectual property in Fortitude, a patent-pending textile which blends the strength of polyester on the outside, with the natural wicking, moisture and temperature management qualities of Merino wool on the inside.

"We have deliberately designed the Gimono range to appeal to practitioners across a wide variety of martial arts. With the advent of mixed martial arts, or MMA - one of the fastest growing sports in the United States - we are seeing a number of players cross-training in different fight styles to compete in this arena. Our fight-wear is designed to provide such athletes with a performance alternative to train in," says Calvert.

Fortitude was also to take Calvert and Scott into a very different arena through its association with AgResearch. During New Zealand Fashion Week in September, AgResearch held its own Runway Show where New Zealand fashion designers chose from a selection of recently-developed fabrics to create entries for the show.



New Zealand designer Michelle Yvette's creation for the AgResearch New Zealand Fashion Week Runway Show featured a jacket made from Fortitude.

"Everyone who saw our fabric saw huge potential for it beyond the field of martial arts, so when we were invited to participate in the AgResearch show we were given the perfect opportunity to see how it might be used in fashion when three of the ten designers participating in the show chose to work with Fortitude," says Calvert.

The pair are now focusing on building their sales momentum, both nationally and internationally. With an entrepreneurial background and years of international business and marketing experience, Calvert is well placed to capitalise on the very positive feedback already generated by this innovative new approach to a traditional art form.

While the Gimono fight-wear range is the prime focus, Calvert and Scott also have plans to further commercialise Fortitude. Calvert says that during their research, they discovered that, in fact, although the current form of the gi had been around since the 1800s, the father of judo's uniform had been a cotton-lined gi with a brown linen outer which he repaired with kite twine.

"While still based on design of the original garments, our Gimono range has honoured that tradition but brought it into the 21st century," she says. ●