

SATURDAY
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SPORTSMAN

AUSTRALIA'S GREATEST RACING PAPER

Magic Millions Previews - Inside

6-page Classic Sale Preview - Breeders' guide

**Sandown (Sunday)
Randwick (Tuesday)
- Camera Charts**

SPORTSMAN Breeders' guide

2 pages of news and views edited by Paul Micallef



Tested ... 1994 Melbourne Cup winner Jeune

Latest DNA test hailed Boost for breeders

FOR the first time in Australia, a simple genetic test to determine genetic compatibility of proposed matings based on DNA analysis is being offered to breeders.

Thoroughbred Genetics Asia Pacific Pty Ltd, a joint venture between The Pines Stud and The Thoroughbred Genetics Company (TOG) based in the UK has developed the unique test.

Using a blood sample from the mare, a report on her genetic make-up is generated, which includes a crucial stallion selection to enhance the DNA structure of the progeny.

Throughout the history of thoroughbred breeding there has been no proven scientific approach to determine mating compatibility.

Various methods of confirmation, performance and pedigree analysis have all been utilised over the years with varying degrees of success.

However, when it is considered that approximately 30 per cent of the historic studbook records are inaccurate, to date it has been a hit and miss approach.

A key example of this occurred when The Pines Stud, part owners of the Melbourne Cup winning stallion Jeune, had his DNA tested by TOG in 2002.

The tests were able to prove that the stallions' tall female line as represented in the Australian Stud Book is incorrect.

Graeme Little and Emma Boling, directors of The Pines Stud on the Mornington Peninsula, and breeders of the Magic Millions favourite Haasa, have brought this latest genetic technology to Australia from the UK, and have mated their broodmare band in 2002 in accordance with genetic testing results by TOG.

The Asia Pacific joint venture offers a blend of scientific excellence, combined with an in-depth knowledge of racing and breeding, making it a unique partnership.

Director of TOG said: "DNA analyses are extremely accurate and can show very different results to a pedigree worked out on paper."

"The information is already proving invaluable to breeders in the northern hemisphere, as it enables them to see which characteristics, both good and bad, will or won't be passed down the line, and breaks the deadlock imposed by conventional approaches."

"Millions of dollars are spent speculatively producing foals and yearlings which later prove to be unsuccessful on the track, and are therefore ultimately of little value at stud."

"We have developed the tools to provide enhanced genetic management of bloodstock with the sole objective of increasing race performance."

The first test offered to the Australian market will provide genetic advice on matings, with further tests to be developed focusing on mating strategies to avoid inheritance of key disease traits.

Depending on the complexity and volume of tests required, costs per test range on a sliding scale from \$500 to \$990 per horse.

All tests are subject to contract and are treated in the strictest confidence.

DNA blood typing is already used in Australia to confirm the parentage of any new horse admitted to the Stud Book and of course has revolutionised many other agricultural activities, and indeed the criminal law system.

Director Emma Boling noted: "It is inevitable that genetics will have a major impact on thoroughbred breeding and we are delighted to encourage Australian breeders to take advantage of this tool now with a view to strengthening our industry's competitive position in this increasingly global market."

Dr Harrison will be visiting the Magic Millions sale at the Gold Coast between January 7 and 14.