Six fawns in a test-tube

THE WORLD'S first test-tube fawns were born at Ruakura AgResearch in December, following four year's work by scientist Debra Berg. The six Red fawns are now thriving on Ruakura's experimental deer farm.

Berg says the in-vitro fertilisation (IVF) process offers several advantages over other artificial breeding techniques. Eggs can be recovered from infertile females, or those that don't respond to superovulation, and even dead animals.

IVF is also very efficient — a single semen straw can fertilise 400 eggs against only one animal using artificial insemination. A new development also allows sperm sex selection using IVF.

The IVF process involves culturing the eggs and sperm separately for some hours before incubating them together, where fertilisation occurs. The resulting embryos are cultured for seven days and then transferred to recipient females.

It sounds simple, but until now scientists have had a poor understanding of cervine fertilisation, and genetic material has suffered from poor survival rates. Berg spent three years developing an IVF protocol, which finally paid off last autumn, when 29 embryos were transferred, resulting in six fawns born. Eggs were donated by Summit Deer Products and Mair Venison's Rotorua plant.

One of the six test-tube fawns with mum