

## It's a Girl! Brazil's Cloned Cow Is a Mother.

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The cow, Victoria, Latin America's first cloned bovine, gave birth to her first calf on September 19 at the Brazilian Agricultural Research Company's National Research Center for Genetic Resources and Biotechnology (Cenargem/Embrapa), in Brasília.

The calf, Gloria, weighed 38.2 kilos at birth, 12 kilos less than Victoria's birth weight, and the two are doing fine.

According to Embrapa's coordinator of animal reproduction research, Rodolfo Rumpf, the birth confirms that Victoria has fulfilled all the initial goals of the cloning. That is, she is healthy and able to reproduce.

"The function of the female is to have offspring, and, thus, this test was decisive. Victoria's ability as a mother is fantastic."

He emphasizes that Gloria is gaining a kilo each day, consuming only her mother's milk.

Rumpf points out that Gloria is the result of artificial insemination. Her case deserves attention, because her mother, Victoria, was the first animal cloned in Latin America.

The method used to clone Victoria is almost identical to the one used with Dolly, the world's first cloned sheep. Victoria was formed from a cell drawn from the udder of an adult cow.

The nucleus of the cell was removed, and a nonnucleated egg cell from a third cow was inserted. Finally, Victoria developed inside a host mother.

Embrapa's research began in 1984. The company is currently investigating the importance of the oocyte and cytoplasm in the cell. This will make it possible to alter genetic codes.

To illustrate, Rumpf cites a case in New Zealand. "We shall be able to modify milk quality, for example. With fat or without," he summarizes.

Rumpf explains that Embrapa's cloning research is intended to develop and foster new technologies.

"We want to recover endangered genetic material and join it to genetically modified elements. But we first have to perfect the cloning," he affirms.

Rumpf explains that they have received various research requests from private companies that make grants in this area.

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