

## THE ROLE OF OVUM IN GENDER PRESELECTION IN FARM ANIMALS

**Introduction** Scientists focused their research to separate X or Y-chromosome bearing spermatozoa and then fertilize the ovum with preselected sperm to produce offspring of predetermined sex. Surprisingly, nobody paid attention towards the role of ovum in controlling sex of fetus. It is the first time we attempted to recognize the role of ovum in controlling gender of a fetus in farm animals.

Pretension is to discover a mechanism of sperm selection by an ovum during the process of fertilization. He pretends that from millions of sperm an ovum makes own selection a partner sperm to complete the fertilization process.

**Material and methods** Naturally, mature ovum discharges some magnetic waves of different frequencies. When dam is discharged an ovum to produce female calf, the frequency of waves around the ovum repel y-chromosome bearing sperm that ovum can be fertilized only with X- chromosome bearing sperm. When the birth of male calf is desired, the second mechanism allows the ovum to produce waves which repel X-chromosome bearing sperm and get fertilize with Y-chromosome bearing sperm. The waves, which are responsible for the birth of male calf and female calf, were named as H-WAVES and M-WAVES respectively. These mechanisms make some special changes in follicular fluid around the ovum; for example, change in viscosity, pH, osmotic pressure or steroidogenic ratio that enable ovum to discharge H or M waves. This technology is equally effective in case of naturally mating or artificial insemination of the animals. After extensive experimentation, we have discover to mechanism named “RATAN PAK H (RPH)” AND “RATAN PAK M (RPM)” which are working to produce either male or female calf. RPH is responsible to charge follicular fluid in such a way that ovum produce H- waves, which repel X-chromosome bearing sperm presenting, birth of male calf. On the other hand, RPM manipulate ovum such a way that a female calf is produced.

**Results** Successful trials have been conducted in the area of Sargodha district of Punjab, Pakistan. Three species of animals like mare, cows and buffaloes were included in these trials until now, we have been worked on 732 animals the results obtained are very encouraging. The results of these experiments are present in **Table 1**

The trials are also being conduct now at different areas to confirm the results of our technology. WE know that this is a new approach for gender preselection and the idea is entirely different than that already existing one, therefore , it would not be accepted easily the scientist and the general public. However, we can say with confidence that we can produce at least 96% results with predetermined sex and we can prove it practically at any farm, or at any research institute. Discovery of such mechanism should be give a lot of new fields to scientists for their research and should be much more fruitful for farmers.

Table – 1: Number and species of animals have been experiment with Pak Shahpur Sex Choice Technology in Sargodha District

S. NO	SPECIES OF ANIMALS	NO.TREATED	POSITIVE	NEGATIVE	POSITIVE%
1	COWS	462	460	02	99.56
2	BUFFLOES	126	123	03	97.61
3	MARES	12	11	01	91.96
<b>TOTAL</b>		<b>732</b>	<b>726</b>	<b>06</b>	<b>96.27</b>

**Conclusion:** Controlling gender through manipulation of ovum is an easy and reliable technology, which could be applied equally through natural mating or artificial insemination. Discovery of such mechanism should give a lot new fields to scientist for their research. This technology would have a significant impact on the genetics and economics of livestock production. Selection of gender through this technology could give farmers the choice of sex of offspring. Keeping in view all these advantages of general preselection offspring, it is now imperative to produce male or female calf at your own choice. Fortunately, it is now possible through Pak Shahpur choice sex (PSCS) Technology.

