

## **Abstract:**

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### **Effects of Viability and Motility On Cold Shocked Bovine Spermatozoa Held at Different Temperatures**

Artificial insemination is a common technique used worldwide to impregnate cattle. It is widely used within the dairy cattle industry to help produce heifers for milking purposes. While there have been many advances in AI technique, more research is needed for improvement. Based on current studies regarding AI, there is a lack of information regarding the effects of viability and motility on cold shocked bovine spermatozoa. In addition, limited information is available on the effects of cold shock bovine spermatozoa post thaw. Based on the lack of information, research is needed to determine the effects of cold shock on bovine spermatozoa during the thawing process. The objective of this study is to determine how cold shocked bovine spermatozoa will affect the viability and motility of sperm after post thaw.