

**Actividades divulgación Proyecto AGROALNEXT\_2022**

<b>Lugar</b>	Universitat de Valencia
<b>Localidad</b>	Burjassot
<b>Provincia</b>	Valencia
<b>Fecha</b>	Enero de 2023
<b>Proyecto:</b>	Optimización de la conservación y búsqueda de marcadores de la fertilidad en espermatozoides de animales de interés productivo (FERTSPERM)
<b>Código proyecto</b>	AGROALNEXT_2022/063
<b>Grupo de investigación</b>	 UNIVERSITAT DE VALÈNCIA  ivia Institut Valencià d'Investigacions Agràries

**INFORME DE LA ACTIVIDAD:**

**Comunicación aceptada como poster al congreso internacional** que se celebrará del 21 al 23 de Septiembre de 2023 en Nantes (France). Título: Quality of goat sperm stored in PBS at 17°C is affected by the energy substrate type.

**FOTOS DE LA ACTIVIDAD:**

----- Forwarded message -----

From: <[info@esdar.org](mailto:info@esdar.org)>

Date: Wed, May 3, 2023, 12:55 PM

Subject: Update regarding your ESDAR abstract submission

To: <[wp.sabrina.gacem@gmail.com](mailto:wp.sabrina.gacem@gmail.com)>

Dr. Sabrina Gacem,

your abstract "Quality of goat sperm stored in PBS at 17°C is affected by the energy substrate type" has been reviewed.

Dear colleague,

It is my pleasure to inform you that your abstract has been **provisionally accepted** for the next ESDAR meeting. Full acceptance will automatically occur after the organizing committee will have confirmed the **payment and registration for yourself or at least one of your co-authors** for the participation in the conference. So, if you did not register yet, please do this as soon as possible.

Please also double check the preview of your abstract at the following website [www.esdar.org/abstracts](http://www.esdar.org/abstracts) using your personal login and password as some minor corrections may have been implemented by the reviewers. Also double check whether the list of authors and co-authors and the affiliations of the participating institutes are correct.

Very best regards and looking forward to meet you at the conference.

%7B%24account\_url%7D

Gaby Hirsbrunner

Please review your abstract data, and click "Confirm" to complete your abstract submission.

## Abstract preview

### Quality of goat sperm stored in PBS at 17°C is affected by the energy substrate type

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The choice of energy metabolic pathways for ATP synthesis and sperm motility during cooled storage could be influenced by a variety of energy conditions, but how these conditions affect goat sperm is unknown. The aim of the current study is to examine the effect of different energy substrates in Phosphate-buffered saline (PBS) medium during cooled storage on sperm quality. Six ejaculates from Murciano-Granadina male goats were washed twice and stored for 48h at 17°C in five different media consisting of PBS supplemented with 35 mM of Glucose (G), Lactate (L), Fructose (F), Pyruvate (P) or without supplementation (C). To avoid osmolarity differences, G, F and C media were supplemented with NaCl. Total motility (TM) and progressive motility (PRM) were measured with CASA system (AI Station, Sperm.Tech, Spain) and high mitochondrial membrane potential (hMMP) was assessed by flow cytometry at 0h, 24h and 48h. Results were analyzed by GLM using SPSS. TM showed a significant decrease in F, G and C media at 24h and 48h (18.7%, 14.1% and 5.13% at 24h for F, G and C media respectively;  $P < 0.05$ ) while L and P media kept a higher TM compared to other media at 24h and 48h (48.5% and 47.8% TM at 24h for L and P media;  $P < 0.05$ ). After 48h, PRM significantly declined in all media, except for L medium which maintained the same level to PRM at 0h. Similar to PRM, hMMP at 24h and 48h showed a significant decrease in F, G and C medium. However, P and L media maintained similar hMMP at 0h. In conclusion, caprine sperm stored at 17°C in PBS maintained better quality parameters when lactate and pyruvate are used as energy substrates. This study was supported by MCIN with funding from European Union NextGenerationEU (PRTR-C17.I1) and by Generalitat Valenciana (AGROALNEXT/2022/063).

Y para que conste a los efectos oportunos

Firma del IP1.