

Dear reader:

This special edition of La Granja titled “Understanding dairy cows for a sustainable production”, seeks to generate awareness and reflection on primary milk production, and for this to happen we must first understand, support and respect producers. In general, humans solve problems in the short term according to the needs, but without considering the integrative look that would allow a continuous analysis, emphasizing the sustainability of the systems from economic, productive, environment and social aspects.

In this regard, Dr. Darwin Yáñez-Avalos and other researchers from Universidad de Córdoba, and Universidad del Rosario in Argentina as well as the Ministry of Agriculture and Livestock of Ecuador, highlight the results of artificial insemination protocols adapted to the reality of the Ecuadorian Amazon, providing alternatives for improved conception and reproductive efficiency.

Likewise, in relation to the postpartum period of the cow, Dr. Javier Huerta-Peña, Dr. Miguel Lammoglia-Villagómez and Dr. Pablo Marini, demonstrate that the origin of infertility in dairy cows in the Mexican highland is associated with postpartum pathologies which have increased in recent years. Thus, they recommend to maximize the care of cows in this period to reduce the presence of pathologies and to avoid problems in cows.

Dr. Francisco de la Cueva, Dr. Alexandra Naranjo, Dr. Byron Puga Torres and Dr. Eduardo Aragón of the Veterinary and Zoology Faculty of Universidad Central del Ecuador, demonstrate the need to control the vehicle of heavy metals in milk in the productive systems close to cities. In order to determine the presence of these metals, they propose a continuous monitoring in milk, specially to identify the causes of its contamination.

To finish this second special issue, and continuing with the quality of the product, Dr. Rocío

Contero-Callay and her team at the Milk Quality Laboratory of Universidad Politécnica Salesiana analyze whether the parameters set out in the law for the payment of raw bovine milk in Ecuador are met. The author points out that these rules are fulfilled and stresses the need to concentrate efforts on health and good milking practices.

In addition, in the miscellaneous section of the journal, six articles with different topics are presented. The first one, about soil science, conducted at the Polytechnic School of Chimborazo and the Ministry of Agriculture and Livestock, Jorge Silva and his team, presents a literature review of the environmental, medical, pharmacological and industrial potential of andisol nanoparticles found in Ecuador. Meanwhile, the research group of Universidad Técnica and la Universidad Laica Eloy Alfaro de Manabí, led by Rubén Darío Fernández, show the effects of the use of hydrogel and the moistening volume in different types of soils.

On the subject of Agriculture and Climate Change, Ingrid Betancourt and Lenin Ramirez, from Universidad Andina and Yachan Tech, respectively, assess the efficiency of hard maize production under different models, analyzing its effect on the climate and its changes. Likewise, Sebastian Cedillo and his group of researchers from Universidad de Cuenca carry out a descriptive roughness model in two dimensions in Mountain rivers.

Finally, in order to continue with the issue of sustainability, Fiorella Cáceres and José Iannacone, from Universidad Científica del Sur and Universidad Nacional Federico Villarreal del Perú, show the environmental effects of insecticides in the production of river shrimp. Also, Bécquer Camayo and his team from Universidad Nacional del Centro de Perú and Alma Global Network of Spain, present more ecological strategies for solar dryers of Aguamayto.

It is evident that the research in the region, represented by this issue of the 33 Journal of Life Sciences, La Granja, points to a more sustainable form of consumption and production, which seeks not only the respect for the environment, but also its care and understanding.

Sincerely,

Dr. Pablo Marini
Universidad de Rosario
Guest Editor

Dr. Ignacio de los Ríos Carmedano
Universidad Politécnica de Madrid
Editor in Chief

MsC. Sheila Serrano Vincenti
Universidad Politécnica Salesiana
Editor in Chief