

Dear reader:

After a collaborative and uninterrupted work, the UPS has continued to improve one more year as a Research University, and has gone from the position 6,611 in the world and 13 in Ecuador (Webometrics, 2013) to the position 2627 (Webometrics, 2020) worldwide, it is the 170 on the continent and 7 in Ecuador. The continuous improvement of all teams and the strategic vision have made progress in the World Ranking, allowing to go to 3984 positions in 7 years and 366 new positions compared to 2019. Within this global strategy of improvement of the UPS as a Research University, LA GRANJA, belonging to the area of Life Sciences, was the first university publication of Ecuador to be included in SCOPUS, Elsevier publishing house and indexed in the Emerging Source Citation Index of the Web of Science (WOS).

This edition presents articles by authors from 5 countries and 16 Universities and Research Centers. We started this number 31 with the topic of weather monitoring, in an effort between the Sciences Department of Environmental Systems of Switzerland and Universidad de Cuenca, led by Dr. Ryan Padrón and his excellent team. In addition, researchers from Universidad de las Fuerzas Armadas, led by Teófilos Toulkeridis, analyze the problem of perceptions in the important and current topic of Climate Change.

From Mexico, Nayeli Martínez and Erick de la Barra, researchers from Benemérita Universidad Autónoma de Puebla and Universidad Nacional Autónoma de México, present studies of urban weeds. While Salomé Araujo and the joint team from Universidad Nacional de Loja, Universidad de las Américas and Universidad Técnica Particular de Loja, analyze cadmium contamination on

cocoa almonds with spectroscopic techniques.

In the field of conservation and biotechnology, Paola Jiménez and her interdisciplinary team from Universidad Politécnica Salesiana and the National Institute of Agricultural Research present effective techniques for the *in vitro* propagation of Quishuar. Also, addressing the topic of livestock systems, specifically goats, Araceli Solís and her team from Universidad Estatal de la Península de Santa Elena present a comprehensive study of the classification of these mammals.

Additionally, an important area of La Granja is that of Veterinary Sciences, Jimmy Quisirumbay, from Universidad Central, presents a meta-analysis of the effects of glutamine on piglet feeding. Meanwhile from Peru, Victor Carhuarpoma De la Cruz and his team of researchers from Universidad de Huancavelica, present studies of antibiotic resistance on alpacas.

Finally, with the topic agricultural production, Rosa Per tierra and Jimmy Quispe, of Universidad Estatal de la Península de Santa Elena, present an economic analysis of the production system of hydroponic lettuces. And Carlos Abad and his team from Universidad Técnica Particular de Loja, analyze the micro-tunnel technique in the productivity of strawberry crops.

We thank all of them for their collaboration and work to continue improving the Journal and contribute to the improvement of society from the dissemination of science and international research in the field of Environmental and Earth Sciences.

Those who are part of La Granja, Revista de Ciencias de la Vida, are confident that this volume will surely be of great use and interest in the scientific community.

Sincerely,

Ph.D Ignacio de los Ríos Carmedano
Universidad Politécnica de Madrid
EDITOR IN CHIEF

Ph.D(c) Sheila Serrano Vincenti
Universidad Politécnica Salesiana
EDITOR IN CHIEF