The Sustainable Development of Zootechnical Sciences in the Context of Life Sciences and the Perspectives of Zootechnical Engineers in the Innovative Concept of Eco-Bio-Economic Engineering

Alexandru T. Bogdan[1], Nicolae Păcală[2], Eliza Simiz[2]

[1]*Romanian Academy, National Institute for Economical Research (INCE)-Center for Agroforestry Biodiversity Study and Research (CSCBA) - Postdoctoral School for Livestock Biodiversity and Food Biotechnology, Bucharest, Romania*

[2]*Banat's University of Agricultural Sciences and Veterinary Medicine, 300645 Timisoara, Calea Aradului 119, Romania*

Abstract

Zootechnical sciences represent a well defined concept since the notion of "Zootechnics" has been in use (in the second part of the 19th c.) and they continued to develop throughout the 20th century and they have acquired new insights in the early 21st c. knowledge society. The three authors bring forth numerous and various professional documents from national and international literature, some of which are novel and demonstrate that the concept of Zootechnical sciences represents an objective reality.

From a present and future perspective, several scientific fields are grouped in two expressions highly employed in the international specialty literature which have begun to be utilized in our country as well. In this respect, the expressions "biosciences" and especially "life sciences" are explained by the team of authors with concrete examples and relevant evidence, including discussions with undeniable arguments concerning the place and role of zootechnical sciences within the scope of biosciences and life sciences.

As part of ***the Postdoctoral School for Zootechnical Biodiversity and Food Biotechnology, based on the Eco-economy and the Bio-economy required by Ecosanogenesis*** (contract POSDRU/89/1.5/S/63258), funded by the European Social Fund through the Operational Programme Human Resources Development, the scientific basis of a new paradigm of integrated eco-bio-economy have been presented and developed at national and international symposia with acknowledged academic character; the authors further develop the perspectives of zootehnical engineers regarding the innovative concept of integrated eco-bio-economic engineering with a socio-economic impact upon increasing bio-food resources for humans and farm animals in the context of preventing and combating a new global food crisis, in a changing multipolar world.

Keywords: biosciences, life sciences, eco-bio-economic engineering

* Corresponding author: Alexandru T. Bogdan,
Email: cscbas@yahoo.com