



## **EDITORIAL**

## Smart Livestock for Science... 12 months later

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The fourth issue of Slovak Journal of Animal Science 2023 gives to me the opportunity to overview our scientific publishing activity after the first 12 months together. Along four issues, our Journal has been faced with many different aspects of animal farm production, among them mainly circular economy strategy, non-conventional feed resources, and community-based livestock programs. All these different aspects have a common point: boost and develop the livestock farming system, in terms of competitiveness and profitability. Looking at the different articles collected and published during this year, the incorporation of locally available novel feed resource alternatives can promote circular economy concepts, increase food security, and improve sustainable livestock production. By exploiting locally accessible resources, the inclusion of these materials in animal feed nutrition has significant potential to enhance livestock performance, lower production costs, and promote bioeconomy concepts.

On the other hand, analysis of genomic data is an important resource for the effective management of small and endangered animal populations. The research activity of scientists has deeply been focused on developing breeding programs able to conserve animal biodiversity and monitor animal biodynamics.

In the last Editorial article of 2023, I am going to introduce the contents of the articles collected and published in the fourth issue of 2023 year.

**Formelova** *et al.* performed a study to evaluate the effect of dried hempseed cake (by-product of oil production) supplementation (5 %–EG1 and 10 %–EG2) to rabbit feed mixture on livestock performances, quality of meat, digestibility of nutrients and animal health status. All obtained data let Authors to recommend the inclusion of hempseed cake up to 10 % in rabbit diet without any negative effect on animal welfare, livestock performance and quality of meat.

**Osaiyuwu** *et al.* organized a study to provide useful information for the creation of sustainable breeding programmes and developing a sustainable use and conservation strategy aimed at developing highly producing Muscovy ducks in Nigeria; consequently, increasing the food security index of the nation and source of income for small-scale farmers. In general, the ducks from all seven ecogeographic locations were rather homogeneous than heterogeneous.

**Mekonnen** *et al.* had the prime objective to survey and characterize the husbandry practices of the different indigenous sheep populations. Authors concluded the study claiming a need of feed development, shift to modern husbandry practices, access to veterinary services, indigenous sheep conservation through utilization, control of inbreeding, ram-to-ewe ratio, fattening and castration should be of future attention of farmers and stakeholders.

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**Ajayi et al.** to justify the use of duckweed as an alternative and novel aquatic-derived fodder in ruminants' feeding strategies, performed preliminary investigation via *in vitro* gas production technique. The study assessed the nutrient and mineral potential, secondary metabolites and *in vitro* gas production characteristics of duckweed to estimate the short-chain volatile fatty acids, metabolizable energy, organic matter digestibility and apparent *in vitro* dry matter degradability. In conclusion, duckweed from earthen fish ponds is fairly degradable *in vitro*, and the nutrient contents elucidate its forage value for ruminants.

Editorial Team looks forward to evaluating your submitted contributions and providing all necessary support to Authors in order to best serve animal science and the scientific community, with commitment to research integrity and the highest publishing ethics.

Enjoy reading!

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