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The 6TH Conference Of ISOCARD
Saudi Arabia 2023

King Faisal University

The Proceeding of 6th Conference of the International Society of Camelid Research and Development

ISOCARD-2023

"The Role of Camel in Food Security and Economic Development"

الجمعية الطبية البيطرية السعودية
Saudi Veterinaray Medical Society

جامعة الملك فيصل
KING FAISAL UNIVERSITY

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Organized by:

Saudi Veterinary Medical Society (SVMS)
Camel Research Center

King Faisal University

The 6th Conference of the International Society of Camelid Research and Development (ISOCARD)-2023

"The Role of Camel in Food Security and Economic Development"

Assessment the Variation Factors of Milk Production and Composition of Camels in Kazakhstan

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AIM:

To assess the variation factors of milk composition and milk productivity of Bactrians, dromedaries and hybrids from Kazakhstan.

INTRODUCTION:

Nowadays, camel milk is in high demand both in domestic and foreign markets. The potential value of camel milk is on average 3.6% of the total national milk production, and this proportion increased by 30% since its independence. In the last 20 years, the production of camel products increased 5 times. There is an upward trend in prices for camel dairy products, which create an attractiveness for breeding camels with high dairy productivity in the country. Specific physiology and adaptive capacity and increased interest for these animals as livestock species worldwide could lead to high productive camels becoming an important milk source for humans.

METHODS:

Milk composition (SNF, density, fat and protein content) and milk production/12h of 447 Arvana dromedaries, 159 Bactrians and 107 hybrids from different regions in Kazakhstan were determined. As illustrative data, region, parity, physiological stage, and age of the camel is reported. The software used was XLstat (Addinsoft©, 2022).

RESULTS:

In the factorial plan issued from the Discriminant Factorial analysis, Bactrian milk composition and production is appearing at the opposite on average from all other species along the main factorial axis. More than 86% of dromedaries are well classed according to their milk composition and production while it is only around 50% of the Bactrian only. The hybrids are mainly closed to Arvana profile. As a whole, 66% of the camels are well-classed. The more discriminant parameter is the density and the less is the protein. However, all the parameters are contributing to the discrimination.

CONCLUSION:

According to the results, the local camel populations could be discriminated according to their milk composition.

KEYWORDS

Milk productivity, milk composition, Bactrians, dromedary camels, hybrids

CITATION

Shertay, E., Sh., A., Konuspayeva, G., Torekhanov, A., Shamshimanova, A., Abuov, G. and Faye, B. (2023). Assessment the variation factors of milk production and composition of camels in Kazakhstan. In: *The 6th Conference of the International Society of Camelid Research and Development (ISOCARD)-2023 "The Role of Camel in Food Security and Economic Development"*, King Faisal University, Al Ahsa, Saudi Arabia, 12-16/03/2023.