The Alia Camel: A Symbol of Jordan's Heritage & Resilience



A cross-cultural duology authored by Dr. Nizar Haddad (part 2) and Nico Dingemans (part 1) in the wake of the International Year of Camelids from scientific, heritage, socioeconomic, and gastronomic perspectives. With contributions from Sami Allawama. Photos and videos by Yazeed Malkawi and Ghazel Hasan.

International Year of Camelids

The United Nations declared 2024 the <u>International Year of Camelids</u> (IYC 2024). Camels, Ilamas, alpacas, vicuñas, and guanacos are an important source of livelihood for millions of families in deserts and mountainous rangelands around the world. Camelids play a vital role in advancing the <u>Sustainable Development Goals</u> (SDGs) related to the fight against hunger, the eradication of poverty, the empowerment of women, and the sustainable use of terrestrial ecosystems. From providing milk, meat, fiber, and organic fertilizer to transporting products and people, camelids thrive where other livestock species cannot survive.

Jordan

In celebration of camels and Bedouin communities in the Hashemite Kingdom of Jordan, the National Agricultural Research Center (NARC), under the patronage of Dr. Nizar Haddad (Researcher and former Director General of the National Agricultural Research Center), and in partnership with Nico Dingemans (founder of From Farm to Fork in Jordan) and Sami Allawama (founder of Camelera camel milk products), organized Ships of the Desert in May 2024 in Wadi Rum, the first IYC event in the Middle East and North Africa. Dr. Nizar Haddad also led the scientific research The Alia Camel of Jordan: a genetically distinct dromedary breed, which will be published soon, demonstrating that the Alia camels are genetically distinct and deserve preservation. Dr. Mohammed Al-Araishi, camel expert at the National Agricultural Research



Center and the Livestock Research Directorate, played a key role in this important project. In October 2024, Nico Dingemans and Sami Allawama organized a second camelids event in <u>partnership with FAO Jordan</u> in Amman. In <u>part one</u> of this two-part article, Nico Dingemans delves into the socioeconomic and gastronomic significance of camels and camel products, such as milk, cheese varieties, and meat, with contributions from Sami Allawama, while part two (this article) explores the results of scientific and heritage research by Dr. Nizar Haddad, Dr. Mohammad Al-Araishi, and the research team.

Amman, Jordan | 10 April March 2025 | Part 2

Video from Ghazel: 704463ce60aa405bbccfbccf7750d45c

A Unique Breed in the Heart of Jordan

Among the diverse types of dromedaries, the Alia camel (locally known as "Jamal Alia") is a genetically distinct breed found primarily in the arid landscapes of Wadi Araba in the south, and the Jordan Valley in the east. It captured the attention of scientists and cultural enthusiasts alike as recent advanced genomic research identified its' genetic uniqueness due to the exceptional endurance, high milk production, and adaptability to Jordan's diverse environments. Beyond its biological importance, the Alia camel holds a special place in Jordanian culture and history, symbolizing resilience, and ingenuity. In this article, we highlight the Alia camel as a cornerstone of deeprooted Jordanian heritage, its' economic importance, genetic differentiation, and the urgent need for conservation efforts to safeguard its future as a biological and socioeconomic asset for Jordan and the wider MENA region. https://jordantimes.com/news/local/echoes-wadi-rum-desert-delving-

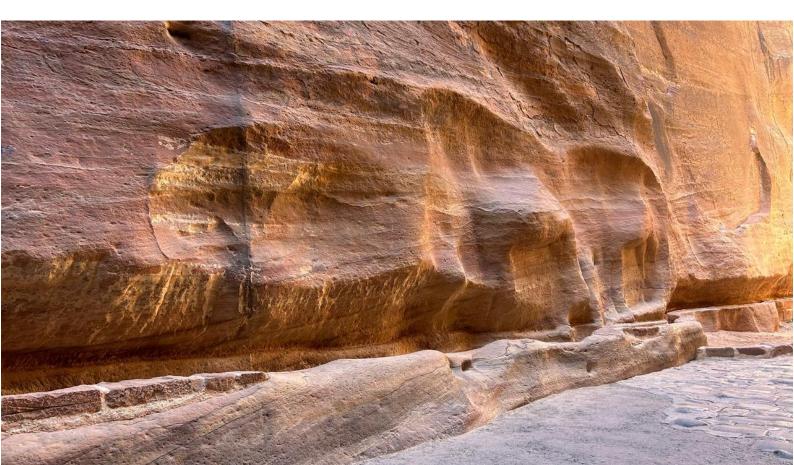


alamelehs-ancient-petroglyphs



The Alia camel has been a part of Jordan's history since ancient times, dating back to the <u>Nabataean civilization</u>. Archaeological findings in Petra, including ancient carvings of camels in the Siq, reflect the essential role of camels as indispensable companions for trade and transportation across the Arabian Peninsula. Oral traditions attribute the Alia camel's lineage to the camels of Ali ibn Abi Talib, the son-in-law of the Prophet Muhammad, further elevating its cultural importance among Jordanian Bedouins. In Jordan's Eastern Desert, rock art further depicts the enduring relationship between camels and Indigenous people of the region. These carvings, etched into the sandstone by early inhabitants, serve as a testament to the camel's importance in daily life and survival, and its' cultural significance is embedded in:

- Folklore and Identity: The Alia camel features prominently in Bedouin poetry and songs, symbolizing resilience, loyalty, and prosperity.
- Social Practices: The camel is an integral part of traditional ceremonies, including weddings and tribal gatherings. Camel racing, where the Alia camel often excels, remains a celebrated tradition.
- Artistic Representation: Depictions of camels, including those resembling the Alia, are found in Jordanian mosaics and rock carvings, highlighting their historical role in the region's cultural narrative.



Collaborative Research & Discovery

Our groundbreaking research was made possible through the collaboration of several esteemed institutions, including the National Agricultural Research Center (NARC), the University of Jordan, and Victory Genomics, among others. The Alia camel project I initiated as former Director General of NARC, was supported by the National Center for Research and Development of the Higher Council for Science and Technology of Jordan, following my prior genetic studies of local <u>Awassi sheep</u>, historical <u>Mehras olive trees</u>, and <u>indigenous honeybee</u> populations, showcasing Jordan's rich agricultural biodiversity.

Why the Alia Camel Stands Out

Our study leveraged whole-genome sequencing (WGS), confirming that the Alia camel is genetically distinct from other dromedaries in the Arabian Peninsula. Its' phenotypic characteristics show remarkable traits, such as:

- Endurance and Speed: Alia camels can cover 20 kilometers in just 35 minutes, making them highly valued in endurance races.
- High Milk Yield: Producing 5-6 liters of milk daily, the Alia camel provides vital nutrition to local communities.
- Adaptability: These camels thrive in arid and semi-arid environments, reflecting their genetic resilience.
- Genetic Distinction: Advanced genomic analysis shows the Alia camel's DNA is significantly different from other regional dromedaries.

This genetic distinctiveness is not due to geographical isolation but rather careful breeding practices in Jordan and the Alia camel's genetic diversity is comparable to or greater than other camel populations, emphasizing its biological significance.



Challenges & A Call for Conservation

Despite its resilience, the Alia camel faces numerous challenges, including habitat loss, modernization, and a lack of formal recognition as a distinct breed. Conservation efforts are essential to preserving its legacy.

Why conservation matters:

- Cultural Preservation: Protecting the Alia camel ensures the continuity of Bedouin traditions and Jordanian identity.
- Economic Value: The camel's traits, such as high milk yield and racing abilities, make it an asset for breeders and the tourism industry.
- Biodiversity: Conserving the Alia camel contributes to the genetic diversity of dromedaries in the region.

To ensure its survival, several steps must be taken:

- Official Breed Recognition: Officially classifying the Alia camel as a distinct breed will facilitate targeted conservation programs.
- Expanded Research and Monitoring: Broader genomic studies can enhance understanding of the breed's unique traits and inform global conservation strategies.
- Sustainable Breeding: Programs to maintain the Alia camel's genetic purity are vital.
- Research Expansion: Broader genomic studies could uncover additional unique traits and inform conservation strategies.
- Public Awareness: Educating the public and agricultural and tourism sectors about the camel's cultural and economic value can inspire local and global support.

An excellent example of raising public awareness is the pioneering work of camel milk producer Eng. Sami Allawama (Camelera) and culinary tourism expert Nico Dingemans (From Farm to Fork in Jordan) in raising culinary awareness of the health benefits of camel milk, camel cheese and camel meat. By creating demand in the hospitality and tourism sectors they help to diversify the livelihood of local camel breeders throughout Jordan.



FAO's Year of Camelids & Global Significance

The Alia camel's importance resonates on a global scale, particularly in light of the "Year of Camelids." FAO's initiative underscores the critical role camels play in supporting livelihoods, food security, and cultural heritage across arid regions worldwide. Jordan's Alia camel embodies the goals of this global recognition. As a breed that excels in milk production, endurance, and adaptability, it serves as a model for sustainable livestock management. By safeguarding the Alia camel, Jordan can set a precedent for preservation by amplifying shared cultural and economic value of camels in the MENA region and beyond. Through research, collaboration, and public awareness, the Alia camel can continue to thrive as a vital part of the region's identity and economy. Similar programs could be directed toward identifying and conserving other unique camel breeds, such as the Awarik camel of Saudi Arabia. Regional conservation efforts can ultimately lead to:

- Strengthening cross-border collaboration in camel conservation.
- Enhancing camel-based industries, including tourism and dairy production.
- Preserving shared cultural heritage across the MENA region.

Bridging the Past and Future

For centuries, the Alia camel has been a faithful companion, provider of resources, and symbol of resilience and identity for Jordanian communities. Today, it stands at the crossroads of tradition and innovation. By prioritizing this living treasure, Jordan not only honors its' past but also paves the way for a sustainable future. The story of the Alia camel is one of hope and resilience. It represents the enduring connection between people and the natural world. With concerted efforts, this extraordinary breed can continue to thrive, embodying the spirit of Jordan for generations to come.



https://youtu.be/BmhDF0ZKREA



www.linkedin.com/pulse/celebration-camels-jordan-nico-dingemans-oeksf/

