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A STUDyo.f SOME OF THE ACTIVITY PATTERNS OF *CAMELUS DROMEDARIOUS* MAINTAINED IN THAL AREA OF PUNJAB, PAKISTAN

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A comprehensive study involving 12 camels in different age groups was conducted for a period of 15 days at a Govt. Livestock Experiment Station in Thai desert of Punjab province to observe their various activity patterns round the clock. The activities mainly concentrated upon included daily grazing and rumination pattern, idling and resting pattern and frequency of defaecation and urination. On overall basis the total time spent for various activities expressed as percent of 24 hours was found to be 37.40, 31:70,26.52 and 4.37 for grazing, rumination, idling and resting respectively. Time spent in rumination while sitting was about 45% higher than rumination in standing posture. Similarly, nocturnal rumination time was more than twice as much as observed during day time. Rumination time as observed was minimum in youngstock while resting time was the maximum. An ethogram depicting the daily activity patterns of camels has also been constructed. The frequency of defaecation and urination during day and night time was 5.7 and 3.0 and 5.7 and 4.3, respectively. The correlation between grazing/browsing time and the time for diurnal rumination was -0.047, while that of time between grazing/browsing and nocturnal rumination was 0.171.

Key words: activity patterns, *Camelus dromedarious* . Thai area

INTRODUCtIQN

Despite various well recognised roles played by camel such as milk and meat production, its use in agricultural operations, its use as a beast of burden, as riding, racing and as draught and dancing animal,, no organised research worth its name, has been conducted on camel in Pakistan. Only a few scattered studies concerning composition of its milk, production of ghee from its milk, blood picture, etc. have been undertaken. Recently two studies, one on daily activity patterns and the other on some productive and reproductive aspects of camel have been completed. As far as planned research on camel is concerned, it would be more or less a true statement that camel is one of the most ignored farm animals in Pakistan. The potential of Pakistani camel has remained unexploited as ever. Although the element of mechanisation of agriculture and the widespread use of vehicular transport for intracity haulage of various goods, has curtailed the camel-driven operations, yet the camel would continue to occupy an important place in the list of economically useful farm animals found in Pakistan for decades to come.

TI1epopulation of camel in Pakistan has shown a very gradual increase and has grown from 0.4 million in 1955 to 1.2 million in 1996 (Anonymous, 1996-97). However, inspite of increasing mechanisation and urbanisation in the country, the population of camel has not shown a downward trend. This fact itself speaks of the usefulness and importance of the one-humped camel in Pakistan.

TI1estudy in question was undertaken to determine the various daily activity patterns of one-humped Pakistani camel.

MATERIAL AND METHODS

The study involved 12 camels selected randomly from the herd maintained at a Govt. Livestock Experiment Station located in Thai desert (Layyah district) of Punjab province in Pakistan. These were divided into three groups (group I, four adult males; group II, four adult females and group III, four youngstock). The animals were identified with bold red markings on their backs. Ten hours grazing/browsing time (8 AM to 6 PM) was allowed daily. The animals were watered 1-3 times daily as and when water was available in the range area. At night the animals were kept in an enclosure.

Observations for various activities such as rumination pattern, idling and resting pattern and frequency of defaecation and urination were made round the clock for 17 days, including an adjustment period of two days. For grazing time, the animals were monitored for 10 hours daily in the grazing area. The following grasses/browse species are commonly found in Thai tract:

Grasses: *Cenchrus ciliaris* (Dharnan), *Elionurus hirsutus* (Karera),

Browse species: *Acacia jacquemoniii* (Kikri), *Calligonum polygonoides* (Phog), *Prosopis cineraria* (land), *Solvadora oleoides* (Van), *Sueda fruiticosa* (Lana) .

Certain terms used in this research paper imply the following meaning:

Grazing/browsing time: Total time camels were allowed to graze/browse.

increase over mid (19.41 %) and over better parents (19.08 %) in case of grain yield per plant. Hybrid vigour expressed for this character had also been reponed earlier by Malik *et al.* (1981), Bhatti *et al.* (1982), Iqbal *et al.* (1990) and EI-Hennawy (1996). It is concluded that cross LU26S x HABA-3 could be further evaluated tor selecting high yielding wheat genotypes.

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