

REVIEW OF LITERATURE

- **Bouissou (1972)** examined influence of body weight and presence of horns on social rank in domestic cattle.
- **Reinhardt *et al.* (1978)** studied resting habits of Zebu cattle in a nocturnal closure. The amount of time cattle spend resting depends on environmental conditions, time spent ruminating and grazing, and on breed. Studies on Zebu cattle showed individual preferences for particular resting areas, which could be traced throughout 12 months.
- **Hearnshaw and Morris (1984)** studied genetic and environmental effects on a temperament score in beef cattle.
- **Buddenberg *et al.* (1986)** worked on maternal behaviour of beef cows at parturition. They observed an important element of maternal behavior is the cow's aggressive protection of her calf and early development of the newborn beef calf.
- **Metz and Metz (1986)** studied maternal influences on defecation and urination in the newborn calf. They observed cows spend much of the first few hours after birth licking the calf, a behavior that is important in stimulating calf activity and may have physiological effects including stimulating breathing, circulation, urination and defecation
- **Albright J.L. (1993)** studied feeding behavior of dairy cattle. Feed accessibility may be more important to cows than the actual amount of nutrients provided. Cows eating with their heads in the downward position produce 17% more saliva, which directly affects rumen function, than cows eating with heads held horizontally.

- **Krysl *et al.* (1993)** observed influence of supplementation on behaviour of grazing cattle. Grazing is affected by temperature. In very high temperatures cattle will graze predominantly at night.
- **Barfield *et al.* (1994)** worked on domestic calves (*Bos taurus*) recognize their own mothers by auditory cues. They demonstrated that 3 to 5 week old calves could recognize their mothers using vocal cues.
- **Currie and Bruce (1995)** studied structure and function of domestic animals. They observed that cattle can distinguish smell.
- **Visscher and Goddard (1995)** studied genetic parameters for milk yield, survival, work ability, and type traits for Australian dairy cattle.
- **Fraser and Broom (1997)** studied farm animal behaviour and welfare. They observed that cattle have long memories. They can individually identify 50–70 other herd members
- **Grandin and Deesing (1998)** studied genetics and behavior during handling, restraint, and herding. This review includes herd behaviour, individual differences in behavior effects of early experience and handling on behaviour.
- **Houpt (1998)** studied domestic behaviour for veterinarians. They observed that cattle lie down to sleep, ruminate or drowse for nearly half of their day.
- **Hafez and Bouissou (2000)** studied reproduction in farm animals. They observed Vision, olfactory and vocal senses are involved in cow and calf identification.
- **Mitlohner *et al.* (2001)** studied behavioural sampling techniques for feedlot cattle.
The entire day involves maintenance behaviour: standing, walking, lying, feeding, drinking, self-grooming, allo-grooming, agonistic behaviour and ruminating
- **Poindron (2005)** worked mechanisms of activation of maternal behaviour in mammals and introduced that hormones play a major role in initiating and driving maternal behavior in all mammals.

- **Marina *et al.* (2007)** examined maternal behavior in cattle. These behavior allow the cow to bond with her calf, protect and provide it with nourishment and ultimately break down this bond at weaning.
- **Soch *et al.* (2011)** worked on effect of different factors on dairy calves' behavior. Their purpose were to study the effects of age, sex, and father on behavior of calves
- **Kumar *et al.*(2010)** worked on RP -HPLC method development and validation for the estimation of oxytocin in milk. And introduced that oxytocin is a cyclic octapeptide hormone released by the posterior pituitary and showing uterotonic and galactogenic activity.
- **Eriksson (2013)** studied improvements in milking management through imitation of calf behavior. The aim of this literature review is to describe, evaluate and consider implications of the three different suckling activities that the calf displays during a suckling bout. In terms of milking, these phases are represented by pre-stimulation, stimulation during milking and post-stimulation.