Karyotype of Malayan Gaur (Bos gaurus hubbacki) , Sahiwal-Fresien cattle and Gaur x cattle hybrids backcrosses.

ABSTRACT

Interspecific hybridization has been reported for a wide variety of vertebrate species either spontaneous or by organized crossing of bovine species. The hybrids were often carrying intermediate characters genetically and phenotypically of the parents. Thus, status information of both aspects is valuable in animal production for selection and breeding management. The Gaur-cattle hybrids was reported to be superior in production value compared to their parent cattle but fertility status was still questionable. The project was abandoned due to their fertility issue and the hybrids were kept within the cattle in a dairy farm. Cytogenetic status and breeding record of the remaining herd were unavailable since then. The herd was then translocated to a deer farm (PTH Lenggong) and kept freely in the paddock. Recently, two female calves were born via inter se mating. Peripheral blood cultures of Malayan Gaur, Sahiwal-Friesian cattle and Gaur x cattle hybrid backcrosses were analyzed via Giemsa stained metaphase. The Gaur and cattle were having diploid chromosome number (2n) of 56 and 60, respectively. Interestingly, the backcrosses from the hybrids by cattle bulls were found to have two chromosome arrangements, which are 2n = 58 and 2n = 60.

Keyword: Malayan gaur; Cattle; Interspecific hybridization; Selembu; Karyotype.