

Mycoplasmas in bovine lymphocyte cultures

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Lymphocyte cells taken from A. I., bulls were cultured in conventional, 3-day cultures. Conventional staining was performed. The cultures were inoculated with 4-mycoplasma strains, isolated from A.I. bulls. Inoculation with 10^6 — 10^8 CFU had to be broken off because of insufficient mitosis results. Inocula of 10^2 — 10^3 showed mitosis inhibitative potencies, varying with the strains. None of the isolates caused significant frequency increases of breaks compared to the controls.

Report on chromosomal examination of A.I. bulls in Hungary

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In preliminary studies the karyotypes of 11 bulls were prepared at the Department of Pathology, Robert Károly Hospital, Budapest using a modified human method.

The routine chromosomal examinations started practically at the beginning of 1975. Till now, altogether 116 bulls were evaluated in three A.I. stations, most of them (104) at our Institute. 113 bulls were found to be phenotypically normal and 5 showed chromosomal anomalies. All bulls belonged to six pure breeds and three crossed ones. The number of bulls in each breed is as follows: 36 *Hungarian Simmenthal*, 10 *Austrian Simmenthal*, 46 *Holstein Friesian*, 1 *Dutch Red-White*, 1 *Swedish Friesian*, 3 *Hereford*; 10 *Hungarian Simmenthal* × *Holstein-Friesian*, 8 *Holstein-Friesian* × *Jersey* × *Hungarian Simmenthal* and 1 *German Friesian* × *Holstein-Friesian*.

Of the nine breeds examined chromosomal anomalies were found only in the *Hungarian Simmenthal* and *Holstein-Friesian* breeds. In *Hungarian Simmenthal* two cases of centric fusions 1/29 and 11/16 and one chimerism of sex-chromosomes, in *Holstein-Friesian* breed one case of mosaicism 13/21 and one chimerism of sex-chromosomes were disclosed. According to these findings the percentage of chromosomal anomalies in the two breeds abovementioned were 8.33 p. cent and 4.34 p. cent respectively.

Ergebnisse von zyto-genetischen Routineuntersuchungen an Bullen in Bayern

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Seit 1973 wurden in Bayern 533 Besamungsbullen (36,9 p. cent aller eingesetzten Bullen) aus 8 von 13 Stationen untersucht. 6 heterozygote Translokationsträger wurden in 2 von 4 untersuchten Rassen gefunden. Der Anteil von 1,13 Prozent an Zentromerfusionstieren in Routineuntersuchungen entspricht nicht der tatsächlichen Verbreitung der Zentromerfusion in der Population, da die männlichen Tiere aus gezielten Paarungen selektiert werden, jedoch einzelne positive Vererber als Translokationstiere in der künstlichen Besamung stärker als der Durchschnitt eingesetzt wurden. Zusätzlich konnten 5 Chimären mit mehr als 80 p. cent weiblichen Zellen ermittelt werden, wovon nicht bei allen die heterosexuelle Zwillingsgeburt bekannt war.