

regions of chromosomes such as the centromere and telomere in cattle, goat and horse; centromere and « secondary constriction » in pig; satellite in cat. However, polymorphism in occurrence of N bands was observed.

Influence of the  $\text{NaH}_2\text{PO}_4$  incubation on the discovering of N bands in the fresh and old slides was observed. Staining procedure for C banding has been used for the comparison of results.

### **Frequency and source of chromosome abnormalities in chick embryos**

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In a series of nine studies, 8 258 chicken embryos have been examined for the occurrence of chromosomal abnormalities. Eggs were incubated for only 16 to 18 hours before the embryos, in the primitive streak stage, were removed. Preparations for karyological examination were made from cell suspensions of each embryo. The overall incidence of embryos with aberrations was 49 p. 1,000 but there were large and significant differences between stocks of broiler-type (BR) and Leghorn-type (LG). BR contained 102 p. 1 000, LG contained 14.1 p. 1000 and embryos from crosses between the two contained 46 p. 1000. The most frequently occurring types of abnormalities were haploidy (including haploid-diploid chimerics), polyploidy, diploid-tetraploid mosaics and pure aneuploidy. Their incidences per 1,000 in BL, LG and crosses respectively were 54, 3, 19 for haploidy; 21, 6, 9 for polyploidy; 16, 1, 5 for diploid-tetraploid mosaics; 6, 3, and 9 for aneuploidy. The parental source of each of the primary types of abnormalities has been determined and the place in the reproductive cycle where errors occur giving rise to each has been established.