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## Frequencies of some B blood group alleles in laying hens from a selection and crossbreeding experiment

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## SESSION IV

## COMMUNICATIONS LIBRES ET RAPPORT DES GROUPES DE TRAVAIL

**Proteins of the milk and genetic variants in certain sheep populations of Sicily (*Barbaresca-Siciliana*)**

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After giving information on the origins and the breeding of the *Barbaresca-Sicilian* sheep, the authors refer the results of an electrophoretic assay (pH 8.6 starch gel) on the individual milk of 200 subjects chosen by chance in diverse districts of Sicily.

Proteins of the whey : the pathways present one single constant band of  $\beta$ -lactoglobulin, whereas for the  $\alpha$ -lactoalbumin there were band A and the variant with a genic frequency of 0.5 p. 100 of the B allele. Caseins : the most common result is 3 bands in the  $\alpha_3$ -Cn zone and 2 bands in the  $\beta$ -Cn zone. It is also possible to observe 2 (20 subjects) and 4 (2 subjects) bands in the  $\alpha_3$  zone and 3 bands (22 subjects) in the  $\beta$ -Cn zone.

In the conclusions the authors underline the possibility of utilizing the obtained data in the selection of the considered race-population which, as is well-known, is bred for the production of milk and meat.

**Frequencies of some B blood group alleles in laying hens from a selection and crossbreeding experiment**I. EDFORS-LILJA \*, C. WEYDE \*, B. GAHNE \*, L.E. LILJEDAHL \*  
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The frequencies of four B blood group alleles ( $B^{15}$ ,  $B^{16}$ ,  $B^{19}$  and  $B^{21}$ ) were studied in a 647 hens and 214 cocks obtained from a Scandinavian selection and crossbreeding experiment. The lines were selected for number of eggs, egg weight and for egg weight and egg number combined into a selection index, respectively. The selection lines differed from the control line with regard to B allele frequencies. Some associations were found between the different B alleles and production traits such as age at first egg, number of eggs, egg mass and rate of lay.