

#### IV. — Enseignement de l'élevage des animaux et de la génétique animale

##### TEACHING OF ANIMAL BREEDING AND GENETICS AT UNIVERSITY-LEVEL SCHOOLS IN SOME SOCIALIST COUNTRIES

Z. STALINSKI. — *Department of Genetics and Animal Breeding Academy of Agriculture Kraków, Poland.*

The paper deals with the system of teaching animal breeding at Zootechnical Faculties or zootechnical specialization at University-level Schools in the following countries: Poland, Czechoslovakia, GDR, Yugoslavia and the S.U.

Duration of studies is 4-5 years. The program of studies provides from 3 174 to 5 300 h of obligatory subjects. Number of optional subjects is small. Following subjects were given more detailed treatment: genetics and methods of animal breeding, feeding, feed-science and animal husbandry. A total of 863 h (Hungary) to 2 040 h (Czechoslovakia) is planned.

Genetics and methods of breeding are lectured at different years in various countries and number of hours designed for this purpose differs too. In Poland these two subjects are lectured at I and II years of studies during 176 hours.

The topics are mainly: general genetics, population genetic and improvement of breeding methods.

Some traditional aspects concerning general animal breeding are excluded e.g.: animal origin, domestication, purpose of breeding, growth development, reproduction. These aspects are to-day included into the problems of animal husbandry, animal physiology and veterinary science.

##### TEACHING ANIMAL BREEDING IN THE UNITED STATES

A. E. FREEMAN. — *Department of Animal Science, Iowa State University Ames, Iowa 50011 U.S.A.*

Animal breeding is taught in Land Grant Universities primarily according to principles organized by J. L. Lush. Undergraduate students average about 6.0 semester hours in animal breeding (one to three courses), 3.0 hours of genetics, 3.7 hours of mathematics, and 1.2 hours of statistics. Graduate teaching is highly specialized in organized course sequences. About two years is required to earn an M. S. degree and 4.2 years for a Ph. D. The average semester hours of credit taken for the M. S. and Ph. D. degrees, respectively, are: animal breeding 5.2 and 8.2, statistics 7.8 and 16.1, mathematics 3.4 and 7.8, and genetics 4.0 and 8.9. Students supplement training in these areas with courses from many other disciplines. Research is an integral and important part of graduate training, generally with substantial guidance from the major professor at the M. S. level and largely independent at the Ph. D. level. Ability to use computers is essential. Students completing Ph. D. degrees have a broad training in animal breeding and have been successful in academic work and in the industry.

##### TEACHING ANIMAL GENETICS IN BLOCKED COURSES

D. FEWSON, K. RIEMENSCHNEIDER. — *Institute of Animal Husbandry and Breeding and Unit for Educational Research and Development University of Hohenheim, Deutschland.*

The position of the subject of animal genetics is demonstrated for the study program of students of general agriculture at *Hohenheim University*. The contents are described of the courses for the different degrees of specialization.

The temporal blocking of the courses has a favourable effect on the teaching of theories and methods since the students deal through several weeks with the same logical context. The interesting difference of individual work and group sessions has proved to stimulate the students. The students prepare the topics in individual work. In the following group session the topics are repeated and discussed with respect to more details and to fields of application. For the individual work written materials containing exercises and problems for self control of the learning process must be available. A maximum of 10 students is the limit for efficient group sessions in order to have all students contribute to the discussions.