

## VERGLEICH VON PARAMETERN ZUR BEURTEILUNG DES BESAMUNGSERFOLGES

B. DREES, J. CLAUS, H. BERGMANN, N. MACKLE und E. KALM

*Institut für Tierzucht und Tierhaltung der Christian-Albrechts-Universität Kiel, 2300 Kiel/BRD*

In der Arbeit werden Parameter des Besamungserfolges hinsichtlich Kennzeichnung des Fruchtbarkeitsniveaus von Herden untersucht.

Im Vergleich zum Erstbesamungsergebnis behalten Non-Return-Angaben 30/60 Tage nach Erstbesamung (EB) eine Fehlerquote von + 9.6 % Punkten. Für elektronische Datenverarbeitung wird die Berechnung des Besamungserfolges 90 Tage nach EB befürwortet.

Herderleistungsangaben weisen praktisch keine Beziehung zum Besamungsergebnis der Einzeltiere auf. Zur Kennzeichnung der Herdenfruchtbarkeit ergaben Berechnungen zur Wiederholbarkeit von Betriebsergebnissen auf gleitender 2-Jahresbasis bei den Merkmalen Günstzeit, Besamungsintervall und Erstbesamungserfolg Werte um  $r_{IKK}=4$ .

POPULATION PARAMETERS FOR SEMEN CHARACTERISTICS  
AND NON-RETURN-RATE OF TEST BULLS

W. SCHLOTE and J. MINKS (\*)

*Institute of Animal Production, Technical University Berlin, D-1000 Berlin*(\*) *Institute of Animal Husbandry and Breeding, Hohenheim University Stuttgart, D-7000 Stuttgart*

The data of 280 testing bulls of the *German Simmental* breed at one A. I.-station were used in a preliminary analysis to estimate population parameters for semen characteristics and non-return-rate. All traits showed significant differences between years, motility and rejection rate also between months and non-return-rate between seasons. The significant difference between bulls tested on station and on farm with respect to the rejection rate was due to the result of one year, in which only 3 bulls had been tested on station. In general, there was a tendency for a smaller rejection rate for station tested bulls. The estimate for the heritability of rejection rate was almost zero, for the other traits, however, medium values were obtained, the standard errors being quite high, though. Phenotypic and genetic correlations of non-return-rate to volume and density were close to zero, for motility and rejection rate values of the order of .20 resulted. The phenotypic and genetic correlations of daily gains to all traits were also low, for motility and non-return-rate they were about .10 and were positive for breeding purposes.

## ANALYSIS OF FERTILITY DATA IN A.I. POPULATIONS

F. GASTEIGER and C. SPECKER

*Institut f. Tierzucht und Tierhygiene,  
Lehrstuhl für Tierzucht der Universität München, D-8000 München*

The results of the investigation of the data of the "Besamungstation Meggle" and of a sample of 1,535 first calving cows with progesterone tests are presented. The fertility parameters are influenced by year of insemination, age of the cow, inseminator/region, month of insemination and interval calving to first insemination. The estimations of heritability for F to L, NR 60 and I/S amount to  $h^2 = 1$  p. 100. By confirming oestrus or non-return rate by progesterone tests,  $h^2 = 3$  p. 100 can be reached. Further the possibilities of some progesterone test combinations in an A.I. programme are discussed.