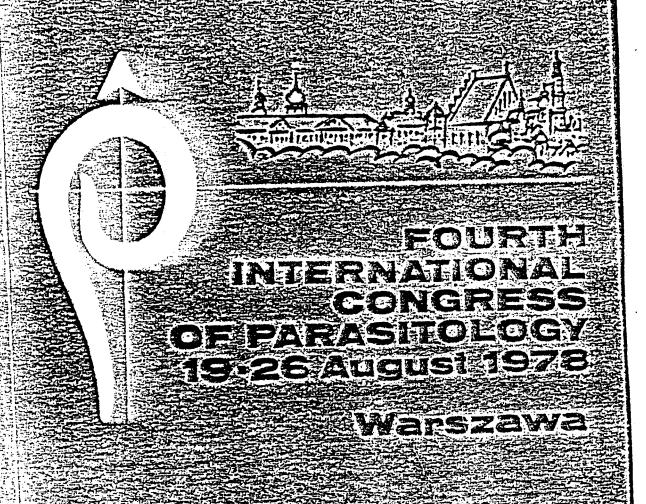
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CHIPTE COMMUNICATIONS

PARASITIC INFECTIONS OF ECONOMIC AND SOCIAL IMPORTANCE



RESEARCH ON THE EPIDEMIOLOGY OF DOURINE IN ITALY

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An epidemiological survey for Dourine was carried out in a zone of about 1000 sq. miles in the Abruzzi region. The area total equine population, on the gasis of official census data, was estimated to be about 3000 heads. 3 blood samples were collected from each of 2856 horses and 1958 donkeys, for a total of about 14,000 samples which were examined for *Trypanosoma* equiperdum antibody by complement fixation.

The average prevalence rate in the entire population was 6.4%. Compared to the population average rate, a statistically higher rate (average 26.0%) was found in 6 Comuni (Borroughs) High prevalence Comuni), a lower rate (2.0%) in one Comune (Low prevalence Comune) and an average rate (4.6%) in 7 Comuni (Average prevalence Comuni); 6 Comuni were found to be free of infection.

Trypanosoma equiperdum antibody was found in 18.0% of the stallions, 5.7% of the horses mares, 5.5% of the castrated and immature horses, and 1.4% of the donkeys mares. The average infection rate of stallions in High pre-

22

valence Comuni was 47.9% in the Average prevalence ones 17.5%, in the Low prevalence one 4.8%, while in the horse mares was 27.0%, 3.6% and 0.9% respectively.

The positivity rate in horse mares, submitted to controlled stud stations (29.1%) of the total) was 9.1%, while in horse mares, submitted to uncontrolled stud (70.9%) of the total) was 4.4%. In the stallions belonging to authorized stud stations (20.6%) of the total) the positivity rate was 21.9%, in those used for unauthorized studs (79.4%) of the total) 19.6%.

The prevalence rate was directly proportional to the population density of each of the 3 sub-zones in which the entire territory was divided for geographic reasons.

On the basis of the statistical analysis of the results, hypothesis are formulated on the mode of spread of the disease in the population.