

TRANSLATION 810 (T810)
MEDICAL ZOOLOGY DEPARTMENT
UNITED STATES NAVAL MEDICAL RESEARCH UNIT No. 3
CAIRO, EGYPT

TRANSLATION FROM RUSSIAN. CHUNKHIN, S. P., CHUMAKOV, M. P.,
BUTENKO, A. M., SMIRNOVA, S. E., TAUFFLIEB, R., CAMICAS, J. L.,
ROBIN, Y., CORNET, M., & SHABON, Zh. (1969)*. Results from investi-
gating human and domestic and wild animal blood groups in the Sinai Peninsula

intensely developed cattle breeding and the highest cattle and tick concentrations (chiefly Hyalomma). Hyalomma impeltatum prevails among ixodid ticks. Annual precipitation 300-500 mm.

A total of 747 sheep and cattle sera was investigated in this region. The immune stratum among sheep was 5.8% (30 immune of 512 investigated) by the DPRA and among cattle 11.5% (27 of 235 investigated). The difference in immune stratum level between sheep and cattle is explained by the fact that the average age of a sheep is half that of cattle. Association between the immune stratum level and the age of cattle is very distinctly observed in this region. Thus, the immune stratum level was 4.3% (2 of 46) in 1-3 years old, 13.0% (3 of 23) in 4-6 years old, and 24.1% (7 of 29) in 7-9 years old animals. Forty-one DPRA positive sera were examined by the CF test; positive responses were obtained in 24 (more than 50%) cases. Sera with anticomplement activity were treated in kaolin, which decreased the titer of antibodies. Responses were considered positive in a beginning dilution of 1:8.

2) Northern Sudan savanna occupies the central portion of Senegal. Annual precipitation 750-1,000 mm, grass cover is richer than in the semi-desert, nomadic cattle have local character. Hyalomma truncatum prevails among ixodid ticks; Amblyomma variegatum is next in frequency. A total of 263 domestic animal blood sera was examined: 80 goats, 70 sheep, and 113 (heads) cattle. Antibodies were absent in goats; immune stratum was 1.4% among sheep and 6.2% among cattle.

3) Southern Sudan savanna occupies the southeastern portion of Senegal. Annual precipitation 1,200 mm. We examined 26 cattle blood sera and 4 (15.4%) of them proved to be immune.

4) Casamance region occupies the southwestern portion of Senegal, Annual precipitation 1,500 mm. This region is chiefly characterized by dry deciduous forests. Cattle are provided with fodder which excludes

Wild birds. A total of 43 wild bird blood sera was examined; no immune birds were recorded.

Humans. Sera from 159 febrile patients were examined. Blood

Thus, these serological data show a quite wide distribution in