

Summary of Master Thesis (1984)

Address: (studies on bovine leukemia and other lymphogenic viruses of cattle and buffaloes in Egypt)

In the first part of the study, a total of 1640 serum samples were collected from cattle (1129), buffalo (266) , and sheep (245) in private and governmental farms in 8 Egyptian provinces. All samples were screened by AGPT for BLV antibodies using gp-69 antigen.

All sheep and buffalo sera were negative. Cattle sera were collected from two breeds Frisian (1012) and native (117). All tested sera from native breed were negative. Only 5 sera from Frisian dairy cattle collected from the Karada Frisian breeding station were positive in the AGPT out of (310) serum samples tested (1.6%). The 5 sera showed a clear precipitation band. This is the first record for bovine leucosis in Egypt.

Twenty one animals representing three generation nearest to the positive samples were tested hematological for their total and differential leucocytes count.

Comparing the results of AGPT and hematological test as judged by Bendixen and Simplified European keys, it was found that: 12 animals were found negative in both serological and hematological tests, 3 positive in AGPT and leukemic to both used keys , 2 positive in AGPT and hematological suspicious according to Bendixen key and hematological negative according to simplified European key, 3 negative in AGPT and hematological suspicious according to both keys, 1 negative in AGPT and leukemic according to both keys .

The same 21 were analyzes for their serum lysozyme content, no correlation could be detected between serum lysozyme content and leukemic status of the animal.

The same 21 were analyzes electrophoretically, no correlation between the electrophoretic pattern and leukemic status of the animal was detected.

In the second part of the study, bronchial, mesenteric, and prescapular lymph nodes collected from 44 apparently healthy cattle of the native breed slaughtered at El-Qanater El-Khiria abattoir were collected and screened for precipitating antigen of BLV, BVD, IBR and RP.

None of the tested lymph nodes showed a positive a positive reaction in AGPT for BLV.

For BVD a clear precipitation lines were found in 37.8% of bronchial, 75% of mesenteric and 80.5% for prescapular lymph nodes.

IBR precipitating antigen was found in 43.2% of bronchial and 68.3% of prescapular lymph nodes. These results pointed clearly to the diagnostic importance of prescapular lymph nodes.

No clear AGPT reaction was obtained in case of RP to lack of a suitable positive precipitating antigen.

