

Advis 87

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"MECHANICAL" TRANSMISSION AND TEST HERDS.

If I am right in my supposition that mechanical transmission becomes relatively more important as one gets further from the tsetse belt, then the present system of operating test herds must be misleading. I am emboldened about this by a statement by Mr. G.D. Shaw, Chief Veterinary Research Officer, Northern Rhodesia, who states (1958) that "In 1955 it was estimated that 60% of the animal trypanosomiasis in Northern Rhodesia was transmitted by this means."

- (a) If "mechanical" transmission is important, then test herds used to indicate presence of Glossina should be block inoculated with berenil at every appearance of infection. The berenil index should be the interval between blocks, not the mean interval based on single treatments of positives.
- (b) If "mechanical" transmission is caused by haematophagous Diptera associated with domestic animals (e.g. Stomoxys) we should find that it is more frequent in areas with a dense cattle population than in those with a less dense, challenge in respect of Glossina being the same. I think evidence from our Sanyati test herds supports this.
- (c) If "mechanical" transmission is of importance, then variations in biting fly density could account for hitherto unexplained differences in challenge.

References.

Shaw, G.D. (1960) Animal trypanosomiasis in Northern Rhodesia. (A detailed survey of the problem). Symposium on Animal Trypanosomiasis. I.A.C.E.D., Luanda, 1958. C.C.T.A. Publication No. 45, 124 - 37.



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