

# Epidemiology and pathology of bovine schistosomiasis in Mozambique

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## AIM

To study the epidemiology and pathology of bovine schistosomiasis in Mozambique.

## BACKGROUND

- Bovine schistosomiasis is of great importance in Africa. It is caused by *Schistosoma bovis*.
- In bovines the symptoms are similar to humans, mainly intestinal, hepato-splenic, vesical and genital.
- It has been shown to be endemic through all Africa and in some Mediterranean countries (Portugal, Spain, Italy, Iraque and Israel).
- Hybrids of *S. haematobium* and *S. bovis* are known to infect humans (Moné et al, Parasitol Res, 2015).

## METHODOLOGICAL STRATEGY

1. This study was done at the Laboratory of Parasitology of the National Institute of Veterinary (Maputo, Mozambique) during one year.
2. Bovine samples were collected monthly from the provinces Maputo, Gaza, Inhambane, Zambézia, Tete, Sofala, Manica, Nampula, Niassa and Cabo Delgado Mozambique for the search of schistosoma eggs.

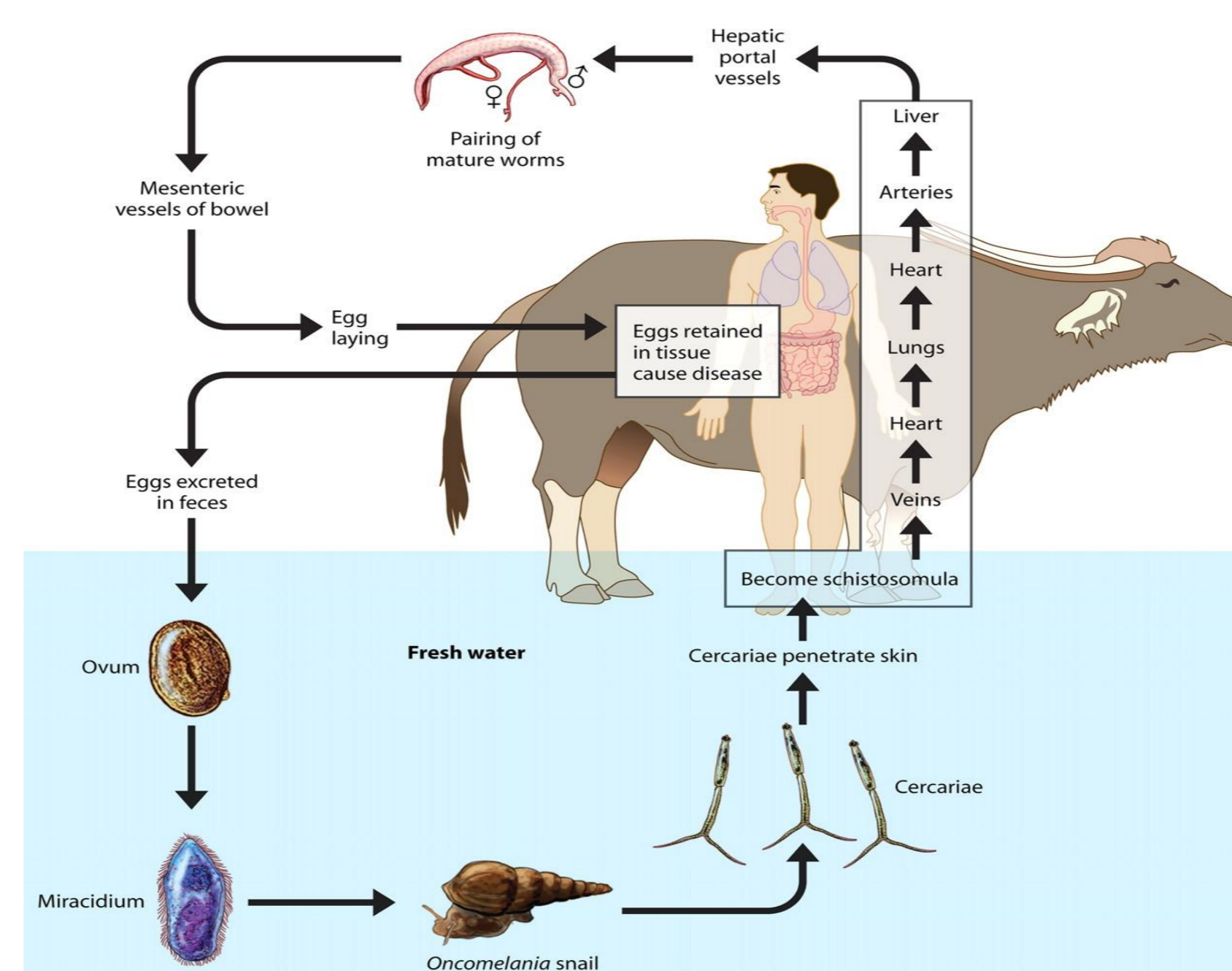


Fig. 1: *Schistosoma* spp. life cycle.

MAPA 1  
DISTRIBUIÇÃO DO EFECTIVO PECUARIO BOVINO  
EM MOÇAMBIQUE

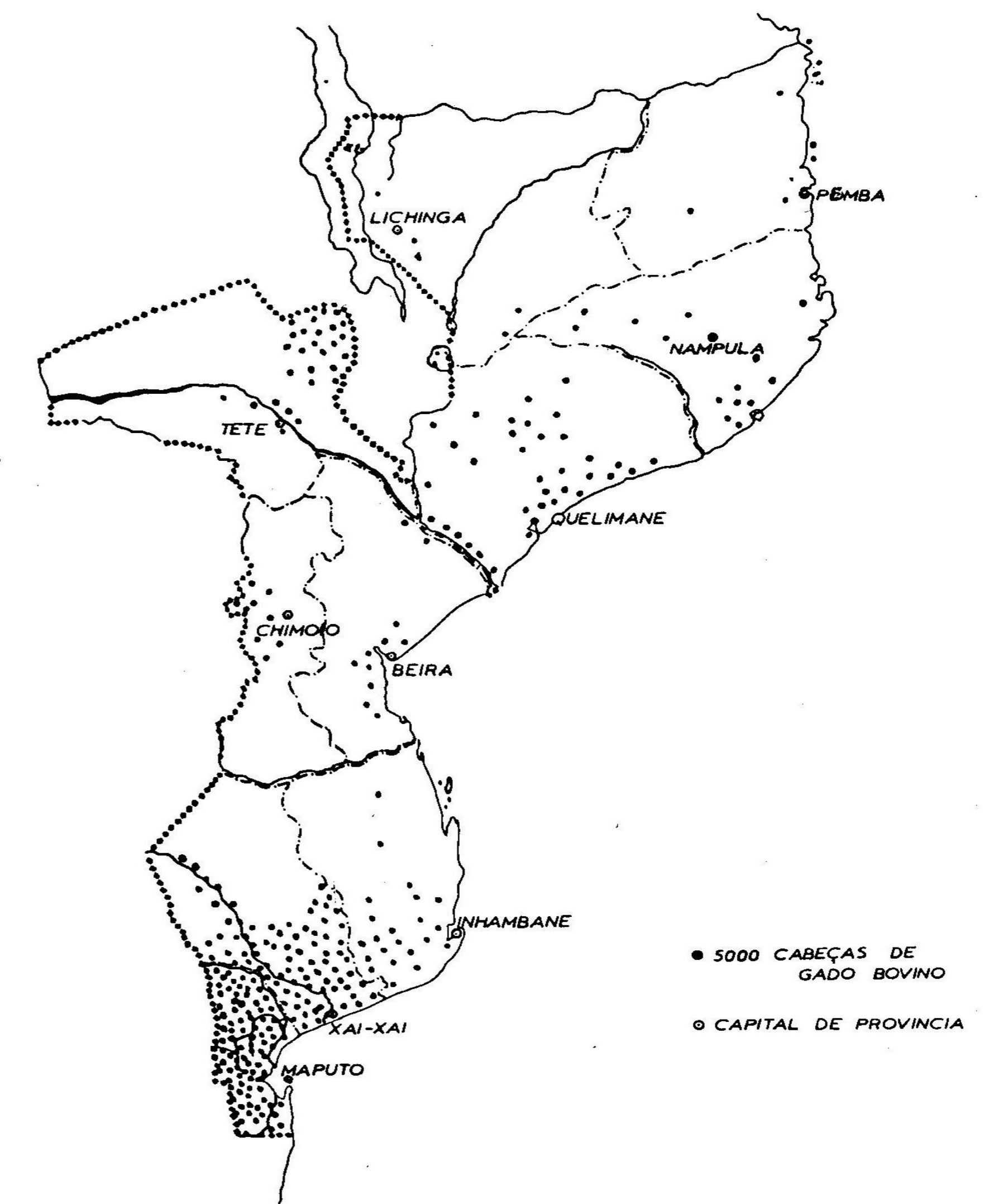


Fig. 2: Bovines in Mozambique.

## RESULTS

1. We analyzed 3361 samples; 63.8% of the studied bovines were infected by schistosomes in mesenterium; 59 (56.7%) males and 45 (43.3%) females.



Fig. 3: Schistosomes in mesenteric blood vessels.



Fig. 4: Schistosomes in portal blood vessels.



Fig. 5: Inflammation and hemorrhage in intestinal segments.



Fig. 6: Bladders with ureteral edema and hypertrophy.



Fig. 7: Hemorrhage in uterus.

## CONCLUSIONS

1. The results obtained with the present study should be relevant to the fact that hybridization between *S. haematobium* and *S. bovis* has an epidemiologically importance.
2. To our knowledge this is the first study evaluating epidemiology and pathology of Bovine schistosomiasis in Mozambique.