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## Molecular characterization of trypanosomes isolated from naturally infected cattle in the "Pays Lobi" of Côte d'ivoire

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## **ABSTRACT**

*Objectives:* this study aimed to investigate the prevalence of bovine trypanosomosis in the "Pays Lobi" of Côte d'Ivoire where a lot trypanosusceptible zebu cattle are now found.

Methodology and Results: Blood samples were collected from 200 male and female cattle sampled in five villages from the department of Bouna. PCR technique was used for the diagnosis of trypanosomes. Out of the 200 animals examined, 41 were infected with trypanosomes, representing an infection prevalence of 20.5 %. The specific diagnosis revealed prevalence rates of 2.5 %, 3 %, 5 %, 10 % for *T. congolense* "Savannah", *T. congolense* "Forest", *T. vivax* and *T. brucei*, respectively. Three mixed infections were found involving *T congolense* "Savannah" and *T. brucei*, *T. congolense* "Forest" and *T. vivax*, *T. vivax* and *T. brucei*.

Conclusions and applications of findings: The outcome of this study has shown that more attention is needed in controlling trypanosome infection in the "Pays Lobi". Indeed, better understanding of prevalence of sub- clinical infection could help with efforts to control the disease and population-based screening of both animal and insect vectors.

**Key words**: Prevalence, Trypanosomes, trypanosusceptible, zebu; "Pays Lobi"