CONCLUSIONS
CONCLUSIONS

The study was conducted in rural areas of Jhansi (hyper-endemic for malaria). One thousand five hundred twenty samples were collected during transmission period (September - October 1987). Samples were examined for slide as well as sero-positivity. Also 722 ELISA positive samples were further analysed for sero-positivity using IIF technique. The observations of the study have led to following conclusions:

1. There was no significant \( P \leq 0.25 \) difference in slide positivity rate (SPR) among different age groups but sero-positivity rate was significantly low \( (P \leq 0.001) \) in those aged \( \leq 14 \) years in comparison to over 15 years age group.

2. No significant \( P \geq 0.10, P \geq 0.25 \) difference was observed in SPR and sero-positivity rate in relation to religion and caste.

3. Significant \( P \leq 0.01, P \leq 0.001 \) difference was observed in both the rates between unmarried individuals and married individuals.

4. Significant \( P \geq 0.025, P \leq 0.001 \) difference was observed in SPR and sero-positivity rate between
illiterates and literates as SPR declined with improvement in literacy status.

5. No significant difference ($P \leq 0.05$) was observed in SPR for various occupations except individuals classified as other groups. While comparing adults and children, there was significant difference ($P \leq 0.001$) observed in sero-positivity rate.

6. There was no significant difference ($P > 0.05$) observed in SPR in relation to various social class but significant difference ($P > 0.01$) observed in sero-positivity rate between Social Class II & V.

7. SPR was not significant ($P \leq 0.25$) in relation with over-crowding but sero-positivity rate was significantly higher ($P \leq 0.01$) in individuals residing in over-crowded dwellings and keeping cattle within dwellings.

8. Significant difference ($P \leq 0.001$, $P \leq 0.001$) was observed in SPR and sero-positivity rate between individuals with hepatomegaly and without hepatomegaly.

9. Significant difference ($P \leq 0.001$, $P \leq 0.001$) was observed in SPR and sero-positivity between individuals with splenomegaly and without splenomegaly.

10. SPR and sero-positivity rates were significantly different ($P \leq 0.10$, $P \leq 0.001$) between individuals with history of fever and without history of fever.
11. No significant difference ($p \geq 0.75$) was observed in SFR between individuals with past history of treatment and without past history of treatment but there was significant difference ($p \leq 0.001$) in sero-positivity rates.

12. Significant difference ($p \leq 0.001$) was observed in SFR between individuals with high temperature and without temperature.

13. The difference in sero-positivity rates was insignificant among males and females.

14. The sero-positivity rate correlated positively with slide positivity rate.

15. The ELISA values were markedly lower in age groups 1 - 6 to 5 - 14 years, but there was less difference in older age groups. The ELISA values increased with age and reached a plateau by age of 54 years, in protected population.

16. ELISA was found to be highly sensitive (100.00%) and moderately specific (53.92%) test.

17. IIF was found to be sensitive (90.00%) and moderately specific (40.96%) test.
10. Multiple serological tests should be performed for diagnosis of malaria. Rising antibody titre (ELISA) and raised IIF antibody levels along with any other positive test, give very strong evidence of malaria, but this needs further evaluation in an area with high incidence of malaria.