EFFECT OF PYRIMETHAMINE / PYRIMETHAMINE RESISTANCE ON FERTILITY OF *PLASMODIUM YOELII* TO *ANOPHELES STEPHENSI*

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In the light of global warming and the predicted enlargment of chloroquine-resistant malaria -endemic areas, it has to be seen whether other alternate antimalarial drugs have effects similar to those of chloroquine in increase transmission. Compared to studies on antimalarial drugs and ability of the drug resistance on the asexual stages of malaria parasites the impact of alternate antimalarial drugs and ability of the drug resistant parasites on mosquito infection have remained neglected. Degree of infection to mosquito to can be measured by counting oocysts and sporozoites. Fancidar, a combination of pyrimethimine and sulfadoxine, is one of the such alternate drugs being increasingly used in area of chloroquine resistance for treatment of *P. falciparum* infections in man. We have prepared (selected) progressively pyrimethimine- resistant lines of rodent malaria, *P. yoelii*, by subjecting the sensitive line to several rounds of incremental drug pressure in vivo. The selected resistant lines were studied with regard to their ability to produce gametocytes (the sexual stages infective to mosquito) and infectivity to *Anopheles stephensi*. Studies on these aspects will be reported.

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