Aims and Objectives
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A detailed study was planned on *Piper longum* along the following lines.

ISOLATION AND CHARACTERISATION OF COMPOUNDS

(1) The first aim was to isolate compounds from fruits of *Piper longum* by preparing aqueous, acetone extracts and structurally analyze them using methods like IR and NMR spectroscopy.

IN VITRO STUDIES

(2) (A) To test the isolated compounds for their antibacterial and antimycobacterial activity.

(B) To evaluate the role of aqueous extract of fruits of *Piper longum* as a bioenhancer with anti TB drugs *in vitro*.

STUDIES WITH EXPERIMENTAL ANIMALS

(3) To compare the hepatoprotective effect of aqueous extract of fruits of *Piper longum* and piperine when administered alone and with anti-TB drugs in uninfected experimental animals.

(4) To assess the hepatoprotective effect of aqueous extract of fruits of *Piper longum* in infected experimental animals when administered with anti TB drugs.
STUDIES WITH HEALTHY HUMAN VOLUNTEERS

(5) To evaluate the role of fruits of *Piper longum* as a bioavailability enhancer when administered along with anti tuberculosis drugs in healthy human volunteers.

(6) To evaluate the various hematological and biochemical parameters when fruits of *Piper longum* was administered for a period of 40 days in healthy human volunteers.