CONCLUSION

Isoniazid (INH) and Rifampicin (RIF) are first-line drugs for anti-TB therapy, but the hepatotoxicity that results from use of these drugs remains a significant problem for clinical treatment.

In the acute study, *A.pavonina* and *E.indica* showed neither mortality nor changes in behavior in mice at maximum dose of 2gm.

The efficacy *A.pavonina* and *E.indica* in experimental liver toxicity described in the present investigation suggest the potential for reaching on understanding of hepatoprotective potency. The administrations of *A.pavonina* and *E.indica* and extracts show potential of extracts in respect with hepatoprotective potency in comparison to standard drug Silymarin. These findings support that the oral *A.pavonina* and *E.indica* possesses hepatoprotective activity as evidenced by significant dose dependent restoring the activities of liver marker enzymes by produces decreasement in lipid peroxidation (MDA) and increase in the levels of antioxidant enzymes (GSH, CAT and SOD) through scavenging of radicals or by enhancing the activity of antioxidant. These factors protect cells from reacting oxygen species (ROS) damage caused by isoniazid (INH) and rifampicin (RIF) induced hepatotoxicity. Histopathological observations of liver tissue also correlate with biochemical results. Finding results suggested that 200 mg dose of both drugs showed better protection to restoring the liver markers parameter and antioxidant markers towards normal than 100 mg dose. *A. pavonina* is more effective than *E.indica* in preventing isoniazid (INH) and rifampicin (RIF) induced hepatotoxicity. *In vitro* antioxidants study of *A.pavonina* and *E.indica* shows freer radicals scavenging activity which are also responsible for the hepatoprotective claims.