Conclusion
Under the light of this study it is concluded that the chlorpyrifos is responsible for irreversible damage to male reproductive organs as well as decreased in body weight, sperm morphology, sperm count, sperm motility, sperm density, alkaline phosphates activity (ALP), acid phosphates activity (ACP), and testosterone level, simultaneously significantly increase in abnormal sperm morphology, protein concentration, uric acid level, metal deposition and sperm DNA brakeage. These changes are potentially harmful and lead to reproductive infertility in rats. Our results reveal that chlorpyrifos induced oxidative stress diminishes the male fertility, thus being harmful to any animal, especially mammals like the human being. Histological, biochemical and hormonal estimations of various parameters indicated that the Emblica can revitalized those abnormalities and mitigates the toxic substance which is induced by chlorpyrifos

Based on the results obtained it can be concluded that aqueous extract of Emblica officinalis formulation, an herbal preparation ameliorate male reproductive tissue damages. Aqueous extract of Emblica officinalis contains antioxidants, several flavonoids and steroids, these reduces the oxidative stress and recover the testicular tissue injury. Emblica officinalis fruit juice neutralizes the oxidizing potentials of reactive oxygen species induced by chlorpyrifos; through, these activities they maintain cell membrane integrity and viability. The present study mainly indicates that Emblica officinalis play an interior role to reduce the chlorpyrifos toxicity in male reproductive aspect. Most of the parameters studied emphasizing the fact that the fruits of Emblica officinalis can be effectively utilized to combat chlorpyrifos induced male reproductive toxicity as well as the clues from traditional use of plant materials can be employed to find remedies for a wide array of pesticides related problems.

It can be hypothesized that antioxidant activity ameliorates reproductive toxicity in mammalian system.