Abstract

Present study was undertaken to assess the contraceptive efficacy of 90% ethanol extract of *Cyamopsis psoralioides* pod on male Swiss albino mice. The animals were grouped into 20 days and 40 days treatment. Here each animal received 200mg/Kg body weight and 400mg/Kg body weight of the ethanolic crude extract of *Cyamopsis psoralioides* was orally administered to 12-14 weeks old male Swiss albino mice. The animals of control group received double distilled water. At the end of experimental period, fertility test was done. Animals were sacrificed and reproductive organ weight, sperm abnormality, sperm count was done. Biochemical changes in reproductive tissue. The testosterone level was determined by RIA method, histology and histometry study was assessed. Recovery study was also carried out. The *Cyamopsis psoralioides* crude extract did not affect the body weight throughout the experiment, this shows the absence of side effect of the treatment. Significant reduction in the weights of reproductive organs were observed in dose-dependent manner. The sperm concentration was significantly reduced. The abnormality of spermatozoa increased. The diameter of the seminiferous tubule, leydig cell and the serum testosterone concentration were significantly reduced after the treatment. Biochemical analysis revealed the decreased levels of protein, glycogen, cholesterol and ascorbic acid in the reproductive organs. Histological study revealed the changes in the structure of testis and epididymis. The extract fed animals show reduced fertility in a dose dependent manner. In reversibility experiment all the treated groups regained their fertility after the withdrawal period of 30 days. From the above results we can conclude that the ethanolic extract of *Cyamopsis psoralioides* pod in higher dose with the longer duration of treatment could act as a potential contraceptive agent in males.