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Development of a male contraceptive from traditionally used Indian medicinal plants

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Objective: Although contraceptives have been used by millions of couples to control birth, however, 70 million unwanted pregnancies occur worldwide. Therefore, there is an urgent need to take a fresh look of an effective measure to check human fertility at present time. Many plants such as Azardirachta, Crotalania, Tryptigium, Gossipium Hibiscus, Mikania, Quassia, Striga or their compounds have been screened in India, China and other parts of the world to find safe and reversible contraceptive agents. In the present study 50 percent ethanolic extracts of the Citrullus, Martynia and Maytenus were prepared and administered orally at different doses in fertile, healthy adult male rats for 60 days at the aiming to search a new safe, cheap, orally effective, reversible male contraceptive from traditional medicinal plants. Materials and

Methods: Body and organs weights; and the weight of testis and other accessory reproductive organs were recorded. Motility and density of Sperm were measured. The blood was analyzed for hematology. The protein, fructose, ascorbic acid, glycogen and sialic acid contents were determined in testis and accessory reproductive organs. To observe effects on testes and accessory reproductive organs sectioned were stained and examined under light microscope. CPCSEA and guidelines of ethical committee of the Department of Zoology, University of Rajasthan, and Jaipur were followed to maintain the animals. The data were analyzed for statistically by using student's "t" test.

Results: The weight of testes and accessory reproductive organs were significantly reduced in all extracts treated groups. The sialic acid, protein, ascorbic acid, and fructose contents were significantly declined. The histological observations exhibit degenerative changes in the germinal epithelium, spermatocytes and spermatozoa number highly reduced.

Conclusion: It can be concluded that androgenic deprivation effects of the treatment reduced sperm number and motility with the treatment, resulted significantly declined the fertility of the extracts treated rats. Acknowledgements: Author thankful to the Head and Coordinator CAS, Department of Zoology, University of Rajasthan, Jaipur for providing facilities and UGC, New Delhi for financial support.

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