Hindawi Publishing Corporation BioMed Research International Volume 2015, Article ID 175726, 6 pages http://dx.doi.org/10.1155/2015/175726



## **Research Article**

## **Evaluation of Aqueous Leaf Extract of** *Cardiospermum halicacabum* (L.) **on Fertility of Male Rats**

## L. Dinithi. C. Peiris,<sup>1</sup> M. A. T. Dhanushka,<sup>2</sup> and T. A. H. D. G. Jayathilake<sup>1</sup>

<sup>1</sup>Department of Zoology, University of Sri Jayewardenepura, 10250 Nugegoda, Sri Lanka
<sup>2</sup>Environemtnal Management Division, Abans Environmental Pvt. Ltd., Colombo 5, Sri Lanka

Correspondence should be addressed to L. Dinithi. C. Peiris; dinithipeiris@gmail.com

Received 9 March 2015; Accepted 18 April 2015

Academic Editor: Swaran J. S. Flora

Copyright © 2015 L. Dinithi. C. Peiris et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Treatment with 100 mg/kg and 200 mg/kg body weight of aqueous leaf extract (ALE) of *Cardiospermum halicacabum* for 30 days produced a significant dose dependent increase in the sperm counts and sperm motility in both caput and cauda regions. Further, significant increase in serum testosterone level was evident at all applied doses. However, no significant changes in the weight of sex organs were observed. Aqueous leaf extract also increased the number of females impregnated, number of implantations, and number of viable fetuses while decreasing the total number of resorption sites in the pregnant females. However, the total cholesterol level in the serum remained unchanged and there were no records on renotoxicity; nevertheless ALE exhibited a hepatoprotective effect. It was concluded that aqueous leaf extract of *Cardiospermum halicacabum* enhanced sperm concentration, motility, and testosterone, leading to positive results in fertility.