International Journal of ChemTech Research
CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
Vol.10 No.13, pp 145-152, 2017

Evaluation of *In Vivo* Antioxidant and Lipid Peroxidation Activities of Different Extracts of Aerial Parts of *Pavetta indica* (Linn)

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Abstract : The present investigation was to evaluate the *in vivo* antioxidant and lipid peroxidation effect of different extracts of aerial parts of *Pavetta indica* (Linn). High fat diet rats showed significantly (P<0.001) reduction the levels of tissues enzymatic antioxidant and non enzymatic antioxidant and incresed the level of Thiobarbuuric acid reactive substance. The level of thiobarbuuric acid reactive substance are elevated in HFD rats (group II) when compared with control group. Treatment of methanol extract of *Pavetta indica* in high fat diet rats were showed significantly (p<0.001) increment the levels of Superoxide dismutase (SOD), Catalase (CAT), Glutathione peroxidase (GPx), Glutathione reductase (GR),Glutathione S transferees (GST) and non enzymatic antioxidant Glutathione (GSH) when compared with HFD rats (Group II). The methanolic extract of *P. indica* in high fat diet rats were found lowered the concentration of TBARS when compared with HFD rats (Group II). In comparison of all the three extract treated group with standard group, the methanol extract of *Pavetta indica was* showed significant result than that of other extracts treated groups. The methanol extract of *Pavetta indica* is a significant source of natural antioxidant, which might be useful in preventing the progress of different oxidative stresses.
Key words : *Pavetta indica* , High fat diet, Lipid peroxidation, Antioxidant.

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