



# INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

## IN-VITRO ANTIOXIDANT AND ANTI-INFLAMMATORY ACTIVITY OF *ERAGROSTIS PILOSA*

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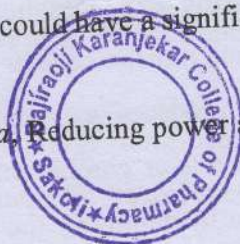
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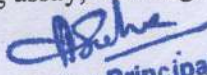
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### ABSTRACT

In this study, the antioxidant anti-inflammatory activities of methanolic extract of the whole plant of *Eragrostis pilosa* were evaluated by different in vitro methods. The whole plant of *Eragrostis pilosa* was extracted with methanol employing a maceration process. These extracts were screened for antioxidant activity by different in vitro assay methods including Reducing power assay, Iron chelating assay, and Nitric oxide scavenging activity. The screening was carried out at different concentrations including 100-500µg/ml in reducing power assay and Nitric oxide scavenging activity while in the iron-chelating assay, the extract was used in a concentration of 50, 100, 150, 200, and 250µg/ml. In vitro anti-inflammatory activity was evaluated by the membrane stabilization method at a concentration range of 100-500µg/ml. The extract of *Eragrostis pilosa* exhibits antioxidant potential with increasing concentration. The antioxidant and anti-inflammatory activity of the whole plant of *Eragrostis pilosa* might be attributed to its flavonoids, tannins, and other phenolic constituents. Our study concluded that the methanolic extract of the whole plant of *Eragrostis pilosa* may contain antioxidants components, which might help prevent the progress of various oxidative stresses. Besides, the extract was found to possess considerable anti-inflammatory properties and could have a significant effect against chronic inflammation.

**Keywords:** *Eragrostis pilosa*, Reducing power assay, Iron chelating assay, scavenging assay, Membrane stabilization.



  
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