



# Environment and Sustainable Development

Problems, Prospects and Mitigation

(ESDPPM)

*Edited by*

Dr. Debabrata Das

Dr. Pampi Ghosh

Dr. G. Maheswari

 Bharti

**Environment and Sustainable Development  
Problems, Prospects and Mitigation**

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**Bharti Publications**  
**New Delhi- 110002 (INDIA)**

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**Title:** Environment and Sustainable Development:  
Problems, Prospects and Mitigation (ESDPPM)

**Editors:** Dr. Debabrata Das | Dr. Pampi Ghosh | Dr. G. Maheswari

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First Published, 12 Sep, 2022

ISBN: 978-93-94779-43-3

Published by :

**Bharti Publications**

4819/24, 2nd Floor, Mathur Lane

Ansari Road, Darya Ganj, New Delhi-110002

Phone: 011-23247537

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Website : [www.bhartipublications.com](http://www.bhartipublications.com)

Printed by: Sagar Color Scan, Delhi

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## Antioxidant and Cytotoxic Effects of Methanol Extracts of *Sesbania grandiflora* Flower

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### ABSTRACT

Bioactive compounds present in *Sesbania grandiflora* flowers were identified and antioxidant and cytotoxic property of its methanol extract was evaluated. The article reflects the potential of bioactive compounds in flowers of *Sesbania grandiflora*. Preliminary phytochemical analysis was carried out to determine its major chemical constituents such as alkaloids, sterols, flavonoids, terpenoids, phenolic compounds, saponins, carbohydrates, glycosides, and tannins. Antioxidant activity of the methanol extract were determined by two different methods viz., 2,2-diphenyl-2-picryl hydrazyl hydrate radical scavenging assay and reducing power assay.



**E**nvironment is the totality of our surroundings. It includes living and nonliving components of nature. All round holistic development of nature and environment is 'sustainable development'. It was emphasized by the UN Conference on Environment and Development (UNCED) which defined it as: 'Development that meets the needs of the present generation without compromising the ability of the future generation to meet their own needs'. Environmental sustainability is important because of how much energy, food and human-made resources we use every day. Rapid population growth and use of resources

- has resulted in a polluted environment, leading to more greenhouse gas emissions, unsustainable energy use, and deforestation and even malpractice that cause social pollution. So, need to identify the problems, highlight the prospects and finally mitigate the issues for a better healthy environment. As the environment performs our crucial functions, every citizen should know the situation and promptly work for a green, clean and healthy environment. The book, 'ESDPPM' highlights some basic information to know the present scenario of the environment.

## About the Editors



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**Bharti Publications, New Delhi**

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[www.bhartipublications.com](http://www.bhartipublications.com)

ISBN: 978-93-94779-43-3



Price- Rs. 1280/-