

# Table of Contents

Volume 29, Issue 4 — April 2022

---

## Research Articles

---

1.

### **Assessing the Impact of Climate Change on Alpine Flora Using Remote Sensing and Machine Learning**

, William Weber

*Keywords: Climate change; Alpine flora; Remote sensing; Machine learning; Biodiversity conservation; Satellite imagery; Species distribution*

---

2.

### **Stochastic Incidence Matrix Based DCOPF Approach for Large Scale Power System Daily Operation**

José Lindberg, Roberto Svensson

*Keywords: Stochastic programming; DC Optimal Power Flow; Incidence Matrix; load forecasting; power system operation; optimization; uncertainty analysis*

---

3.

### **Effects of Urban Green Spaces on Biodiversity Conservation: A Case Study of Cape Town, South Africa**

Aisha El-Sayed, Hiroshi Tanaka, Maria Fernandes, Victoria Brown, Luca Nilsson

*Keywords: urban biodiversity; green spaces; ecological sustainability; habitat conservation; urban planning; Cape Town*

---

4.

### **An Investigation of Empathic Skills of Children and Parents**

Ming Marchenko, Taro Mensah, Michael Anderson, Antonio Shevchenko

*Keywords: empathy; children; parents; gender differences; empathic skills; emotional sensitivity; cognitive sensitivity*

---

5.

### **Phylogenetic Analysis and Habitat Preferences of Endemic Alpine Flora in the Himalayas**

, Takashi Müller, Franz Lindberg, Michael Olsson

*Keywords: phylogenetic analysis, endemic species, alpine flora, Himalayas, biodiversity, conservation, climate change*

---

6.

### **Ecological Impacts of Urbanization on Native Plant Species**

, Jean Johnson

*Keywords: Urbanization; Native Plants; Biodiversity; Habitat Fragmentation; Conservation*

---

7.

### **Field Approaches of Bacterial Biocides and Essential Oils as Integrated Control Measures against Peanut Crown Rot**

Kazuki Melnyk, Pablo Persson, Petro Wang, Francesco Schneider, Pablo Persson, Petro Wang, Francesco Schneider

*Keywords: Bacterial Biocides; Essential Oils; Integrated Management; Pest Control; Plant Protection*

---

8.

### **Vitamin D as a Candidate for Mitigating Diabetes Mellitus: Current Evidence and Future Perspectives**

Tendai Rodríguez, Viktor Kone, Olaf Tanaka, Michael Persson, Viktor Kone, Olaf Tanaka, Michael Persson

*Keywords: Vitamin D, Diabetes Mellitus, Prevention, Endocrinology, Nutrition, Health*

---

9.

### **Design and Simulation of Sandwich Pipes for Deepwater Applications**

P. Satyanarayana Raju

*Keywords: Sandwich Pipes; Deepwater; Offshore Engineering; Pipe Design; Simulation*

---

**10.**

**The Impact of Standards of Living on Dietary Adequacy of University Youth in Egypt**

Ibrahim SolimangehanA, EL Shourbagy and Mohamed Saraya(3)

*Keywords: Living Standards; Dietary Adequacy; University Students; Nutrition; Food Security*