# Table of Contents

**Perspective Article**

5  Technospheric Mining Towards a Circular Economy  
*Richard Diaz Alorro*

---

**Research Articles**

8  Non-CO2 Greenhouse Gas Emissions from Field Building of Crop Residues in the Philippines 1990-2015  
*Jose Hermis P. Patricio*

23 Litterfall Production and Turnover in the Longer Term Ecological Research (LTER) Sites in Southern Philippines  
*Florfe M. Acma, Victoria T. Quimpang, Victor B. Amoroso and Noel P Mendez*

36 Underutilized Senna *tora* (L.) Roxb. - A Highly Potential Multipurpose Species For Food, Feed, Medicine And Climate Resilience For The Philippines  
*Joy M. Jamago, Jean L. Valleser, Gerald N. Galleron, April Grace M. Racines, Bryan U. Bactong, and Nora M. Ata*

48 Phytochemical Screening And *in vitro* Antibacterial Activity of Syzygium sp.(“O-on”) Crude Extracts Against *Pseudomonas Aeruginosa* and *Staphylococcus Aureus*  
*Merced G. Melencion, Chris Rey M. Lituañas, Andrew B. Melencion*

57 Phytochemical and Antioxidant Activity Variation of Processed Edible Ferns  
*Domingo P. Lodevico, Melania M. Enot, Rainear A. Mendez, Vince R. Abadredez, Gemma Faith B. Monisit, Fulgent P. Coritico and Victor B. Amoroso*

68 Assessment of Termite Infestation in Academic Infrastructure at Central Mindanao University (CMU)  
*Mark Jun A. Rojo*

74 Proximate Composition of Raw and Heat-treated *Flacourtia jangomas* (Lour) Raeusch] Fruit  
*Lynette C. Cimafranca*