2026 | Volume Volume - 10 - Issue Issue - 1

In this issue

Research Article

Open Access Research Article PTZAID:AEST-10-195

Neurotoxicity of Zero-Valent Iron Nanoparticles in Primary Zebrafish Brain Cell Cultures

Published On: October 27, 2026 | Pages: 041 - 048

Author(s): Keyla Soto Hidalgo*, Laura Tirado Mena, Beatriz Zayas Rivera and Karoline Rios Rodriguez

Zero-valent iron nanoparticles (nZVI) are increasingly used in environmental remediation and explored for biomedical applications; however, their potential neurotoxic effects and underlying cellular mechanisms remain incompletely understood. In this study, newly synthesized nZVI were physicochemically characterized and evaluated for cytotoxic effects using primary bra ...

Abstract View Full Article View DOI: 10.17352/aest.000095

Open Access Research Article PTZAID:AEST-10-193

Occurrence and Human Health Risk Assessment of Pesticide Residues in Staple Cereals Sold in Northern Nigeria

Published On: July 18, 2026 | Pages: 026 - 034

Author(s): Nafisat Abdulkadir*, Ahmad Abdulhameed, Ezra Abalis Gaya and Toma Buba

Pesticide contamination of cereal grains has become a growing food safety concern because cereals constitute a major component of the human diet and represent an important route of dietary exposure to agrochemical residues. This study investigated the occurrence of pesticide residues in commonly consumed cereals marketed in northern Nigeria, determined their complianc ...

Abstract View Full Article View DOI: 10.17352/aest.000093

Review Article

Open Access Review Article PTZAID:AEST-10-192

Electrochemical Valorization of Biosolids: A Comprehensive Review of Resource Recovery and High-Value Product Generation

Published On: June 24, 2026 | Pages: 001 - 024

Author(s): Sarath Poda*, Gerardine G Botte

The rapid growth of municipal and industrial wastewater treatment has led to an unprecedented accumulation of biosolids, traditionally managed through land application, incineration, or disposal pathways that often undervalue their embedded chemical and energetic potential. In the context of the circular economy, biosolids should no longer be viewed as residual waste ...

Abstract View | Full Article View | DOI: 10.17352/aest.000092

Mini Review

Open Access Mini Review PTZAID:AEST-10-194

Water Footprint and Food Industry: Alcotra-Region Nexus

Published On: August 12, 2026 | Pages: 035 - 040

Author(s): Alessia Corami*

The water footprint (WF) is defined as the total amount of water required to produce goods and services. This value can be determined for crop activity, but also in industrial processes, for a multi-national company, for a state or for a watershed. It is an index to assess the water necessary for agro-industrial activity. Water is classified using three colours acco ...

Abstract View | Full Article View | DOI: 10.17352/aest.000094