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In this issue

Research Article

Open Access Research Article PTZAID:AEST-7-171

Collection and delivery points in the last mile of cargo transportation: Sustainability benefits and challenges

Published On: October 17, 2023 | Pages: 061 - 065

Author(s): Gustavo Henrique Freitas Matinha, Carlos Eduardo Sanches de Andrade* and Cintia Isabel de Campos

The present work aims to analyze sustainability aspects related to the use of lockers, collection points, and other forms of fixed points, by transporters and consumers, in the last mile of cargo transportation, as an alternative to home delivery. For this purpose, a literature review was performed. Three distinct platforms were researched using strings in three diffe ...

Abstract View Full Article View DOI: 10.17352/aest.000071

Open Access Research Article PTZAID:AEST-7-170

Deep learning-based object detection for smart solid waste management system

Published On: August 31, 2023 | Pages: 052 - 060

Author(s): Meron Desta*, Tagel Aboneh and Bisrat Derebssa

Currently in Ethiopia, pollution and environmental damage brought on by waste increased along with industrialization, urbanization, and global population levels. Waste sorting, which is still done improperly from the household level to the final disposal site, is a prevalent issue. Real-time and accurate waste detection in image and video data is a crucial and difficu ...

Abstract View Full Article View DOI: 10.17352/aest.000070

Open Access Research Article PTZAID:AESST-7-169

Antioxidant and detoxifying enzymes response of stored product insect pests to bioactive fractions of botanical extracts used as stored grains protectant

Published On: August 07, 2023 | Pages: 043 - 051

Author(s): Jacobs Mobolade Adesina*

Recurrent exposure of stored product insects to synthetic insecticides resulted in the development of resistance which occurs due to changes in insect metabolic enzymes. The inhibitory effect of ethyl acetate active fraction of Mitracarpus villosus, Bridelia micrantha, and Clerodendrum capitatum on antioxidant and detoxifying enzymes of stored product insects was inve ...

Abstract View Full Article View DOI: 10.17352/aest.000069

Open Access Research Article PTZAID:AEST-7-167

Cytotoxicity, genotoxicity, and mutagenicity of the active pharmaceutical ingredient nevirapine and a nevirapine-based drug on the plant species Allium cepa

Published On: May 23, 2023 | Pages: 025 - 033

Author(s): Juliana Souki Diniz*, Gabriel de Souza-Silva, Clessius Ribeiro de Souza, Leonardo Alvarenga de Paula Freitas, Ana Luísa Souki Parreira, Brennda Rocha Pena, Marcos Paulo Gomes Mol and Micheline Rosa Silveira

The toxicity of the active pharmaceutical ingredient and nevirapine-based drug at analytical concentrations was evaluated under laboratory conditions, using Allium cepa seeds as a model. The germination index of the negative control was 86.8 ± 2.1. The concentrations of 6.42 and 9.54 mg/L of the active pharmaceutical ingredient and 11.20 mg/L of the nevirapine-based d ...

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Open Access Research Article PTZAID:AEST-7-166

The influence of the geographical features of Kyrgyzstan on the choice of types of recreational activities (A case study: issyk-kul region)

Published On: April 18, 2023 | Pages: 017 - 024

Author(s): Choduraev TM* and Toktoraliev ET

Economic impact is a stimulating effect on the economic condition of various regions. The paper describes the influence of the structure of the object on the choice of recreational activities, taking into account the sensitivity of the mountain structure to anthropogenic impact. Determined the value of the initial values of the applications of sociological research, ...

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Open Access Research Article PTZAID:AEST-7-164

Characteristics of environmental degradation in mining areas (A case study of the Southern Trans-Urals)

Published On: January 19, 2023 | Pages: 004 - 012

Author(s): Aufar Gareev* and Emil Gareev

The areas affected by mining operations are characterized by extremely complex environmental changes that affect all components of the natural complexes. In several cases, radical negative changes (transformations) take place, which cause the formation of the habitat, characterized by changes in characteristics of all components of the natural environment, including g ...

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Open Access Research Article PTZAID:AEST-7-163

Prospects for environmentally safe disinfection of urban sewerage with the help of compositions of non-toxic bactericidal metal complex reagents and surfactants

Published On: January 14, 2023 | Pages: 001 - 003

Author(s): Tsivadze AYu, Fridman AYa*, Barinov RA, Kruglina KA and Magomedrasul G

The prospects of environmentally safe disinfection of urban sewerage using compositions of bactericidal complexes of copper with amino acids and iminodiacetate derivatives of mucopolysaccharides and triglycerides of fatty acids are shown. When they are dosed into wastewater, the complexes penetrate into the structure of Suspended Particulate

Matter (SPM) and mucus and ...

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Review Article

Open Access Review Article PTZAID:AEST-7-172

Human effects of lindane in a one health perspective. A review

Published On: December 15, 2023 | Pages: 066 - 071

Author(s): Gabriele Arnesano, Marco Merella, Igor Meraglia, Agostino Messineo, Margherita Pallocci*, Paolo Maurizio Soave, Michele Treglia and Nicola Magnavita

Lindane or gamma-hexachlorocyclohexane is a chloro-organic insecticide marketed since 1938. The demonstration of significant toxic effects for humans, including neurological, hepatic, hematological, and carcinogenic effects, led to its ban. Since 2000, the use of lindane has declined, but attention to the possible effects on public health must remain high, given the b ...

Abstract View | Full Article View | DOI: 10.17352/aest.000072

Open Access Review Article PTZAID:AEST-7-165

Negative effects of acid rains on agricultural areas

Published On: February 22, 2023 | Pages: 013 - 016

Author(s): Fatma Kunt* and Ahmet Özkan

Due to the atmospheric pollution loads that started with the industrial revolution and have increased exponentially in the process that has come to the present day, the natural components of the atmosphere have been damaged and changed. One of the negative return points of this human-made degradation in the natural order is acid rain. Acid rains harm people directly a ...

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Literature Review

Open Access Literature Review PTZAID:AEST-7-173

Evaluation of biological agents with cover crops for sustainable agriculture:

Literature review

Published On: December 29, 2023 | Pages: 072 - 079

Author(s): Confesora Pinales Ramírez, Emmanuel Torrez Quezada, Willy Maurer and Omar Paíno Perdomo*

Cover crops combined with biological agents constitute a promising alternative to improve soil health and contribute to the environmental sustainability of agricultural systems, for which a search has been carried out whose objective was to carry out a critical analysis of the existing literature on agents, bioremediation with cover crops for sustainable agriculture. ...

Abstract View | Full Article View | DOI: 10.17352/aest.000073

Open Access Literature Review PTZAID:AEST-7-168

Industrial entrepreneur’s perception of greenhouse gas emission and its impact in Vientiane Capital, Lao PDR

Published On: June 14, 2023 | Pages: 034 - 042

Author(s): Bounmy Inthakesone*, Khampheng Kingkhambang, Pakaiphone Syphoxay, Phouthone Singhalath, Salika Phavongxay and Syvanh Phonasa

Laos ranked 8th in terms of total greenhouse gas emissions among ASEAN countries, with 17.9 million metric tons of carbon dioxide equivalent (MtCO2e) emissions. The energy sector was responsible for the majority of emissions, accounting for about 50% or 8.9 MtCO2e, followed by the agriculture sector at around 35% or 6.3 MtCO2e, and other sectors at approximately 15% o ...

Abstract View | Full Article View | DOI: 10.17352/aest.000068