

NIGERIAN SOCIETY FOR EXPERIMENTAL BIOLOGY



(NISEB)
OMU-ARAN 2018

PROGRAMME OF EVENT & BOOK OF ABSTRACTS



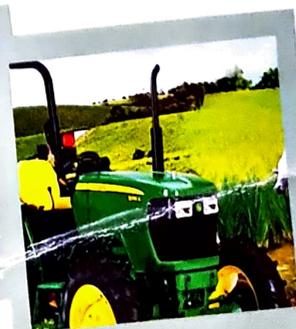
Annual
**Scientific
CONFERENCE**
and General Meeting

Theme:

**EXPERIMENTAL BIOLOGY FOR FOOD SECURITY
AND SUSTAINABLE DEVELOPMENT**

DATE: SUNDAY JULY 1ST – WEDNESDAY 4TH JULY 2018

VENUE: INTERNATIONAL CONFERENCE CENTRE, LANDMARK UNIVERSITY, OMU-ARAN



the malondialdehyde level whereas groundwater 2 and 2.5... leachate did not significantly alter the malondialdehyde level. The repeated exposure of male rats to the groundwater samples and leachates from Gbagege dumpsite may have consequential effect on the normal functioning of the prostate with respect to normal urination and reproduction in the animals.

Keywords: Gbagege dumpsite, Groundwater, Leachate, Prostatic function, antioxidant activity.

GDD0035

GREEN SYNTHESIS AND CHARACTERIZATION OF IODINE NANOPARTICLES AND SILVER- IODINE DOPED NANOPARTICLES PRODUCED USING *PIPER GUINEENSE* LEAF EXTRACT

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Iodine nanoparticles is increasingly gaining attention from chemists, physicists, biologists and engineers for the development of new nano-devices with wide application in medicine, catalysis, electronics, chemistry and energy. In this study iodine (INP) and Iodine-doped silver (Ag-INP) nanoparticles were synthesized from potassium iodide and silver nitrate impregnated with molecular iodine respectively. However, this was done without the use of any stabilizers through a simple and eco-friendly route of leaf broth of *Piper guineense* as a reductant. The biologically synthesized INP and Ag-INP were characterized using UV-vis spectrophotometer, dynamic light scattering (Malvern Zetasizer), energy dispersive x-ray spectroscopy (EDX) and Fourier transform infrared spectroscopy (FTIR). The biosynthesized INP and Ag-INP shows an absorption peak at 276.5 nm and 425.5 nm respectively with average particle size which is mono and polydispersity of 121.7 dnm for INP and 2.165 and 46.82 dnm for Ag-INP. EDX confirmed the presence of iodine at 3.5 KeV with maximum count of iodine and potassium at 1050. The FTIR spectra under optimized conditions indicated the presence of biomolecules in the iodine nanoparticle with signal 3348.54 cm^{-1} corresponding to hydroxyl group of alcohols and phenols, and the weak signals at 1635.69 cm^{-1} corresponding to alkene groups. In conclusion, the biological synthesis of INP and Ag-INP has potential as antibacterial agents and can serve as a good contrast agent providing opportunities for improved diagnostic imaging.

Keywords: Iodine nanoparticle, synthesis, *Piper guineense*, Iodine-doped silver nanoparticle.

GDD0036

PHYTO NUTRIENT COMPOSITION, ANTIOXIDANT ACTIVITIES AND GC-MS INVESTIGATION OF TWO SOLVENT EXTRACTS OF THE LEAVES OF *Spondias mombin* (HOG PLUM LEAVES)

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