

Table of contents

A REVIEW IN NODAL ANATOMY FOR PLANTS Israa A.R. AL-DOBAISSI & Rasha K.H. AL-MASOUDI	1
DOCUMENTS ISSUANCE VALIDATION USING 2D BARCODE Mohammad A. TAHA ALDABBAGH	10
IMPACT OF FOLIAR APPLICATION OF CHELATED ZINC ON THE SEASONAL CHANGES OF GROWTH AND DEVELOPMENT OF GRAPE BERRIES (VITIS VINIFERA L.) Wurood Hamza MUTTALEB & Zainab Haider ALI	18
KNOWLEDGE OF ENDOCRINE-DISRUPTING CHEMICALS DURING PREGNANCY AND FOETAL DEVELOPMENT Aseel Ibrahim SUHAEL	35
THE OPTIMUM LOCATION OF CONCRETE SHEET PILES UNDER HYDRAULIC STRUCTURE AFFECTED THE SEEPAGE WATER PRESSURE USING ANSYS PROGRAM Manal A. MUHAMMED, Muthik A. GUDA & Jaafar B. ALGBURI	46
EFFECT OF DIFFERENT DOSES OF IVERMECTIN ON BIOMARKER HORMONE OF ADRENAL GLAND AND HISTOLOGY OF IT IN LOCAL FEMALE RABBITS Bushra F. HASAN, Shaymaa Z.AL RUMAIDH, Abdulrazzak N. KHUDAIR & Nawras A. ALWAN	60
EFFECTS OF ENHANCER DIESEL FUEL AND VIBRATING WINGS SUBSOILER PLOW ON THE PERFORMANCE OF AN AGRICULTURAL TRACTOR Hussam T. TAHA, Yousif Y. HILAL & Raqeeb H. RAJAB	71
DETERMINE THE MOST APPROPRIATE DATE FOR PLANTING BROCCOLI (BRASSICA OLERACEAE L. VAR. ITALICA) SEEDS IN NINEVEH GOVERNORATE Fathel F. R. IBRAHEEM, Abdelmonnem S. KAHLEL, Hussien J.M. AL-BAYATI & Aknan A. M. AL-KAWAZ	81
ISOLATION AND MOLECULAR IDENTIFICATION OF PHYTOPHTHORA INFESTANS (MONT.) DE BARY THE CAUSAL AGENTS OF POTATO LATE BLIGHT Huda Z. AL-TAAE, Ali K. AL-TAAE & Hussein J. AL-BAYATI	88
THE EFFECT OF SULFONYLUREAS DRUGS ON KIDNEY AND LIVER FUNCTIONS IN TYPE 2 DIABETIC PATIENTS Noor Khalid ZAIDAN, Wisam Mahmoud MOHAMMED & Hiba A.K.AL-HADITHE	97

ANALYTICAL DETECTION OF HEAVY METALS IN COSMETIC Hana Sh. MAHMOOD, Ahlam A.SHEHAB & Nada A. KHALIL	103
MOLECULAR IDENTIFICATION OF ANGUINA FUNESTA THE CAUSAL AGENT OF BARLEY EAR COCKLE DISEASE IN NINEVEH PROVINCE – IRAQ Yousef M. A, & Ali K. AL TAAE	108
FABRICATION SENSORS BASED ON NANOCOMPOSITES ZnO/PVDF Amel D. HUSSEIN	123
HYPOGLYCAEMIC AND ANTIHPERGLYCAEMIC ACTIITIES OF AQUEOUS EXTRACT OF FICUS CARICA IN DIABETIC RATS Shahbaa M. AL-KHAZRAJ & Ihsan K. KHALIL	137
THE EXTENT OF ADHERENCE TO THE ROUTINE VACCINATION SCHEDULE FOR CHILDREN IN TIME OF CORONA PANDEMIC Haider Y. ABDULRAZAQ & Farzdaq Fakhir GATAE	136
SEPARATION AND IDENTIFICATION OF A NUMBER OF UNSATURATED FATTY ACIDS FROM DIFFERENT TYPES OF ALGAE Mohammed A.H.ALOBEADY & Mira Ausama AL-KATIB	145
REVIEW ON STIMULATIONS OF THE SPREAD OF HELICOBACTER PYLORI INFECTION IN IRAQ Tamara Abbas HAMED& Batool Abd Al Ameer BAQER	160
A COMPARISON BETWEEN NOSQL AND RDBMS: STORAGE AND RETRIEVAL Sameera Abbas FADHEL& Enas Ali JAMEEL	173
EFFECT OF SODIUM CHLORIDE ON STEVIA PLANT GROWTH IN VITRO Hiba A. JAWAD, Nahlah H. HUSSEIN& Fadia F. SALEH	185
SYNTHESIS OF TRIPODAL BORATE LIGAND WITH NI(II) AND CU(II) COMPLEXES Asmaa Mohammed Noori KHALEEL	192
IMPACT ASSESSMENT OF CREATINE ON MANY PHYSIOLOGICAL AND BIOCHEMICAL SCALES IN MALE RABBITS Nawras A. ALWAN, Eman Aboud AL-MASOUDI &Alia M. KUDAYER	202
FRONTIERS IN EARLY DETECTION OF HEPATOCELLULAR CARCINOMA Hussain Ibrahim HUSSAIN, Ruqayah Ali SALMAN & Shaimaa S. MUTLAK	211

SJ-FLAT MODULES

Ashwaq Medhloom JUDDAH& Akeel Ramadan MEHD 221

THE EFFECT OF HYPERTENSION ON THE LITERAL CELLS LINING THE CHEEK AREA IN THE MOUTH

Shatha Hizem SHAKE, Muzayyan Fadhly NAMIK&Al-Yakthan Ali SALIH 231

PREPARATION OF ACTIVATED CARBON FROM (PISTACIA KHINJUK PEELS)
AND STUDY ITS CHEMICAL PROPERTIES

Farah K. HAMMOUD, Alaa Ali HUSSEIN &Ebtehag .Z.SULYMAN 240

EVALUATION OF THE OPTIMAL KI-67 CUTOFF VALUE DETERMINING GRADES OF GLIOMA IN TURKISH
POPULATION

Tiba Idham MOHAMMED 249

FIRST RECORD for WATERMELON NECROSIS DISEASE on WATERMELON CROP in IRAQ

Qais K ZEWAIN 260

EVALUATION OF THE EFFICIENCY OF SOME NANOCOMPOSITES IN ROOT-KNOT NEMATODES
(MELOIDOGYNE SPP.) UNDER LABORATORY CONDITIONS

**Sama Amer Abbas EL-TEKRET, Liqaa Hussein MOHAMMED2, Ebtehal Jawad ALZAIDI & Estabraq
Mohammed ABDALREDA** 271

ANALYSIS STUDY OF BOUNDARY LAYER OF AIR FLOWING ON A FLAT PLATE

Sarah Burhan EZZAT, Yousif Khudair ABASS , Qusay Kamil JASIM & Ahmed E. AHMED 279

EFFECT OF FLAVONOIDS ON THICKNESS AND DIAMETER OF TESTICULAR SEMINIFEROUS TUBULES
IN ADULT MALES WISTAR RATES EXPOSED TO OXIDATIVE STRESS BY LEAD ACETATE

Zahraa Hussein KADHIM 291

THE USE OF MODULAR NETWORKS IN ARCHITECTURAL CONSTRUCTION METHODS

Ashwaq MEDHLOOM JUDDAH 311

THE HISTOPATHOLOGICAL EFFECT OF HIGH DOSES OF MAGNESIUM ON KIDNEY

Roaa S. ALRAWI, Lina A.JEBUR, & Layla Qais JAWAD 321

SYNTHESIS, SPECTROSCOPIC, THERMAL AND BIOLOGICAL STUDIES of SOME NOVEL METAL IONS
COMPLEXES

Alyaa Khider ABBAS 331

MODIFICATION OF WASTE POLYSTYRENE AND INVESTIGATION OF ITS CONDUCTIVE CHARACTERISTICS WITH THE ADDITION OF ANTHOCANDIEN PIGMENT DERIVED FROM EGGPLANT PEEL Muhsen Chelab MUHSEN, Hikmat Abualrahim ALI & Fatima H. MALK	349
ASSESSMENT AND MANAGEMENT OF THE RISKS OF CORROSION IN METALLIC PIPELINES Mohamed RMAIDA	356
DC ELECTRICAL CONDUCTIVITY OF TETRA-DIIMINO BENZENE-PAMINO BENZENEPHTHALOCYANINATO METAL (II) & (III) Nazar A. HUSSEIN, & Thuraya M. IBRAHIM	374
THE OPTIMUM LOCATION OF CONCRETE SHEET PILES UNDER HYDRAULIC STRUCTURE AFFECTED THE SEEPAGE WATER PRESSURE USING ANSYS PROGRAM Manal A. MUHAMMED, Muthik A. GUDA, Jaafar B. ALGBURI & Ahmed Yousif JAWAD	382
SEPARATION AND IDENTIFICATION OF A NUMBER OF UNSATURATED FATTY ACIDS FROM DIFFERENT TYPES OF ALGAE Dawood S. MADAB & Suaad M. HASSEN	396
THE EFFECT OF THE SEDIMENTS OF THE HILLA RIVER ON THE CHARACTERISTICS OF THE ADJACENT SOILS (BABYLON GOVERNORATE) Iman A. HAMEED, Haleema Abdul Jabbar ABDUL RAHMAN, & Alsaadi ANMAR	406
DETECTION OF TRICHOMONAS VAGINALIS IN WOMEN WITH VAGINITIS IN MOSUL CITY Sarah Burhan EZZAT, Yousif Khudair ABASS , Qusay Kamil JASIM & Ahmed E. AHMED	426
EFFECT OF MICROWAVE RADIATION ON THE VIABILITY OF ESCHERICHIA COLI AND STAPHYLOCOCCUS AUREUS Mehraban T.AHMED, Akhink A.HASSAN, Yousra Y.HUSSEIN & Ali YAHYA SAEED	441
THEORETICAL STUDIES OF [KMNO ₄]X USING FIRST PRINCIPLES CALCULATIONS Hussein NEAMA NAJEEB, Hassan A.MAJEED & Mohammed J.JADER	447

MOLECULAR DIAGNOSIS OF DIFFERENT ISOLATES OF SEED GALL NEMATODE (ANGUINA TRITICI) IN IRAQ AND ITS CONTROL Noor Ebraheem Qassem AL-BADRANY, Huda Hazim Wafi AL-TAEE , Qusay Kamil JASIM & Ali Hamood THANOON	457
EFFECT OF NANO-ABAMECTIN IN COMBATING THE TWO-SPOTTED SPIDER MITE TETRANYCHUS URTICAE KOCH (ACARI: TETRANYCHIDAE) UNDER LABORATORY CONDITIONS Isra W. SALEM, Tawfiq M. ALANTARY & Mahmoud A. ALAW	477
SURGICAL TREATMENT OF THE FIFTH METACARPAL FRACTURES. RETROSPECTIVE STUDY ABOUT 30 CASES Abdelaziz KEROUMA	484
CRISIS MITIGATION OF DISAPPEARING PRIVATE GREEN SPACES THROUGH SUSTAINABLE SOLUTIONS - CASE STUDY IN BAGHDAD (IRAQ)S AL-HELLI Marwah	490
MICROSERVICES VS. MONOLITHIC ARCHITECTURES [THE DIFFERENTIAL STRUCTURE BETWEEN TWO ARCHITECTURES] Nada Salaheddin ELGHERIANI & Nuredin Ali Salem AHMED	500
ON iR -CONTINUOUS AND iR -CONTRA CONTINUOUS FUNCTIONS IN TOPOLOGICAL SPACE Sumaya A. ABED	515
IN VITRO SELECTION BASAL MEDIUM USED FOR SEEDS GERMINATION, CALLOGENESIS INDUCTION OF LOCAL VARIETIES OF VICIA FABA L A.H. AL MAMOOR & Zina MOHAMMED SARHA	523
GREEN SYNTHESIS OF NEW HYDRAZONE DERIVATIVES Harith. M. AL-AJELY	530
SOME NEW SEMI-NORMED DIFFERENCE ENTIRE SEQUENCE SPACES OF FUZZY REAL NUMBERS DEFINED BY A DOUBLE ORLICZ FUNCTIONS Leena ABED MUSLIM KADHIM, Wissam JALIL KARIM & Zainab ABDUL-ZAHRA NAJM	536

THE EFFECT OF FUNCTIONALIZED MULTI-WALLED CARBON NANOTUBES (F-MWCNTS) ON TOMATO PLANTS (SOLANUM LYCOPERSICUM)

Nuralhuda Aladdin JASIM 545

ECOTOURISM AND CULTURAL INTEREST OF A NATURAL SITE: KARST LANDSCAPE IN A CAVE OF EL KAF IN THE ORIENTAL REGION OF MOROCCO

Khalid EL BEKKAYE, Yassine EL BEKKAYE, Hicham MHAMDI, Abderrahman HADINI, Mourad BENDADA, KAJEIOU Hamza, Mounia KHOUKHOUCI & KHNAIJER Btissam 561