

COMBINED CONGRESS – WILDERNESS JANUARY 2024 - PROGRAMME

| | PROGRAMME | |
|----------------|-------------------------|--|
| TIME SLOTS | 23-JAN-24 | |
| 11H00 TO 12H30 | SAPSCC MEETING | |
| 12H30 TO 13H30 | LUNCH FOR SOCIETY BORDS | |
| 14H30 | SOCIETY MEETINGS | |
| | | |
| 15H00 TO 18H00 | REGISTRATION | |
| 15H00 TO 18H00 | PUT UP POSTERS | |
| 15H00 TO 18H00 | UPLOAD TALKS | |

| Time slots | Programme | | | |
|----------------|---|--|---|--|
| | | 23-Jan-24 | | |
| 07h00 to 8h30 | Registration | | | |
| 09h00 to 10h00 | Keynote SSSSA - Prof C van Huysteen | | | |
| 10h00 to 10h30 | Tea/Coffee | | | |
| 10h30 to 13h00 | | Session 1 | | |
| | Crops - Conservation Agriculture | Soils - Soil biology | Horts - Post-harvest biology | |
| Session Chair | Dr Johann Strauss | Dr. Corrie Swanepoel | Isa Bertling | |
| 10h30 | INCIDENCE OF MYCOTOXINS IN MAIZE GROWN UNDER CONSERVATION AGRICULTURE PRACTICES ON SMALL SCALE FARMER FIELDS IN KWAZULU- NATAL - Belinda Janse Van Rensburg | EVALUATION OF THE MICROBIOMETER® FIELD TEST KIT FOR SOIL BIOLOGY IN THREE DIFFERENT SOILS OF THE WESTERN CAPE PROVINCE - <i>Anélia Marais</i> | EFFECTS OF PRE- PLUS POST-HARVEST APPLICATION OF PLANT EXTRACTS ON THE POST- HARVEST QUALITY OF POTATOES (SOLANUM TUBEROSUM L.) KEPT UNDER AMBIENT STORAGE CONDITIONS - <i>Bonga Lewis Ngcobo</i> | |
| 10h50 | PRODUCING VEGETABLES IN A CONSERVATION AGRICULTURE SYSTEM: EFFECTS ON SOIL HEALTH AND CROP PRODUCTIVITY <i>Beatrix Alweendo</i> | METAGENOMICS EVALUATION OF THE COMMUNITY PROFILE AND FUNCTIONAL DIVERSITY OF ROOT MICROBIOME IN LETTUCE (LACTUCA SATIVA L.) VARIETIES, A SHOTGUN APPROACH - Akinlolu Olalekan Akanmu | USING XANTHAN GUM COATINGS AS CARRIERS OF PROBIOTIC BACTERIA TO RETAIN POSTHARVEST QUALITY AND ANTIOXIDANTS IN CANTALOUPE SLICES (Cucumis melo L.) - Tshudufhadzo Chikhala | |
| 11h10 | EFFICACY EVALUATION OF SPRAY PROGRAMMES FOR THE CONTROL OF GLYPHOSATE RESISTANT CONYZA SPECIES UNDER CONSERVATION AGRICULTURE - <i>Maryke Craven</i> | AFLATOXINS IN SOIL ECOSYSTEMS: DEFINING ITS FATE AND TOXICOLOGICAL RISK TO SOIL ORGANISMS - Tanya Fouche | FRUIT FIRMNESS: A NEW METHOD TO DETERMINE CITRUS QUALITY? - Marli Kleyn | |
| 11h30 | THE IMPACT AND PERCEPTION OF MAIZE SMALLHOLDER AND SEMI COMMERCIAL FARMERS ON CLIMATE CHANGE IN SEMI-ARID AREAS OF NORTH WEST, SOUTH AFRICA - Vusimuzi Alson Ngcobo | STRUCTURAL AND FUNCTIONAL DIVERSITIES OF MICROBIAL COMMUNITIES OF GLYCINE MAX L RHIZOSPHERE SOIL FROM FREE STATE, SOUTH AFRICA - Ayansina Ayangbenro | THE IMPACT OF POSTHARVEST TREATMENTS ON THE INCIDENCE OF CHILLING INJURY IN SWEET ORANGES (CITRUS SINENSIS) IN CITRUSDAL, SOUTH AFRICA - Heinrich Geldenhuys | |
| 11h50 | REGENERATIVE AGRICULTURE VS CONSERVATION AGRICULTURE: EFFECTS ON SOIL QUALITY AND CROP PRODUCTIVITY <i>- Guy Musto</i> | ASSESSING THE IMPACT OF VARIOUS PRESCRIBED FIRE FREQUENCIES ON SOIL BACTERIAL DIVERSITY AND COMPOSITION IN THE SEMI-ARID SAVANNA RANGELANDS - <i>Sanele Poswa</i> | OLEOCELLOSIS: WHY HAS THE CONTROL THEREOF NOT BEEN RESOLVED? - Johane Niemann | |
| 12h10 | CROPPING SYSTEMS CAN IMPROVE PROFITABILITY ON LOWER NITROGEN APPLICATIONS - <i>Rens Smit</i> | IMPACT OF ACCUMULATED PATHOGENIC BACTERIA FROM TREATED WASTEWATER ON SELECTED FERTILITY VARIABLES AND BENEFICIAL BACTERIA IN AGRICULTURAL SOIL - Patience Ntimbane | IMPACT OF PREHARVEST ETHEPHON FOLIAR SPRAY ON THE POSTHARVEST FATTY ACID PROFILE AND DIETARY INDICATORS OF MACADAMIA NUTS - Noluthando Aruwajoye | |
| 12h30 | THE NITROGEN AVAILABILITY IN SOIL FOLLOWING LEGUME CROPS AND THEIR EFFECT ON THE FOLLOWING CROP - Hanneke Augustyn | COMPARISON OF NUTRIENT USE EFFICIENCIES IN CITRUS UNDER DIFFERENT FERTILIZATION AND IRRIGATION MANAGEMENT PRACTICES - Imaan Parker | GREEN SYNTHESIS OF ZINC OXIDE NANOPARTICLES USING MORINGA OLEIFERA LEAF EXTRACT AND ITS ANTIFUNGAL EFFECT AGAINST COLLETOTRICHUM GLOEOSPORIODES IN AVOCADO - Sibonelo Ngubane | |
| 12h50 | EXTENT OF SOIL ACIDITY IN NO-TILLAGE SYSTEMS IN THE WESTERN CAPE PROVINCE OF SOUTH AFRICA - Adriaan Liebenberg | | | |
| 12h50 to 13h10 | | Lunch | | |
| | Lunch | | | |

| Session Chair Session Chair EVALU IN EST V CON | Adaptation Agriculture, Biofuels, Crop ding& Adaptation& Weed management& Herbicides & Biofuel Dr Pieter Swanepoel UATION OF THE DSSAT-CERES MAIZE MODEL TIMATING YIELD IN SOUTH AFRICA'S NORTH WEST PROVINCE - Christopher Rankin | Soils - Technology & Policy Dr. Cathy Clark SOUTHERN AFRICAN SOIL, LAND COVER AND WEATHER GENERATOR FILE DATABASES FOR SWAT APPLICATIONS - Jay le Roux | Hort production & cultivation practices Mark Penter ENHANCING NUTRITIONAL AND PHYSIOLOGICAL QUALITY OF SWEET PEPPER FRUIT THROUGH |
|--|--|--|--|
| 13h30 to 13h50 EVALU IN EST V CON | UATION OF THE DSSAT-CERES MAIZE MODEL TIMATING YIELD IN SOUTH AFRICA'S NORTH | SOUTHERN AFRICAN SOIL, LAND COVER AND WEATHER GENERATOR FILE DATABASES FOR SWAT | ENHANCING NUTRITIONAL AND PHYSIOLOGICAL |
| 13h30 to 13h50 IN EST V | TIMATING YIELD IN SOUTH AFRICA'S NORTH | WEATHER GENERATOR FILE DATABASES FOR SWAT | |
| | | | INCORPORATING BIOSTIMULANT, ORGANIC, AND INORGANIC FERTILIZERS - Siyabonga Dlamini |
| | NSERVATION AGRICULTURE IN VEGETABLE EMS: A NEW HORIZON FOR SOIL HEALTH? - Jade Andrews | COUNTRIES' RIO CONVENTION COMMITMENTS RELATED TO THE SOIL INITIATIVE FOR AFRICA FRAMEWORK - <i>Liesl Wiese-Rozanov</i> | DETERMINING EFFECTIVE POLLINATION PERIOD (EPP) FOR PLUM CULTIVARS IN SOUTH AFRICA - Louisa Blomerus |
| | ONG-TERM CONSERVATION AGRICULTURE ONOMIC EFFECTS ON THE ENVIRONMENT - Johann Strauss | THE APPROACH TOWARDS A LAND CAPABILITY ASSESSMENT - Anneliza Collett | THE EFFECTS OF N-(2-CHLORO-4-PYRIDYL)-N'- PHENYLUREA (CPPU), AND THE COMBINATION OF CALCIUM AND BORON ON FRUIT CRACKING DISORDER OF 'EARLY DELIGHT' LITCHI FRUIT - <i>Nicolaas Roets</i> |
| 14h30 to 14h50 GLYPHO | RNATIVE HERBICIDES FOR THE CONTROL OF IOSATE-RESISTANT AMARANTHUS HYBRIDUS OTH PIGWEED) IN RSA - <i>Nhlanhla Shabangu</i> | AGRICULTURAL ASSESSMENT REGULATIONS AND THEIR REAL-WORLD APPLICATION - Darren Bouwer | PROPAGATION OF JUNCUS LOMATOPHYLLUS: A JOURNEY WITH WATER PLANTS - <i>Riana Kleynhans</i> |
| 14h50 to 15h10 | TIGATING HERBICIDE RESISTANCE IN LOLIUM SPP <i>Louise Bestbier</i> | LOCAL IS LEKKER: WHY WE NEED LOCALLY CALIBRATED SOIL SPECTROSCOPIC PREDICTION MODELS - <i>Anru-Louis Kock</i> | EFFECT OF SMOKE-WATER TYPE AND CONCENTRATION ON GERMINATION AND SEEDLING VIGOUR OF CEREAL RYE, ONION AND GAZANIA - Isa Bertling |
| (QTLS) F 15h10 to 15h30 LENG | GTH IN OLD SEED OF TUGELA-DN × ELANDS BLED-HAPLOID (DH) POPULATION OF BREAD | ALPINE WETLAND DEGRADATION IN THE NORHTERN MALOTI-DRAKENSVERG: ON THE NEED FOR BASELINE RESEARCH - Johan van Tol | DO NUT MATURITY, NUT DEVELOPMENT AND MINERAL NUTRITION PLAY A ROLE IN THE DEVELOPMENT OF THE SKIN ADHERENCE DISORDER IN MACADAMIA (CV. 'NELMAK 2')? - Karin |
| 15h40 to 16h00 | WHEAT - Thobeka Philile Khumalo | | Hannweg |

| | Session 3 | | |
|---------------|---|--|---|
| | Crops - Crop Production | Soils - Soil genesis, classification & mapping | Horts - Indigenous and medicinal plants |
| Session Chair | Dr Magdeleen Cilliers | Prof Johan van Tol | Louisa Blomerus |
| 16h00 | DRY MATTER ACCUMULATION, TRANSLOCATION, AND YIELD OF WATER USE EFFICIENT MAIZE (WEMA) IN RESPONSE TO NITROGEN FERTILIZER AND PLANT DENSITY - <i>Abidemi Ruth Adebayo</i> | DEVELOPMENT AND EVALUATION OF NEW BIOPHYSICAL SCORING CLASSIFICATIONS FOR USE IN AGRICULTURAL LAND EVALUATION - <i>Kurt</i> <i>Barichievy</i> | INVESTIGATING THE EFFECT OF WATER STRESS ON GROWTH AND BIOCHEMICAL RESPONSES OF PELARGONIUM SIDOIDES - Phila-Sande Ntoyi |
| 16h20 | THE EFFECT OF DIFFERENT LED LIGHTS ON MORPHOLOGICAL PARAMETERS AND PHYTOCHEMICAL CONTENT OF RED MUSTARD MICROGREENS GROWN UNDER CONTROLLED CONDITIONS - Noxolo Mbandlwa-Mthembu | THE USE OF DIGITAL SOIL MAPPING (DSM) TO IMPROVE CONVENTIONAL SOIL MAPPING FOR PRECISION AGRICULTURE IN SOUTH AFRICA - Jasper Dreyer | ROSE-SCENTED GERANIUM (PELAGONIUM SPP.) ESSENTIAL OIL AS INFLUENCED BY HERBAGE DRYING AND DRYING METHOD - <i>Viwe Dyafta-Malima</i> |
| 16h40 | VESICULAR ARBUSCULAR MYCORRHIZAL FUNGI INFLUENCE ON GROWTH OF CANCER BUSH (SUTHERLANDIA FRUTESCENS) AND ALLEVIATION OF SALINE STRESS - <i>Tsobedi Absalom Masenya</i> | USING HYDROPEDOLOGY AS SOFT DATA TO REFLECT HYDROLOGICAL PROCESSES WITHIN SWAT+ - Isadore Edward Smit | SAFEGUARDING FOOD SECURITY THROUGH THE ADOPTION OF INDIGENOUS VEGETABLES IN THE EASTERN CAPE: A REVIEW - Nangamso Mtamzeli- Cekiso |
| 17h00 | EVALUATION OF THE AGRONOMIC PRACTICES OF BAMBARA GROUNDNUT PRODUCED BY SMALLHOLDER FARMERS IN MPUMALANGA PROVINCE, SOUTH AFRICA - Peggy Chikwaza | DIGITAL SOIL MAPPING ENABLES INFORMED DECISIONS TO CONSERVE SOILS WITHIN PROTECTED AREAS - <i>George Van Zijl</i> | CONSUMER ACCEPTANCE OF JAM FROM SELECTED INDIGENOUS FRUITS - Karen De Jager |
| 17h20 | SOYBEAN GROWTH PERFORMANCE AS AFFECTED BY PLANT DENSITY, ZINC ADDED TO PHOSPHORUS FERTILIZER SOURCE UNDER DIFFERENT ENVIRONMENTAL CONDITIONS - Madille Benjamin Gonyane | USING DIGITAL SOIL MAPPING METHODS FOR PRECISION AGRICULTURE - <i>Joaquim Geraldes</i> | EFFECTS OF DIFFERENT SOIL SUBSTRATES ON GROWTH AND MINERAL COMPOSITION OF LESSERTIA FRUTESCENS L. (GOLDBLATT & J.C. MANNING) SEEDLINGS CULTIVATED UNDER GLASSHOUSE CONDITIONS - Nokuthula Sithole |
| 17h50 | | Poster session | |
| 18h30 | | Cocktail | |

| Time slots | Programme | | | |
|-----------------|--|--|--|--|
| | 24-Jan-24 | | | |
| 07h00 to 08h00 | Registration Session 4 | | | |
| | | Session 4 | | |
| | Crops - Crop Production & Crop Quality | Soils - Soil fertility | Horts - Post-harvest biology | |
| Session Chair | Dr Belinda Janse van Rensburg | Leushantha Mudaly | Estelle Kempen | |
| 08h00 | EVALUATING THE CORRELATION BETWEEN THREE ASSESSMENTS OF PRE-HARVEST SPROUTING OF BREAD WHEAT - Sandra Hull | SOIL FERTILITY TRENDS IN THE SOUTH AFRICAN SUGARCANE SECTOR: A COMPREHENSIVE LOOK FROM 2017 TO 2022 - Thandile Mdlambuzi | CHANGES IN CAROTENOID AND METABOLITE PROFILES FROM LEAVES OF SIX CULTIVARS OF SWEET POTATO (IPOMOEA BATATAS L.) DURING LACTIC ACID FERMENTATION MAMAKGANA - <i>Florence Mashitoa</i> | |
| 08h20 | SUNFLOWER RESPONSE TO PLANTING DATE AND NITROGEN FERTILIZATION <i>- Safia Maáli</i> | THE EFFECTS OF SLAG & VESICULAR ARBUSCULAR MYCORRHIZA ON GROWTH AND YIELD OF SPINACH (FORDHOOK) - <i>Morakene Lambert Letsoalo</i> | EFFECT OF SUCROSE AND CALCIUM CHLORIDE PULSING ON EARLY SEASON 'HASS' AVOCADO FRUIT EXOCARP CHILLING INJURY AND COLOUR CHANGE DURING STORAGE AND RIPENING - <i>Nhlanhla Mathaba</i> | |
| 08h40 | UNDERSTANDING CUCURBITACIN CONTROL OF ROOT-KNOT NEMATODES - Zakheleni Dube | SIX YEARS OF BUSH CLEARING OF COLOPHOSPERMUM MOPANE DEPLETES SOIL NUTRIENTS IN A SAVANNA GRASSLAND - Vusi Sabela | HISTOLOGY OF POTATO TUBERS DURING INFESTATION BY SOFT ROT BACTERIA - Tlangelani Nghondzweni | |
| 09h00 | IMPROVED WHEAT YIELD IN CHALLENGING ENVIRONMENTS - <i>Vicki Tolmay</i> | UNDERSTANDING PHOSPHORUS FIXATION IN DIFFERENT SOIL TYPES - Phumla Magagula | THE EFFECT OF ORCHARD-APPLIED ETHEPHON ON POST-HARVEST MACADAMIA KERNEL QUALITY - Mark Penter | |
| 09h20 | BIOLOGICAL CONTROL OF AFLATOXINS IN GROUNDNUT - Bradley Flett | SHORT-TERM TILLAGE, PLANTING DATE, CULTIVAR AND ROTATION EFFECTS ON GRAIN SORGHUM GROWTH ON SANDY SOILS IN TWO DIFFERENT CLIMATIC CONDITIONS IN SOUTH AFRICA - <i>Hlayisani Zacharia Mabasa</i> | POSTHARVEST APPLICATION OF PLANT-BASED EDIBLE WAX FOR DELAYING POTATO TUBER SPROUTING - Juliet Manamela | |
| 09h40 | GLYPHOSATE RESISTANCE SURVEY OF CONYZA SPECIES AND HERBICIDE EFFICACY EVALUATION - Maryke Craven | PLANTING DATE, TILLAGE, AND CROP ROTATION EFFECTS ON THE GROWTH AND NUTRIENT USE OF TWO SORGHUM CULTIVARS GROWN ON SANDY CLAY LOAM SOILS IN SUB-HUMID AND SEMI-ARID REGIONS IN SOUTH AFRICA - Kaya Mrubata | DELAYING POTATO TUBER SPROUTING WITH ABSCISIC ACID CONTAINING SEAWEED EXTRACT KELPAK®: THE EFFECT ON SIFRA AND MONDIAL - Sophia Koka | |
| 10h10 tot 11h10 | | Keynote SASCP - Dr Michael Walsh | | |
| 11h10 - 11h40 | | Теа | | |

| | Session 5 | | |
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| | Crops - Crop Nutrition and Water & Crop Modelling | Soils - Soil chemistry | Hort production & cultivation practices & Rural development |
| Session Chair | Annemarie van der Merwe | Prof Alen Manyevere | Pippa Karsen |
| 11h40 | FACILITATING SUSTAINABLE MINE WATER IRRIGATION - John Annandale | NITRIFICATION RATE IN THE SOIL AS INFLUENCED BY WHEAT LANDRACE VARIETIES - <i>Michael Kidson</i> | EFFECT OF CALCIUM CYANAMIDE AS AN ALTERNATIVE NITROGEN SOURCE ON GROWTH, YIELD, AND NITROGEN USE EFFICIENCY OF SHORT- DAY ONION - Zakhe Simelane |
| 12h00 | POTATO TUBER QUALITY AND NITROGEN USE EFFICIENCY RESPONSES TO INTEGRATED NUTRIENT MANAGEMENT - Jabulani Ntuli | OXALATE SALT CONCENTRATIONS OF VEGETATION AND TERMITE FRASS IN THE GREATER CAPE FLORISTIC REGION OF SOUTH AFRICA - <i>Teneille Nel</i> | EVALUATING THE EFFECTS AND BENEFITS OF COVER CROPS IN CITRUS ORCHARDS - <i>Sibongiseni Silwana</i> |
| 12h20 | CROP RESPONSE TO IRRIGATION WITH UNTREATED AND PARTIALLY TREATED MINE WATERS - Siboniso Magwaza | CREATING A NEAR-INFRARED SPECTROSCOPY CALIBRATION ALGORITHM FOR SOIL ORGANIC CARBON CONTENT FOR SOUTH AFRICA - <i>Willie</i> <i>Cloete</i> | INFLUENCE OF EXOGENOUSLY APPLIED PLANT EXTRACTS ON GROWTH, PHYSIOLOGICAL AND YIELD PARAMETERS OF SUMMER SQUASH (CUCURBITA PEPO L.) - Siphokuhle Mbuyisa |
| 12h40 | EFFECTS OF PHYSIOLOGY, GROWTH AND YIELD OF DIFFERENT MULTIPLE-PARENT ADVANCED GENERATION INTER-CROSS (MAGIC) AMARANTH GENOTYPES UNDER VARYING WATER REGIMES - Lindiwe Khoza | CALCULATING SOIL TITRATABLE ACIDITY FROM ROUTINE SOIL ANALYSES OF CULTIVATED SOUTH AFRICAN SOILS USING VARIOUS MODEL STRUCTURES - Vivian White | EVALUATION OF THE USEFULNESS OF EARLY LEAF ANALYSIS TO IMPROVE NUTRITION MANAGEMENT OF CITRUS - <i>Pieter Raath</i> |
| 12h00 | IN-FIELD ASSESSMENT OF SOIL WATER DYNAMICS OF IRRIGATED POTATO GROWN ON SANDY SOILS - Alex Mukiibi | HEAVY METAL PHYTOREMEDIATION OF MINE CONTAMINATED SOILS USING SELECTED INDIGENOUS CROPS - Sharon Nomthandazo Ndhlovu | CLASSIFICATION OF SMALLHOLDER FARMERS ACCORDING TO LIVELIHOODS COPING STRATEGIES AND LIVELIHOOD OUTCOMES IN THE LIMPOPO PROVINCE - Sydney Shikwambana |
| 12h20 | EXAMPLES OF IODINE AS MICRONUTRIENT IN PLANTS, FOR IMPROVEMENT OF THE MAIN COMMERCIAL GREENHOUSE CROPS CULTIVATION - Suzette Smalberger | COMPARISON OF THE EFFECTIVENESS OF MINED AND BY-PRODUCT SOUTH AFRICAN GYPSUM MATERIALS FOR SOIL SODICITY REMEDIATION - <i>Marina du Plessis</i> | CHALLENGES AND SUCCESSES OF COMMUNITY DEVELOPMENT IN THE HONEYBUSH SECTOR - <i>Cecilia Bester</i> |
| 12h40 | CLIMATE CHANGE IMPACTS ON CANOLA GROWTH AND YIELD CHARACTERISTICS: CHALLENGES AND OPPORTUNITIES - Andries le Roux | | |
| 12h40 to 13h30 | | Lunch | |

| | Session 6 | | |
|----------------|--|---|---|
| | Crops - Crop physiology & Agrometeorology | Soils - Soil chemistry & technology | Horts - Crop protection, Biotechnology, Breeding, Propagation & Physiology |
| Session Chair | Dr Elmarie van der Watt | Prof Elmarie Kotze | Bonga Ncgobo |
| 13h30 | THE IMPACT OF ACCESS TO CLIMATE SERVICES ON SMALLHOLDER FARMERS' CROPPING DECISIONS AND FOOD SECURITY IN ELUNDINI LOCAL MUNICIPALITY, EASTERN CAPE PROVINCE - Yanga Nocezo | TERMITE MOUNDS: ENDANGERED CARBON PUMPS OF THE SEMI-ARID WEST COAST REGION? - Cathy Clarke | AGRICULTURAL RESEARCH COUNCIL- VEGETABLE INDUSTRIAL AND MEDICINAL PLANTS - Beverly Mampholo |
| 13h50 | EVALUATING MACHINE LEARNING MODELS FOR SUB-FIELD MAIZE YIELD PREDICTIONS IN PRECISION AGRICULTURE - Simphiwe Maseko | THE EFFECT OF ALIEN INVASIVE PLANT BIOCHARS ON SANDY SOIL QUALITY AND CAULIFLOWER YIELD - Sipho Mncedi | HOST-STATUS OF 16 CROPS USED IN POTATO ROTATION - Kgabo Martha Pofu |
| 14h10 | EFFECT OF SELECTED BIOSTIMULANTS ON THE PHYSIOLOGY AND GROWTH OF THE COMMON ONION (ALLIUM CEPA L.) - <i>Elmarie van der Watt</i> | OCCURRENCE AND CONCENTRATION LEVELS OF SELECTED EMERGING CONTAMINANTS AND THEIR METABOLITES IN REPRESENTATIVE AGRICULTURAL LANDS AROUND GAUTENG PROVINCE, SOUTH AFRICA - Matome Peter Ngoetjana | BIOCHEMICAL PROFILING OF HONEYBUSH (CYCLOPIA SPP.) STOCK PLANTS AS RELATING TO SEASONAL VARIATION OF CUTTING ROOTING POTENTIAL - <i>Pippa Karsen</i> |
| 14h30 | THE EFFECT OF SALICYLIC ACID AND ANTIOXIDANTS ON GROWTH AND PRODUCTION OF FIELD-GROWN WHEAT (TRITICUM AESTIVUM L 'MATLABAS') SUBJECTED TO HEAT AND WATER STRESS - Nicolaas Roets | INVESTIGATION OF LIMING AND NITRIFICATION SUPPRESSION POTENTIAL OF LOCAL BIOCHARS - Ruben De Bod | EFFECTS OF DIFFERENT PLANT GROWTH REGULATORS ON ESTABLISHMENT OF A MICRO- PROPAGATION PROTOCOL OF GREEN PEPPER (CAPSICUM ANNUUM L.) - <i>Mfihlakalo Zikalala</i> |
| 14h50 | BIOCHEMICAL RESPONSE OF UPLAND RICE CULTIVARS TO DROUGHT ON POOR SOIL AUGMENTED WITH COMPOST, GLOMUS MOSSAE AND NPK 15-15-15 FERTILIZER - <i>Oyeyemi Dada</i> | ASSESSING THE INFLUENCE OF REHABILITATION STRATEGIES ON SOIL QUALITY AT MOKALA NATIONAL PARK, SOUTH AFRICA - <i>Cowan McLean</i> | COMPILING AND VALIDATING A MORPHOLOGICA DESCRIPTOR LIST FOR SCENTED GERANIUMS - Willem Jansen Van Rensburg |
| 15h10 | DIURAPHIS NOXIA RESISTANCE IN COMMERCIAL SOUTH AFRICAN CULTIVARS - <i>Vicki Tolmay</i> | CREATION OF NEAR-INFRARED SPECTROSCOPY CALIBRATION ALGORITHMS FOR SOIL WATER RELATED PROPERTIES - Jacques Faul | LEAF ANATOMICAL TRAITS OF MACADAMIA CULTIVARS WITH POTENTIAL LINKS TO DROUGHT TOLERANCE - <i>Khodani Maumela</i> |
| 15h30 to 16h00 | | Tea break | |

| | Session 7 | | |
|----------------|------------------|-----|-----|
| | Crops Soil Horts | | |
| 16h00 to 17h30 | AGM | AGM | AGM |
| 17h45 | Poster session | | |
| 18h30 | Braai | | |

| Time slots | Programme | | |
|-----------------|--|---|--|
| | 25-Jan-24 Registration | | |
| 07h00 to 08h00 | | | |
| 08h00 to 9h00 | | Keynote Hortological Science - | |
| | | Session 8 | Γ |
| | Crops - Agrometeorology | Soils -Soil Genesis | Horts - Nutrition & water management |
| Session Chair | Prof Martin Steyn | Prof Eyob Tesfamariam | Kgabo Phofu |
| 09h10 | NON-LINEARITY OF THE ETO RELATIONSHIP: AN EXCEL VBA IMPLEMENTATION AS A RESEARCH AND TEACHING TOOL - <i>Michael Savage</i> | EXAMINATION OF SOIL HYDROLOGICAL BEHAVIOR IN GRASSLAND, RANGELAND, AND CROPLAND LAND USES USING HYDROPEDOLOGICAL INTERPRETATION IN THE SELECTED ECOTOPES OF THE EASTERN CAPE PROVINCE OF SOUTH AFRICA - Siphamandla Nyambo | RESPONSE OF NUTRITIONAL WATER PRODUCTIVITY IN OKRA (ABELMOSCHUS ESCULENTUS) SEEDS TO IRRIGATION INTERVAL - <i>Ndivhuho Mutshekwa</i> |
| 09h30 | COMPARATIVE WATER USE BY FAST-GROWING EUCALYPTUS CLONAL HYBRID AND PINUS ELLIOTTII NEAR TWO STREAMS CATCHMENT IN SOUTH AFRICA - <i>Nkosinathi Kaptein</i> | VISUAL EVALUATION OF SOIL STRUCTURE UNDER LONG-TERM NO-TILLAGE SYSTEM - Kopano Phefadu | DO PROTECTIVE NETS REDUCE WATER USE AND IMPROVE WATER PRODUCTIVITY IN APPLE ORCHARDS UNDER MEDITERRANEAN-TYPE CLIMATI CONDITIONS? - Stephanie Midgley |
| 09h50 | APPLICATION OF HEAT UNITS FOR SUSTAINABLE MANAGEMENT OF MAIZE CROP PRODUCTION IN THE FREE STATE PROVINCE, SOUTH AFRICA - <i>Mokhele Moeletsi</i> | ESTIMATION OF SOIL EROSION USING GIS AND REMOTE SENSING INTEGRATION WITH RUSLE MODEL IN UMGENI CATCHMENT, SOUTH AFRICA - Nicholas Byaruhanga | A DEMONSTRATION ON HOW PLANT WATER POTENTIAL-BASED DEFICIT IRRIGATION ALTERS PHYSIOLOGICAL, REPRODUCTIVE AND WINE QUALITY RESPONSES OF GRAPEVINE IN THREE DIFFERENT CLIMATIC REGIONS - John-Murray Visser |
| 10h10 | EXPLORING THE RISK PROFILE OF SEASONAL FORECAST UPTAKE IN VITICULTURE - Zwelihle Fidelity Khumalo | SHORT- AND LONG-TERM FIRE EFFECTS ON SOIL HYDROLOGICAL PROPERTIES IN THE KRUGER NATIONAL PARK - <i>Tercia Strydom</i> | WATER USE AND CROP PERFORMANCE UNDER DRI AND SELF-REGULATING, LOW ENERGY, CLAY BASEE IRRIGATION (SLECI) SYSTEMS - Hunadi Abigail Chaba |
| 10h20 | SEASONAL FORECAST INFORMATION, AWARENESS, ACCESS, AND LOCAL UPTAKE : THE CASE OF COMMERCIAL AND SMALLHOLDER FARMING SYSTEMS IN THE WESTERN AND EASTERN CAPE PROVINCES - Olivier Crespo | THE EFFECT OF NATURAL FIELD-AGING OF INVASIVE ALIEN WOODY PLANT BIOCHARS ON HYDRAULIC PROPERTIES OF SANDY SOILS - <i>Roeline Van</i> <i>Schalkwyk</i> | WATER RETENTION POTENTIAL OF BIOCHAR MADE FROM STEMS OF MORINGA AND VARIOUS INVASIVE PLANTS - <i>Simon Kgathatso Maleka</i> |
| 10h40 | ESTIMATION OF POTATO CROP COEFFICIENTS AND EVAPOTRANSPIRATION FROM CANOPY MEASUREMENTS AND SATELLITE-BASED NDVI - <i>Martin Steyn</i> | | |
| 10h40 tot 11h10 | | Теа | <u>I</u> |

| | Session 9 | | |
|---------------------|--|---|---|
| | Soils - Soil biology & fertility | Soils - Soil genesis, classification & mapping | Horts - New and alternative crops |
| Session Chair | Dr. Gerhard Nortje | Prof George van Zijl | Karin Hannweg |
| 11h10 | SHORT-TERM EFFECTS OF CONSERVATION AGRICULTURE ON SOIL HEALTH DYNAMICS: A MULTI-YEAR STUDY IN OTTOSDAL, SOUTH AFRICA - <i>Gerhard Du Preez</i> | CREATING SAMPLING STRATEGIES TO DETERMINE SAMPLE SIZE AND POSITION FOR OPTIMAL COVERAGE USING DIGITAL SOIL MAPPING TECHNIQUES - <i>Molebaleng Sehlapelo</i> | PRE- AND POST-HARVEST LOSSES OF SWEET POTATO AND OUTLOOK ON THE PROCESSING POTENTIAL OF ORANGE-FLESHED SWEET POTATO - <i>Sunette Laurie</i> |
| 11h30 | IMPACTS OF GLYPHOSATE ON SOIL MICROBIAL COMMUNITIES IN SOYBEAN SYSTEMS - Ayabonga Sibalekile | MAPPING OF SALT AFFECTED SOILS IN SOUTH AFRICA: MACHINE LEARNING APPROACH - Adolph Malatji | NUTRITIONAL COMPOSITION AND PHYTOCHEMICAL PROPERTIES OF SELECTED AMARANTH LANDRACES UNDER OPEN FIELD CULTIVATION - Manaka Makgato |
| 11h50 | STRATEGICALLY INTEGRATING LEGUMES IN MAIZE CROPPING SYSTEMS - Canon Engoke | COMPARING MACHINE LEARNING AND KRIGING FOR PREDICTING TOPSOIL ORGANIC CARBON DISTRIBUTION IN THE WESTERN CAPE PROVINCE OF SOUTH AFRICA – Nokwazi Ngubo | ETHANOL PRODUCTIVITY OF SWEET SORGHUM (SORGHUM BICOLOR (L.) MOENCH) VARIETIES AS A SOURCE OF BIOFUEL UNDER DRYLAND CONDITIONS OF THE FREE STATE - <i>Lesego Kok-Ngonyama</i> |
| 12h10 | Impact of topsoil mining for unfired mudbricks on soil quality in eastern KwaZulu-Natal, South Africa Nkosinomusa Buthelezi-dube | Evaluating the value of spatial and temporal resolution for mapping biogenic earth mounds based on machine learning. Grace Maponya | An Evaluation of Kenaf as a Multipurpose Nutrient- Rich Feed Alternative Ebrahiema Arendse |
| 12h20 | EVALUATING THE EFFECT OF PHOSPHATE AND PECTIN-SUPPLEMENTED BIO-FERTILIZERS ON THE GROWTH AND YIELD OF LENTIL (LENS CULINARIS M.) - Keshav Adhikari | COUPLING TRADITIONAL SOIL SURVEY, CLASSIFICATION APPROACHES AND GEOSTATISTICAL TECHNIQUES TO DELINEATE AND DIGITALLY MAP SOIL MANAGEMENT ZONES IN A BANANA PLANTATION SEOME - Michael Swafo | EVALUATING GRAIN YIELD AND NUTRITIONAL COMPOSITION OF TWO LEGUME SPECIES IN FARMERS' FIELDS IN FOUR MUNICIPALITIES OF VHEMBE DISTRICT - Vhakholwi Matidze |
| 12h40 | ALTERNATIVE USE OF INVASIVE PLANTS RELATING TO MORINGA FOR BIOCHAR TO IMPROVE SOIL QUALITY: CASE STUDY OF SWISSCHARD (BETA VULGARIS L.) - Thabo Selby Nkuna | | |
| 13h00 | | Get lunch packs and board bus to practical visits | |
| 13h30 busses leave | | | |
| 17h00 busses arrive | | Practical Visits | |
| 19h00 for 19h30 | | Gala dinner - Fancourt | |
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