



### Sunday, 21 July 2024

**14:00 to 18:30**

Arrival and registration (Cape Town International Convention Centre, CTICC)

**16:00 to 18:00**

Film: *Roots So Deep (you can see the devil down there)* with a short Q&A with

**Prof Peter Byck**

**18:30**

Welcome cocktail

### Monday, 22 July 2024

Plenary sessions

Venue 1

**Opening session: Welcome addresses (90)**

**08:00 to 09:25**

**Master of ceremonies: Chris Burgess,**

Editor-in-chief: *Landbouweekblad*

**Prof Johann Strauss**, 9WCCA Chair (5)

**Dr Ivan Meyer**, Western Cape minister of Agriculture, Economic Development and Tourism (20)

**RL Bosoga**, Department of Agriculture (20)

**Beth Bechol**, deputy director-general: Food and Agriculture Organization (FAO) of the United Nations (20)

**Stephan Gouws** and **Vikar Shepershad**, John Deere (Diamond sponsor) (20)

**Session 1: Conservation agriculture around the world (60)**

**09:30 to 10:30**

**Moderator: Dr Ilse Trautmann**

**Rapporteur: Annelene Swanepoel**

**Dr Theodor Friedrich:** The drivers and systems of successful adoption of conservation agriculture in different parts of the world (30)

**Saidi Mkomwa:** Resolutions from the Third African Congress on conservation agriculture (30)

**10:35 to 11:05**

Coffee break

**Session 2: Conservation agriculture challenges (60)**

**11:10 to 12:10**

**Moderator: Prof Pieter Swanepoel**

**Rapporteur: Charne Viljoen**

**Prof Ken Flower:** Reliance on herbicides: the Achilles heel of conservation agriculture in Australia (30)

**Prof Peter Byck:** Soil health, farmer wealth: can adaptive multi-paddock grazing get farmers out of debt, restore the land and be a climate solution? (30)

**12:20 to 13:20**

Lunch

**Session 3: Crops and crop/livestock conservation agriculture systems (130)**

**13:30 to 15:20**

**Moderator: Dr Hendrik Smith**

**Rapporteur: Prof Johann Strauss**

**Cobus Bester:** Conservation agriculture under Mediterranean conditions in the Western Cape (20)

**Danie Bester:** Conservation agriculture under summer rainfall in Mpumalanga (20)

**Rick Clark:** My journey towards zero chemical inputs in Indiana, America (30)

**Farmers' panel discussion (60)**

**Egon Zunckel**, South Africa

**Vikas Chaudhary**, India

**Alfred Fast**, Paraguay

**Emilio Gonzalez**, Spain

**Rick Clark**, America

**15:30 to 16:00**

Coffee break

**Session 4: Extensive livestock systems**

**16:05 to 16:55 (50)**

**Moderator: Andrew Ardington**

**Rapporteur: Liane Erasmus**

**DF Fyfer**, South Africa

**Danie Slabbert**, South Africa

**James Brodie**, South Africa

**Peter Byck**, America

**Session 5: Role of sustainable agricultural mechanisation in scaling the adoption of smallholder conservation agriculture in Africa (120)**

**17:00 to 17:30**

**Moderator: Assistant director-general**

**Abebe Haile-Gabriel**

**Rapporteurs: Weldone Mutai and**

**Andriamady Rondromalala**

**Dr Bram Govaerts:** Scaling of regenerative conservation agriculture via sustainable agricultural mechanisation: the International Maize and Wheat Improvement Center (CIMMYT) approach (30)

**Panel discussion (90)**

**17:30 to 19:00**

**Saidi Mkomwa:** Introductory remarks about the Framework for Sustainable Agricultural Mechanisation in Africa (F-SAMA) and the session

**HE Madam Josefa Sacko:** Retiring the hand hoe to the museum, and the call to action to member states, private sector and development partners

**Katie Kennedy Freeman:** Directions for investments in sustainable agricultural mechanisation with conservation agriculture

**Sieglinde Snapp:** Conservation agriculture on the move: a learning agenda through digital, mechanisation and service models

**Geoffrey Mrema:** Conservation agriculture and sustainable agriculture matrix synergy: Role of the medium-scale farmers

**Josef Kienzle:** The futuristic perspective of operationalisation of the F-SAMA

**Abebe Haile-Gabriel:** Questions and answers, and the way forward



## Main plenary

## John Deere Breakaway Venue

## Landbouweekblad Breakaway Venue

### Session 6 (08:00 to 10:00)

#### Special session | Soil health measurements - sense and non-sense (120)

Moderator: **Prof Johann Strauss**  
Rapporteur: **Prof Pieter Swanepoel**

**Prof Karin Jacobs:** Sense and non-sense in soil health: the role of a functional microbiome in regenerative agriculture (30)

**Dr Ieda de Carvalho Mendes:** Large-scale soil health assessments in Brazil using soil enzymes (30)

**Prof Bobbi Helgason:** Successes and surprises: conservation agriculture in the Canadian prairies (30)

**Prof Gerhard Du Preez:** Context matters: what roles do environmental and management factors play in promoting soil health? (30)



#### Special session | Scaling conservation agriculture in Africa: contextual innovations for closing the research to impact gaps (120)

Moderator and introduction of side event: **Paswel Marenya**  
Concluding comments and synthesis: **Reynolds Shula**

**Sieglinde Snapp:** Next-generation research infrastructure for accelerated scaling and impacts

**Hambulo Ngoma:** What drives adoption on small farms? Evidence from Eastern & Southern Africa

**Klaus Droppelmann:** Scaling soil fertility restoration in Zambia: linking farmer field schools, extension, and input provision  
**Rachid Moussadek:** Going big: ingredients for the Morocco green growth vision of 1 million hectares under conservation agriculture by 2030

**Naufel Roudies:** Low cost for high-impact innovation: enhancing adoption of mechanised conservation agriculture in Africa by smallholder farmers

**Philip Wanjohi:** Data is oxygen: AfricaMechanize platform and its role in information dissemination on F-SAMA

#### Special session | Technology for better decision-making in conservation agriculture (60)

Moderator: **Dr Amelia Genis**  
Rapporteur: **Alani Janeke**

Conservation and regenerative farmers rely on technologies like satellite applications, autosteer, and variable-rate systems, along with crop sprayers and combines. South Africa contributes with its own technology, including locally made grain planters and specially bred wheat, barley, and livestock suited to its unique conditions. These innovations, supported by local agricultural services, enhance the productivity and efficiency of farming systems.

#### Special session | Legacy: Legends of South African conservation farming (60)

Moderator: **Chris Burgess**  
Rapporteur: **Alani Janeke**

The unsung heroes, farmers like Jack Human, Bertie Eksteen, and Andre Lund, solved significant farming challenges by embracing nature, paving a path for future generations in conservation agriculture.

### Coffee break (10:00 to 10:30)

### Session 7 (10:30 to 12:00)

#### Special session | Food safety, human nutrition and climate change in conservation farming systems (90)

Moderator: **Chris Burgess**  
Rapporteur: **Alani Janeke**

What are the unique and compelling reasons to market and sell food and fiber produced in conservation farming systems? Does nutrient-dense food or ethically produced fiber translate into a direct financial benefit for farmers? And how does one get consumers to care that these systems over time promise to use less pesticides, as plants and animals are most likely to exist under less stress due to functioning soil microbiomes.



#### Special session | Gender equity, youth and social inclusion (GEYSI) in conservation agriculture (CA) (90)

Moderator: **Monica Fisher**  
Plenary feedback from the small-group discussion: **Cathy Rozel Farnworth**

**Sieglinde Snapp:** Welcome to the special session

**Munyaradzi Mutenje:** Engendering inclusiveness of bundled climate resilient innovations in Zambia

**Adane Tufa:** Implications of intra- and inter-household differences in conservation agriculture adoption for gender equality in agriculture in Southern Africa

**Henry R. Mloza Banda:** Exploring the role of intergenerational transmission of skills and knowledge in facilitating conservation agriculture in Southern Africa

**Monica Fisher:** Designing agricultural advisory approaches to promote social inclusion in conservation agriculture awareness and uptake: lessons from Zambia

**Cathy Rozel Farnworth:** Small-group discussions on research gaps, defining a gender equality, youth and social inclusion research agenda, and how to encourage research on the topic

**Cathy Rozel Farnworth:** Plenary feedback from the small-group discussion

#### Special session | Interphase between agroecology and conservation agriculture (CA) (90)

Moderator: **Futhi Magagula**  
Rapporteur: **Mr Manuel Matsinhe / Ms Mirjam Tapooi**

**Futhi Magagula:** Welcome and introductions (5)

**Dr Stephen Greenberg:** Transition towards agroecological agriculture (25)

**Panel discussion lead by Dr Patricia Masikati: Compatibility between conservation agriculture and agroecological production? (5)**

**Prof Regis Chikowo:** Conservation agriculture in the face of a food systems transformation (10)

**Prof Raymond Auerbach:** Bio-solutions towards supporting conservation agriculture (10)

**Sina Luchen:** Adoption of conservation agriculture/agroecology: implications for food security (10)

**Prof Daimon Kambewa:** Community mobilisation towards agroecology production: Experiences from Malawi (10)

Audience discussion (Q&A) (15)  
Wrap-up: Key messages (10)

## Main plenary

## John Deere Breakaway Venue

## Landbouweekblad Breakaway Venue

### Session 8 (12:00 to 13:20)

#### Promoting conservation agriculture-based knowledge (80)

Moderator: **Prof Cornie Van Huyssteen**  
Rapporteur: **Dr Flackson Tsuma**

**Dr Jana Epperlein:** Supporting adoption of conservation agriculture in Europe: first experiences with a farmer-based movement in German-speaking European countries (20)

**Assoc Prof Antonio Rafael Sánchez-Rodríguez:** Soil health in a cereal-oleaginous crop rotation under no tillage in a semiarid region in Spain: nutrient use efficiency and biodiversity (20)

**Assoc Prof Emilio J. González-Sánchez:** Worldwide trends in conservation agriculture and climate change scientific production (20)

**Kelvin Kalala:** Long-term impacts of conservation tillage practices on soil quality and maize yield in Monze, Southern Province, Zambia (20)

#### Farm- and ecosystem-level benefits (80)

Moderator: **Dr Cloe MacLaren**  
Rapporteur: **Dr Neal Eash**

**Dr Isaiah Nyagumbo:** Conservation agriculture can be an effective fall armyworm control strategy in maize-based cropping systems in Southern Africa (20)

**Dr Md Abdul Matin:** Mitigating labour bottlenecks and improving productivity of smallholder conservation agriculture farmers in Sub-Saharan Africa through mechanisation (20)

**Selebalo Joseph Ramakhanna:** Farmers' perceptions and factors influencing adoption of no-till among beans and maize farmers in Lesotho (20)

**Dr Johan van der Waals (Real IPM):** The effect of soil organic matter fractions in conservation agriculture (20)

#### Mainstreaming of conservation agriculture (80)

Moderator: **Dr Sue Walker**  
Rapporteur: **Dr Kofi Boa**

**Dr Mina Devkota:** Opportunities, challenges and future outlook of conservation agriculture in the Middle East and North Africa (20)

**Dr Melmangalam Ramasubramanian:** Constraints in adoption of conservation agriculture among the farming communities in different agro-climatic zones of Tamil Nadu State, India (20)

**Mathew Abang:** Southern Africa's roadmap to sustainable agricultural mechanisation: navigating challenges in climate-smart agriculture (20)

**Dr Rachid Moussadek:** Accelerating the adoption of the conservation agriculture to 1 million hectares in Moroccan drylands by 2030: challenges and opportunities (20)

### 13:30 to 14:20 Lunch

### Session 9 (14:30 to 17:00)

#### Examples of successful conservation agriculture adoption and scaling out/up (140)

Moderator: **Assoc Prof Emilio J. González-Sánchez**  
Rapporteur: **Dr Theodor Friedrich**

**Dr Christian Thierfelder:** Unanswered questions and unquestioned answers: the challenges of crop residue retention and weed control in conservation agriculture systems of Southern Africa (20)

**Dr Denizart Bolonhezi:** Soil health and soybean yield responses to strategic tillage and cover crops in long-term no-tillage (20)

**Dr Wei Xiong:** The optimisation of conservation agriculture practices requires attention to location-specific performance: evidence from large-scale gridded simulations across South Asia (20)

**Dr Hambulo Ngoma:** Understanding sustained adoption of conservation agriculture among smallholder farmers: insights from a sentinel site in Malawi (20)

**Prof Sue Walker:** Comparison of conservation, regenerative and agro-ecological agriculture in South Africa (20)

**Dr Willem Hoffmann:** Profitability of sheep production in modified conservation cropping systems in the middle Swartland (20)

**Prof Aziz Nurbekov:** Effect of different crop residue rates on productivity of winter wheat yield under no-till method in salt-affected regions of Uzbekistan (20)

#### Farmers' session 1 (120)

Moderator: **Saidi Mkomwa**  
Rapporteur: **Dr Matthew Mbanga**

**Prof Cornie Van Huyssteen:** The effect of *Trichoderma asperellum* on fodder yield in the southern Cape (20)

**Mark Stewart:** A diverse South African conservation farming journey in a nutshell (20)

**Temakholo Mathebula:** Regenerative agriculture in smallholder farming systems in the Natal Midlands: a case study of Martina Xulu (20)

**Leon Badenhorst:** Lente Farm regenerative dairy farm development process (20)

**Klaus Keppler:** Our way to no-till farming  
**Prof Raymond Auerbach:** Chinese dairy farming in the Mongolian desert (20)

**José Mário Lobo Ferreira:** Surface temperature variation as a proxy for soil health assessment in Cerrado biome agro-ecosystems (20)

#### Farm- and ecosystem-level benefits (120)

Moderator: **Assoc Prof Stephanie Midgley**  
Rapporteur: **Dr Isaiah Nyagumbo**

**Dr John N. Landers (presented by Dr Ieda Mendes):** Areas where conservation agriculture can advance (20)

**Dr Mohammad Esmaeil Asadi:** Comparison of the efficiency of energy consumption of conservation agriculture and conventional methods in wheat, rapeseed and irrigated cotton crops in Golestan Province, Iran (20)

**Prof Johann Strauss:** Conservation agriculture system stability under varying rainfall

**Dr Stephano Haarhoff:** Nutrient management for grain and oilseed crops in the summer rainfall region of South Africa (20)

**Julio Román-Vázquez:** The role of conservation agriculture in enhancing biodiversity in agricultural ecosystems (20)

**Neil Miller:** *Lablab purpureus* (L.) sweet intercropping provides production, sustainability and environmental benefits for farmers in northern Tanzania (20)

**Eleanor Mutsamba-Magwaza:** Soil moisture dynamics in maize-legume intercropping systems in semi-arid region (20)

### Free evening



## Main plenary

## John Deere Breakaway Venue

## Landbouweekblad Breakaway Venue

### Session 10 (08:30 to 09:30)

**Panel discussion: The future of conservation agriculture (60)**  
**Moderator: Chris Burgess**  
**Rapporteur: Prof Johann Strauss**

**Leïth Ben Becher**, Tunisia  
**Prof Pieter Swanepoel**, South Africa  
**Prof Gottlieb Basch**, Spain  
**Dr Nele Verhulst**, Mexico  
**Dr Enamul Haque**, Bangladesh

**Panel discussion: Challenges to small-scale farmers (60)**  
**Moderator: Klaas Mampholo**  
**Rapporteur: Dr Jaap Knot**

**Erna Kruger**, South Africa  
**Dr Francis Boa-Amponsem**, Ghana  
**Dr Christian Thierfelder**, Zimbabwe  
**Royd Miselo**, Zambia  
**Dr Matthew Mbanga**, Zimbabwe

**Special session | Management: The legume conundrum of South Africa's winter rainfall region (60)**  
**Moderator: Dr Amelia Genis**  
**Rapporteur: Liana Mocke**

Crop rotation with legumes is vital for sustainable agriculture in South Africa's winter region, supporting grazing and hay production. However, using legumes as a cash crop in continuous cropping faces scalability challenges.

### Session 11: (09:40 to 11:00)

**Farmers' session 2 (80)**  
**Moderator: Dr Jaap Knot**  
**Rapporteur: Dr Hendrik Smith**

**Vikas Chaudhary**: Role of farmer cooperatives in refining and scaling of smart agriculture technologies in Haryana, India (20)  
**Nqobile Mbokazi**: Conservation agriculture and livestock integration, Phumelele Hlongwane and Nothile Zondi, small-scale farmers, Bergville, South Africa (20)  
**Dirk Laas**: Participatory on-farm research to adapt conservation agriculture in the semi-arid North West province, South Africa (20)  
**Cobus van Coller**: The development of conservation agriculture systems on a farm in the arid, sandy northwestern Free State, South Africa (20)

**Examples of successful conservation agriculture adoption and scaling out/up (80)**  
**Moderator: Dr Vijesh Krishna**  
**Rapporteur: Dr Blessing Mhlanga**

**Dr Chloe MacLaren**: Farm management or the environment: what determines whether crop diversification works? (20)  
**Dr Martin Harries**: Western Australian no-till farmers continue to increase water-use efficiency (20)  
**Dr Ramin Lotfi**: The status of conservation agriculture development in Iran's dryland farming system (20)  
**Talent Namatsheve**: Synergistic effects of conservation agriculture and biochar on nitrous oxide emissions, biological N<sub>2</sub>-fixation and soil N dynamics in three contrasting soils (20)

**Promoting conservation agriculture-based knowledge (80)**  
**Moderator: Dr Gert van Coller**  
**Rapporteur: Mohamed Jadiaoui**

**Prof Chunsheng Hu**: Effect of mineral N fertiliser and organic input on maize yield and soil water content for assessing optimal N and irrigation rates in central Kenya (20)  
**Prof Johann Strauss**: Driving conservation agriculture adoption in the Western Cape, South Africa (20)  
**Dr Brian Muroyiwa**: Determinants of no-till conservation agriculture adoption in maize and bean cultivation in Lesotho (20)  
**Francesco Carnevale Zampaolo**: Compatibility between conservation agriculture and the system of rice intensification (20)

### Coffee break (11:00 to 11:30)

### Session 12 (11:30 to 12:40)

**Farm and ecosystem level benefits (80)**  
**Moderator: Dr Sjoerd Duiker**  
**Rapporteur: Paswell Marenja**

**Dr Blessing Mhlanga**: Two crops are better than one for nutritional and economic outcomes of Zambian smallholder farms, but require more labour (20)  
**Alfonso Moreno Moraga**: The effect of *Rhizoglosum* spp. applied as a biostimulant to durum wheat on the crop productivity and quality, when planted with direct seeding and reduced fertiliser doses (20)  
**Prof Tesfay Araya Weldeslassie**: Improving crop productivity, resilience and sustainability through conservation agriculture systems in Eastern Cape, South Africa (20)  
**Bisrat Getnet Awoke**: Evaluating agronomic and economic performance of 4WT-based mechanised conservation tillage systems in Ethiopia (20)

**Mainstreaming of conservation agriculture (80)**  
**Moderator: Prof Gottlieb Basch**  
**Rapporteur: Dr Yash Dang**

**Dr Hendrik Smith**: Adoption of conservation agriculture in South Africa - from current insights and initiatives towards future needs and responses (20)  
**Assoc Prof Emilio J. Gonzalez-Sanchez**: Harvesting sustainable futures: global perspectives on the adoption of conservation agriculture (20)  
**Óscar Veroz-González**: Conservation agriculture in the European common agricultural policy (CAP): The eco-schemes in Spain (20)  
**Dr MD Enamul Haque**: Bio-physical and social constraints restrict adoption, yield and economic gains from long-term conservation agriculture in intensive rice-based systems (20)

**Promoting conservation agriculture-based knowledge (80)**  
**Moderator: Prof Antonio Rafael Sánchez-Rodríguez**  
**Rapporteur: Lewis Hove**

**Prof Mohamed Annabi**: Conservation agriculture to rebuild soil fertility in northern Tunisia (20)  
**Boitumelo Lekgoathi**: Effect of intercropping dry bean with indigenous crops on soil health under regulated deficit irrigation (RDI) (20)  
**Dr Jaap Knot**: Benefits of cover crops in commercial maize-based conservation agriculture production systems of South Africa (20)  
**Dr Denizart Bolonhezi**: How to improve the soybean grain yield and root system in a long-term trial of no-tillage under sugarcane straw (20)

### Lunch (12:50 to 13:35)

Main plenary

John Deere Breakaway Venue

Landbouweekblad  
Breakaway Venue

Session 13 (13:40 to 16:00)

**Farm and ecosystem level benefits (120)**  
Moderator: **Josef Kienzle**  
Rapporteur: **Dr Martin Harries**

**Hanneke Augustyn:** The nitrogen availability in soil following legume crops and their effect on the subsequent crop (20)

**Erna Kruger:** Successful adoption of a range of practices within conservation agriculture in smallholder farming systems in KwaZulu-Natal, South Africa leads to improved climate resilience (20)

**Frits van Oudtshoorn:** The impact of ultra high-density grazing on botanical composition, diversity and productivity (20)

**Dr Jaap Knot:** A risk analysis quantifying the benefits of integrated crop-livestock conservation agriculture systems (20)

**Dr Abir Dey:** Impacts of conservation agriculture on quality and mineralisation of soil organic matter under contrasting hydro-thermal regimes of rice-wheat system in eastern Indo-Gangetic Plains (20)

**Dr Lutécia Beatriz Canall:** Conservation agriculture in a subtropical region of Brazil: soybean yield and soil health parameters after 37 years (20)

**Farm and ecosystem level benefits (140)**  
Moderator: **Prof Tesfay Araya Weldelessie**  
Rapporteur: **Prof Raymond Auerbach**

**Dr Sjoerd Duiker:** Soil health-food health connection confirmed in conservation agriculture (20)

**Dr Gert van Colfer:** Management of Fusarium crown rot of wheat through conservation agriculture (20)

**Prof Cornie Van Huyssteen:** The role of water saturation in conservation agriculture (20)

**Prof Thomas Weyer:** 30 years of conservation agriculture at the agricultural teaching and testing institute Merklingsen (Germany), effects on soil functions (20)

**Dr Neal Eash:** Can "small" maize fields sequester carbon? (20)

**Dr Mohammad Esmaeil Asadi:** The effect of conservation agriculture on organic carbon content in arid and semi-arid areas: a case study of rainfed lands in Aq-Qala city, northern Iran (20)

**Dr Yash Dang:** 55 years of no-tillage and crop residue retention on a vertisol in northeastern Australia (20)

**Mainstreaming of conservation agriculture (120)**  
Moderator: **Dr Mike Wallace**  
Rapporteur: **Dr Lindah Muzangwa**

**Prof Stephanie Midgley:** SmartAgri: conservation agriculture as a pillar in sub-national climate-smart agriculture strategy and implementation in the Western Cape of South Africa (20)

**Dr Adeeth A. G. Cariappa:** Carbon farming to override the yield-emission trade-off in Punjab, India (20)

**Dr Vijesh Krishna:** Impact of conservation agriculture on residue burning and air quality in Punjab, India (20)

**Ananya Khurana:** Decoding the smoke: socioeconomic drivers and regulatory strategies for crop residue burning in India (20)

**Prof Aziz Nurbekov:** Economic efficiency of conservation farming along with short crop-rotation system in salt-affected areas (20)

**Dr John N. Landers:** Zero-tillage planting into a permanent tropical legume sward: the next revolution in conservation agriculture (20)

Session 14 (16:35 to 17:35)

**Examples of successful conservation agriculture adoption and scaling out/up (60)**  
Moderator: **Annelene Swanepoel**  
Rapporteur: **Dr Enamul Haque**

**Prof Gottlieb Basch:** Conservation agriculture: the universal paradigm of sustainable agriculture (20)

**Ernst Hendrik Smit:** Enhancing agriculture resilience with long-term crop rotation trials under conservation agriculture (20)

**Elani Heyneke:** The importance of understanding mesoscale weather features to assist conservation agriculture practices in South Africa: a case study (20)

**Promoting conservation agriculture-based knowledge (60)**  
Moderator: **Dr Nele Verhulst**  
Rapporteur: **Selebalo Joseph Ramakhanna**

**José Javier Guerrero Criado:** Modelling soil-plant behaviour in a wheat-canola rotation in the south of Spain: a new approach from digitisation and conservation agriculture (20)

**Dr Kamaluddin Tijjani:** Does soil native supply of nutrients depend on all the three principles of conservation agriculture? (20)

**Dr Mina Devkota:** Conservation agriculture an option for climate adaptation and mitigation with improved crop productivity and soil health: a case study from rainfed and irrigated drylands (20)

Gala Dinner (19:30)

**"The soil is not just for planting.  
We have to take care of it so that  
future generations can benefit from it."**

- Nicolas Madondo,  
conservation farmer and project  
facilitator, Bergville, KwaZulu-Natal



## Field day

**07:00** Depart to Langgewens Research Farm  
**08:30** Welcome  
**09:45** Move to first visit point  
**10:00** Trials and exhibitions  
**14:00** South African braai, return to Cape Town (16:00)

## Viewings for the day

Soil health and production in four soil disturbance regimes  
 Grazing strategies  
 Long-term conservation agriculture trial and soil pits  
 Planters - local manufacturers  
 Local farmers sharing experiences about their rotation systems  
 Tech exhibition - drones and agriculture

## Poster contributions

**Mamotshabo Rakgwale:** A comparison of arthropod-mediated ecosystem services between annual and perennial cropping systems in the Central Free State, South Africa

**Hunadi Chaba:** Adoption of self-regulating, low-energy, clay-based irrigation (SLECI) systems to save water and improve crop performance by smallholder farmers

**Dr Debashis Chakraborty:** Advisory for stakeholders: adoption of conservation agriculture with the right combinations of techniques and niches

**Dr Brian Muroyiwa:** Agricultural finance and extension services for smallholder maize farmers practising CA in Lesotho: determinants of adopters and non-adopters access to finance and extension services.

**Antonio Manuel Conde-López:** Best management practices implemented in annual crops mitigate climate change

**Robin Riet:** Canola (*Brassica napus L.*) cultivar, plant density and herbicide use effect on weed suppression

**Andries Le Roux:** Climate-change impacts on canola growth and yield characteristics: challenges and opportunities

**Dr SN Theron:** Climate-change perceptions and adaptation strategies among wheat farmers in the Western Cape Province, South Africa: insights from the 2015-2018 drought

**Dorcas Matangi:** Co-designing innovations in Zimbabwe: a comprehensive strategy toward agroecology transition

**Mary Maluleke:** Comparing the financial benefits of different grain farming systems in South Africa

**Prof Regis Chikowo:** Conservation agriculture enhanced by better targeting of resources driven by policy in Zimbabwe

**Clive Kudzai Govah:** Conservation agriculture for regenerating soil health and climate variability in smallholder systems of Zimbabwe

**Frans Joseph:** Controlling gully erosion in the Free State Province using low-cost soil conservation technique

**Dr Willem Hoffmann:** Coping strategies for lower rainfall scenarios on winter cereal production systems in the Swartland, Western Cape

**Dr Tannishtha Bardhan:** Decoding behavioural

drivers impacting the adoption of conservation agriculture by the farmers in Indo-Gangetic Plains

**Connie Madembo:** Demystifying the intermediating role of conservation agriculture on resource pool diversity and weed-crop competition in maize-based farm ecosystems

**Dr Brian Muroyiwa:** Determinants of conservation agriculture adoption and farmers' perceptions of effects of its adoption on maize and beans yield in Lesotho

**Dr Denizart Bolonhezi:** Direct transplanting of pre-sprouted sugarcane seedlings under straw of soybean and cover crop: impact on yield and soil organic carbon

**Dr Óscar Veroz-González:** Effects of no tillage on soil nematode populations in cereal crops in Spain

**Pacsu Simwaka:** Enhancing use of sustainable tillage systems under conservation agriculture in Malawi

**Dr Bonginkosi Vilakazi:** Enzyme activity under different tillage techniques and N fertilizer management in dry land agriculture

**Ngeletshedzo Makhaga:** Evaluating the effect of knowledge transfer on the adoption of conservation agriculture in the OR Tambo District

**Morgan Lee:** Exploring sustainable agricultural transitions in South Africa's commercial grain sector

**Dr Brian Muroyiwa:** Factors influencing choice of maize and bean marketing channels for smallholder farmers in Lesotho: the case of CA and conventional farmers

**Kent Buchanan:** Growing resilience in agriculture: evaluating the relevancy of long-term conservation agriculture in South Africa

**Prof Denis Topa:** Impact of conservation tillage system on soil properties assessed by X-ray computed tomography (CT) and portable X-ray fluorescence spectroscopy (XRF)

**Betty Rutendo Masamba:** Impact of cropping systems on weed community dynamics under conservation agriculture in sub-humid Zimbabwe.

**Selebal Joseph Ramakhanna:** Impacts of maize and bean marketing for smallholder farmers in Lesotho: the case of CA and

conventional farmer

**Dr Lynn Katsoulis:** Improving crop pollination by providing nesting resources to boost the populations of crop-specific solitary bees

**Dr Nadia Araya:** Improving the productivity of leafy vegetables grown under rainwater harvesting and conservation techniques in a semi-arid area of South Africa

**Nariman Nishanov:** Looking at the economic efficiency of conservation agriculture practices: case of Uzbekistan

**Joe Collins:** Lower yield is balanced by lower input costs in a systems-level evaluation of conservation agriculture net profit: some early results.

**Telma Sibanda:** Mechanised conservation agriculture as part of agroecology transition in smallholder systems in Zimbabwe

**Manuel Conde-López:** Methodology to quantify energy consumption in annuals and permanent crops production

**Antonio Manuel Conde-López:** No-tillage contribution to climate change mitigation: emissions balance in a cereal field with different fertilisation and strategies

**Dr Denizart Bolonhezi:** No-tillage for sugarcane-peanut crop rotation system

**Mxolisi Mtyobile:** Performance of maize varieties under minimum tillage in semi-arid condition of OR Tambo District, South Africa

**Jade Andrews:** Rooting for resilience: cultivating prosperity through conservation agriculture in South African vegetable soils

**Prof Raymond Auerbach:** South African conservation dairy farming and the Tigerkloof experiment

**Connie Madembo:** Strip cropping systems improve soil fertility, productivity, and nutritional yield of small-scale maize farmers in Zimbabwe

**Julio Román-Vázquez:** Sustainable systems based on conservation agriculture for cost saving in Western Europe

**Dr Brian Muroyiwa:** The factors influencing adoption of no-till conservation agriculture among bean and maize farmers in Lesotho

**Assoc Prof Emilio Gonzalez:** Worldwide trends in conservation agriculture and climate-change scientific production





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