

Silviculture 4.0

Smart technology from nursery to field.

15 – 17 October 2024

Howick, KwaZulu-Natal,
South Africa.

SYMPOSIUM PROGRAMME



NELSON MANDELA
UNIVERSITY

Modern Silviculture Programme

16 October 2024

Session 1: Modern Silviculture opportunities and trends - Session Chair, Mr Matome Nkgaphela

07.15-07.55 Registration and Tea

08.00-8.15 Welcome

*Dr Muedanyi Ramantswana - Nelson Mandela University
Prof Zenixole Tshetu - Nelson Mandela University*

08.15-08.40 Implementing a successful silviculture modernisation strategy – lessons and opportunities.

Dr Dean da Costa, Mondi

08.40-09.00 Modern silviculture operations, opportunities and challenges – Brazilian grower company perspective.

Dr José Eduardo Petrilli Mendes, Dexco (Brazil)

09.00-09.15 Where are we going? Global modern silviculture trends.

Dr Muedanyi Ramantswana, Nelson Mandela University

09.15-09.30 Digitalisation and automation of forest operations.

Dr Linnea Hansson, Skogforsk (Sweden)

09.30-09.45 Finding the balance between modern silviculture and the need for socio economic upliftment in forestry dependent communities.

Dr Churchill Mkwalo, Department of Forestry & Fisheries and the Environment

9.45-10.20 Discussion and Questions

10.20-10.50 Tea / Networking / Conference Exhibition

Session 2: Advanced re-establishment and tending

10.50-11.00 Word from Platinum sponsor

11.00-11.15 Growing seedlings for current and future planting technologies.

Mr Shaun Biggs, Ellepot

11.15-11.30 Understanding the impact of mulching on early tree growth.

Dr Jacob Crous and Dr Louis Titshall, Sappi

11.30-11.45 Modern cost-effective tools to improve productivity and quality in establishment and tending operations.

Mr Sean McKenzie, Silvix

11.45-12.00 Flat, moderate and steep terrain planting technologies.

Dr Rafael Ribeiro Soler, Bracke Forest

12.00-12.15 Silviculture 4.0: Novelquip's Journey Towards a Modernised Planter.

Mr Stephanus Viljoen, Novelquip Forestry

12.15-12.30 Modernization of pre-canopy weeding operations - Mondi's journey.

Mr Sibusiso Sibanyoni, Mondi

12.30-12.50 Discussion and Questions

12.50-13.50 Lunch/ Networking / Conference Exhibition

Precision Silviculture - Session 2: Chair Ms Doni Sithole

13.50-14.00 Word from Gold sponsor

14.00-14.15 Knowing the condition and performance of your tools – digitalisation through smart connections.

Mr Duncan Fryer, Stihl

14.15-14.30 Using advanced data driven technology for pest and disease detection and monitoring.

Mr Roedolf Nieuwenhuis, CROPWATCH AFRICA

14.30-14.45 Opportunities to improve silviculture operations using drones – a practical guide.

Mr Matt Houghting, PacSys

14.45-15.00 Mapping of manually planted trees using the STA logger - "Sarapico"

Mr Santiago Ferrando, Ferrando & Asociados (Uruguay)

15.00-15.10 Discussion and Questions

Tea and Coffee - Operational research and developments

15.40-15.55 Comparison of the operational productivity and quality of manual and semi-mechanized planting.

Mr Junior Khoza, Nelson Mandela University

15.55-16.10 Combined effect of slash burning and disc harrowing on fuel load reduction and stand productivity of eucalypts.

Mr Angel Goldsmith, Stellenbosch University

16.10-16.25 Comparing the productivity of pitting machine operators under different sites.

Mr Thembinkosi Zulu, Nelson Mandela University

16.25-16.35 Discussion and Questions

16.35-17.00 Closure and Announcements

Dr Muedanyi Ramantswana - Nelson Mandela University