



Faculty of Applied Sciences

DURBAN Graduands

Degree of Doctor of Philosophy in BIOTECHNOLOGY

ARUMUGAM Nanthakumar
(Full Research)

Title of Thesis

Production of oligosaccharides from lignocellulosic biomass

Summary

Exploration of lignocellulosic biomass for the production of value-added compounds is gaining momentum. Biomass such as peanut shells, bambara, cowpea and sorghum are some of the indigenous crops of Southern Africa that are yet to be explored for value addition. Therefore, this study was designed to characterize these underutilized agro-residues for the enzymatic production of prebiotic xylooligosaccharides (XOS) and their application. A two-step extraction of sodium chlorite-delignified biomass yielded pure xylan from peanut shells (15.5%), bambara (12.3%), cowpea (13.6%) and sorghum (32.2%). ¹H NMR spectroscopy together with monosaccharide analyses revealed that all the xylyans were glucuronoxylan and shared similar functional groups as that of hardwood glucuronoxylan. Enzymatic hydrolysis of the xylyans resulted in the maximum yield of XOS at optimized parameters of 1% substrate concentration and 10 U enzyme dosage. TLC analysis of the hydrolysates from *Thermomyces lanuginosus* SSBP GH11 (*T/GH11*) xylanase was compared against GH10 and GH30 xylanases regarding their modes of action. It was observed that the properties of XOS were distinct with different xylanases and GH11 xylanase was more efficient on all the xylyans without the release of xylose. MALDI TOF MS characterization corroborated with the TLC results and showed signals for both neutral and acidic oligosaccharides. A series of computational approaches were also used to study the structure of GH10, GH11 and GH30 xylanases and their interactions with xylan. The *in silico* investigation suggested that *T/GH11* was more suitable for coupling with xylan over GH10 and GH30 xylanases. The prebiotic efficiency of XOS was evaluated as a functional food supplement in a novel amadumbe bambara spread and prebiotic yoghurt formulations. The physicochemical and sensory evaluation of both amadumbe-bambara spread and yoghurt confirmed that both products have improved traits with higher consumer acceptance.

The candidate has published two papers and one book chapter in peer reviewed scientific journals and has presented his research in two national and four international conferences.

Supervisor: Dr S K K Pillai
Co-Supervisor: Prof S Singh

MOGANY Trisha
(Full Research)

Title of Thesis

Extraction and purification of C-phycocyanin and genome analysis of an indigenous hypersaline cyanobacterium

Summary

An indigenous halophilic cyanobacterium capable of producing C-phycocyanin (C-PC), a blue pigment with the high biotechnological application was isolated from a hypersaline environment in Kwa-Zulu Natal, South Africa. The cyanobacterium was found to have several unique traits such as its ability to naturally produce a high amount of C-PC (45mg/g), grow at high salinity (120 g/L), fast growth rate, survive in varying nutrient and light conditions. In this study, a comprehensive polyphasic approach viz., cell morphology, pigment composition, and complete genome sequence analysis was employed to elucidate the taxonomic position of the isolate. Based on the genome analysis, the strain was identified as a novel species of the genus *Cyanothece*, Cluster *Euhalothece*. The full genome sequencing has further allowed us to understand the key genes and proteins responsible for its unique properties such as its adaptation environmental conditions, C-PC synthesis, and stress acclimation. The protein structure and physiochemical properties of C-PC was further predicted based on the amino acid sequence using *in silico* analysis. Furthermore, a cost-effective extraction method for C-PC with high purity was also optimized. The extracted C-PC showed high antioxidant activity (IC_{50} value of 0.540 ± 0.02 mg/mL using the DPPH assay) and was thermostable up to 45°C at a wide pH range (5.0-8.0). A high yield (>400 mg/mL) of analytical grade C-PC was achieved, clearly showing its commercial potential for C-PC production. This research provided new knowledge significantly contributing to the field of biotechnology.

This study has resulted in three peer-reviewed publications and was presented at one national and one international conference.

Supervisor: Prof F Bux
Co-Supervisors: Prof F M Swalaha
Dr S Kumari

Degree of Master of Applied Science in BIOTECHNOLOGY

MAGAGULA Nompumelelo Lina
(Full Research)

Title of Dissertation

Enhancing production of pharmaceutically valuable alkaloids in plant cells, tissues and extracts of *Catharanthus roseus*

Supervisor: Prof B Odhav
Co-Supervisor: Dr V Mohanlall

MAZIBUKO Bodine
(Full Research)

Title of Dissertation

Laccase-mediated biotransformation of phenolic compounds for the synthesis of new antioxidants

Supervisor: Prof T Kudanga

OKUOFU Somiame Itseme **CUM LAUDE**
(Full Research)

Title of Dissertation

Valorisation of bambara and cowpea haulms for bioethanol production

Supervisor: Prof S K K Pillai
Co-Supervisor: Prof S Singh

ROETS Yrielle
(Full Research)

Title of Dissertation

Bioaugmentation with *Bacillus* spp. for bioremediation of synthetic wastewater using a fluidized-bed bioreactor

Supervisor: Prof F Bux
Co-Supervisors: Dr R Laloo
Dr S Kumari

Degree of Master of Applied Science in CHEMISTRY

GNANA Gueh Charles
(Full Research)

Title of Dissertation

Comparison of lignin yield from sugarcane bagasse pellets using liquid hot water and ionic liquid pretreatment methods

Supervisor: Prof N Deenadayalu

*HARILAL Calvin Carl CUM LAUDE
(Full Research)

Title of Dissertation

Development of electrochemical immunosensors for detection of Tau protein: Computational and Experimental studies

Supervisor: Prof K Bisetty
Co-Supervisor: Dr S Kanchi

HLOMA Phathisanani
(Full Research)

Title of Dissertation

Development of an electrochemical immunosensor for the detection of steviol glycosides by experimental and computational methods

Supervisor: Prof K Bisetty
Co-Supervisors: Dr S Kanchi
Dr M I Sabela

JIYANE Sphumelele Nomnotho CUM LAUDE
(Full Research)

Title of Dissertation

Development of a third-generation electrochemical enzyme-based biosensor for a scalable detection of oxygen in power generation cells

Supervisor: Prof K Bisetty
Co-Supervisors: Dr S Kanchi
Dr M I Sabela

MAGUBANE Sibongile Elizabeth
(Full Research)

Title of Dissertation

Fabrication of a colorimetric paper-based microfluidic sensor for residual poly-dadmac detection in water treatment

Supervisor: Prof P S Mdluli
Co-Supervisor: Dr M Mlambo

MLUNGUZA Nomchenge Yamkelani CUM LAUDE
(Full Research)

Title of Dissertation

Hollow fibre liquid phase microextraction of pharmaceuticals in water and *Eichhornia crassipes*

Supervisor: Dr L M Madikizela
Co-Supervisors: Prof L Chimuka
Dr P N Mahlambi

RAMSARUP
(Full Research)

Lee-Ann

CUM LAUDE

Title of Dissertation

An investigation of the voltammetric behaviour of antioxidants in flavonoids

Supervisor: Prof K Bisetty
Co-Supervisor: Dr S Kanchi

Degree of Master of Applied Science in FOOD AND NUTRITION

DLOMO
(Full Research)

Kaite Nokuthula

Title of Dissertation

Food hygiene and safety practices of food handlers in tuck shops at secondary schools in Umlazi

Supervisor: Prof C E Napier
Co-Supervisors: Prof O A Ijabadeniyi
Ms S I Vermeer

Degree of Master of Applied Science in FOOD SCIENCE AND TECHNOLOGY

BUSU
(Full Research)

Nyasha Miriam

CUM LAUDE

Title of Dissertation

Characterisation and application of bambara protein-polysaccharide complex coacervates in encapsulation of bioactive compounds

Supervisor: Prof E O Amonsou

JULA
(Full Research)

Mellisa Nokulunga

Title of Dissertation

Quality and microbiological study of bambara groundnut fortified injera, a fermented flat bread

Supervisor: Prof O A Ijabadeniyi

*NAIKER
(Full Research)

Tremayne Sheldon

CUM LAUDE

Title of Dissertation

Effects of processing on the characteristics of flour and protein isolates produced from *Lablab purpureus*

Supervisor: Prof J J Mellem
Co-Supervisors: Prof E O Amonsou
Prof H Bajnath

PILLAY
(Full Research)

Yovani

Title of Dissertation

Profiling and antibiotic resistance of lactic acid bacteria isolated from commercial *aMasi* samples

Supervisor: Prof O A Ijabadeniyi
Co-Supervisor: Prof F M Swalaha

RAMKISSON
(Full Research)

Shanece

CUM LAUDE

Title of Dissertation

Anticancer and antioxidant potential of *Amaranthus cruentus* protein and its hydrolysates

Supervisor: Prof J J Mellem
Co-Supervisor: Dr SVenter

Advanced Diploma in NAUTICAL STUDIES

MATHONSI	Nhlanzeko Sbusiso	NDIMANDE	Ntando Nqubeko
MAZIBUKO	Thuladu Queen	NTOMBELA	Amanda Pretty
NDEBELE	Bongokuhle Nkosiyethu	NXUMALO	Mxolisi Siphesihle

Advanced Diploma in SHIPPING AND LOGISTICS

GCABA	Siphumelele	NETSHILINDI	Mulanga
*GOVENDER	Celine Astal	NGCOBO	Nonjabulo Patricia
GUMEDE	Thembelihle Hlengiwe	NKAMBULE	Philiswa Joy
KIKA	Nokubonga Unathi	RADEBE	Philangenkosi Mnqobi Michael
MANCIYA	Asiphe	ZONDI	Ayanda
NAIDOO	Nirasha	ZONDI	Sandiso Elton
NDLOVU	Lungisani	ZUMA	Mehluleli Thulasizwe

Degree of Bachelor of Technology in BIOTECHNOLOGY

BIYELA	Buyani Innocent	ODAYAR	Thavisha
GOVENDER	Salisha	PILLAY	Shanelle
LOGNATH	Natasha Kaitlin	RANJITH	Mckayla Divona
MNTUNGWA	Pearl Nobuhle	REDDY	Cassandra
MOODLEY	Revania	SIBIYA	Hlalanathi Philangezwi Luthando
MTHOMBENI	Rivoningo Lowranne	*SINGH	Karishma
NAIDOO	Auriel Odette	SINGH	Shashika
NAIDOO	Priyanka	SINGH	Yashna
NAIK	Kaveshni	VAWDA	Muhammad

Degree of Bachelor of Technology in CHEMISTRY

FYNN	Byron Adrian	NAIDOO	Deneshree
GOVENDER	Ashav	NAIDOO	Romano
GOVENDER	Pashni	NINELA	Aneswa Mandisa
KALLEE	Lucian	NJEBO	Bayanda
KHANYILE	Andile Thandeka	NXUMALO	Silindokuhle Nomathemba
*KHUZWAYO	Bongeka	PAULINUS	Emmanuel Ugochukwu
MAGWAZA	Mcebo Innocent	PILLAY	Radhika
MALUHWALO	Thembanzi	TIMAKWE	Bonga
MASIKANE	Sandile Bhekuyise	VUMA	Treasure Austin
MBULAWA	Siphe Trey	XABA	Sabelo Collen
MNTAMBO	Bahle Luyanda Dave-Junior	ZULU	Nontuthuko Silindokuhle
MOODLEY	Kimona	ZWANE	Thabani Mbusiswa
MSOMI	Bonga Fortune Mondli		

Degree of Bachelor of Technology in CLOTHING MANAGEMENT

LORTAN	Mercia Genevieve	SAMUEL	Megan
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Degree of Bachelor of Technology in CONSUMER SCIENCE: FOOD NUTRITION

BUTHELEZI	Nokwanda Charity	MTHETHWA	Nokuthula Rejoice
DESAI	Ridwanah	MTHETHWA	S'Thabile S'Busisiwe
FIHLA	Thandiwe Neo	MTOTYOI	Ntsika
GUMEDE	Mahle	MTUZELA	Samukelisiwe Promise
GUMEDE	Thabiso Njabulo Praisegod	MUTE	Sinesipo
KHOMO	Fezile Brian	NGUBANE	Nolwazi Nokubonga Tricia
LUTHULI	Siyabonga Zamokuhle	NKABINI	Sindiswa Penelop
MADIKIZELA	Sinovuyo Tebogo	NKOSI	Nonjabulo
MAGINGXA	Sinelizwi	NTSHINTSHI	Sinoxolo
MAGUDULELA	Nokwanda Sharon	OGLE	Larece Raphaelia
MAGWAZA	Zinhle Pretty	PADAYACHEE	Candin
MAHLALELA	Nelisile	PERUMAL	Kamantha
MALITI	Xolani Hendrick	SABELA	Masindi Portia
MAVIMBELA	Sihle Precious Nonhlakanipho	SHANGE	Mandisa Beloved
MGEGBA	Malwande Nangamso	SHEM	Upendo Uwimana
MHLONGO	Nonkululeko Zakithi	SHOZI	Thandeka Nontobeko
MITI	Nontobeko Nosipho	*SINGH	Shivneta
MNGUNI	Phumla Carol	SITYATA	Zethu
MTHEMBU	Philile Surprise	SIZANI	Andiswa Theodora
MTHETHWA	Londiwe		

CUM LAUDE

Degree of Bachelor of Technology in FOOD TECHNOLOGY

GOUDEN	Seveshan	JHETAM	Taskeen
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JAICHAND	Viruska	THUMBRAIN	Dinelle

CUM LAUDE

Degree of Bachelor of Technology in HORTICULTURE

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MAKHANYA	Sibusisiwe Noluthando	NGUBANE	Nontobeko Thobile
MBEWANA	Smangele Augustine	NOBENGELA	Yedwa Dzum-Dzum
MHLONGO	Sthembiso Wilson	SIBIYA	Sandile Bonginkosi
MKHIZE	Nothando Pretty	ZONDI	Senele Siyabonga
MKUNGO	Mfundu Freedom	ZULU	Bonginhlanhla Brian
MTHEMBU	Bongumusa Cecil	ZULU	Phumzile Girlagain
NGCIKWA	Nomcebo		

CUM LAUDE

CUM LAUDE

Degree of Bachelor of Technology in MANAGEMENT Specialising in Sport

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DEYI	Nomthandazo Nonhlanhla Happiness	MOLEFE	Tshepo Placid
DLAMINI	Nompumelelo	NGWANE	Lindokuhle
DLAMINI	Nontethelelo Thobeka	NTSELE	Sthuthukile Amanda
HLATSHWAYO	Nomndeni Ntandenhole	SELEPE	Londamazwokuphila
KHAMBULE	Phumelele Nqobile	STRATO	Sinesipho
KHUMALO	Ayanda	THUSINI	Sinethemba Happiness

Diploma in ANALYTICAL CHEMISTRY

*BEMIAH	Caitlin Marissa	CUM LAUDE	MNCWABE	Nokwanda
CHILIZA	Xolani Alfred		MNDAWENI	Xolisile Lerato
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GANAMFANA	Sphosihle		MTHEMBU	Siyabonga Abel
GATYA	Lukhanyo		MYENDE	Zanele
GULUBELA	Luntu		NAIK	Kami
KHOZA	Saziso Lister		NGUBENI	Sibonakaliso Mazwi
KRISHNA	Yoshan		PILLAY	Adel
MAGWAZA	Mthabiso		RADEBE	Sinqobile Zibuyile
MAJOZI	Ngcebo Nkanyiso		SEETHAL	Sariksha
MAKHAYE	Owami Yedwa		SIBIYA	Ndumiso Praisegod
MANYIKE	Slindile Precious		THUSI	Thandolwethu Valentine
MGOZI	Ntombifuthi		ZONDI	Ziningi Kwazi
MKHIZE	Ayanda		ZUMA	Buziwe
MKHIZE	Ntethelelo Zinhle			

CUM LAUDE

Diploma in NAUTICAL STUDIES

BHENGU	Sibonelo Frank Braen		MTHEMBU	Phindile Zodwa
BUTHELEZI	Siyanda Cyril		MTHEMBU	Trevor Sthembiso
CUSHELA	Miniyakhe		MYENDE	Nomcebo Hlobisile
DLAMINI	Smangaliso		MZIZI	Lungile Purity Thulisile
DUBE	Lungelo Siyabonga Ian Jnr		NENE	Ntando Caiphus
FRANCIS	Jared Benjamin		NGEMA	Sakhile Zomakahle
HERRON	Tegan Kyle	CUM LAUDE	NGUBO	Mondli Charles
MAKHATHINI	Fundiswa	CUM LAUDE	NXUMALO	Lungile Precious
MARAI	Jamie Alyssa Chloe		NZAMA	Siphesihle
MBATHA	Njabulo Siyanda Muntwethu		SHANGASE	Njabulo Quinton
MBATHA	Nomkhosi Sibongakonke	CUM LAUDE	SHONGWE	Sphamandla Lwazi
MDLULI	Nkonzo Siphesihle		*SIMAMANE	Thabiso Lawrence
MKHWANAZI	Sbongumusa Colin		TULI	Mondli Mduduzi
MNCANZA	Thulani		XIMBA	Njabulo Samkelo
MNGOMA	Samukelo Mbuso		ZULU	Nolwazi Prudence
MNYANDU	Linda Bongekwa		ZUNGU	Nozipho
MOKWENA	Mongezi Patrick		ZWANE	Philangezwi Muhlumuntu
MORGAN	Danne Kelly		ZWANE	Sibonelo David

CUM LAUDE

Diploma in SHIPPING AND LOGISTICS

DHANESHARLALL	Jarren Lee	MOLOI	Minah Puleng
DLAMINI	Malibongwe Oscar	MPANZA	Skhumbuzo
GOVENDER	Esaivan	MSANI	Deon Mpumezo
GWALA	Kwanele Ayeza	MTHEMBU	Nokwanda Thabsile
GWELETA	Mary Shweshwe	NCUBE	Kholeka Berly
HLANGU	Siphiwe	NDLOVU	Sibonelo
KHAN	Mahomed Yaseen	NGCOBO	Mthokozisi Salva
KHAYIYANA	Lungi Luyanda	NYAWO	Ayanda Kholiwe
KHUMALO	Nozuko	NZAMA	Biza
KHUMALO	Zamantungwa	PARTHAB	Haren Archary
KUNENE	Buyisile	SHANGE	Nkosinomusa Alpha
MAHLANZE	Thubelihle Pius	SHANGE	Philile Aneliswa Uyanda
MATYANA	Unathi	SIBIYA	Sabathile Pretty
MGOBHOZI	Njabulo	XABA	Patience Dumazile
MHLONGO	Siphesihle Gift	CUM LAUDE	Nomcebo
MNGOMEZULU	Sibonelo	*XULU	Jabulani Nkonzo'Nhle Mkhanyiseli
MNIKATHI	Yamkela	ZUMA	CUM LAUDE

Diploma in TEXTILE TECHNOLOGY

CELE	Bekezela Mthokozisi	MOSHOESHOE	Halekhethé
HLONGWANE	Ayanda Simamukele Precious	MSIYA	Thabani Msindazwe
HLONGWANE	Sphumelele	NDUKU	Simphiwe Jessica
KHUMALO	Lungelo Innocentia	NGCOBO	Njabulo
KHUZWAYO	Simphiwe	NGCOBO	Nkanyiso
MABIKA	Nkazimulo Phiwangesihle	NGCOBO	Sinenhlanhla Irene
MAHLABELA	Xola	CUM LAUDE	Phiwokuhle
MAJOLA	Praisegod Nqobani	NGIDI	Jabulile
MBATHA	Ayanda Ntokozo	NKOSI	Celimpilo Melusi
MBATHA	Lindokuhle Mahazel	SITHOLE	Malibongwe Praiseworth
MCHUNU	Phumlani Collen	SITHOLE	Nonjabulo
MLAMBO	Balungile Bavumile	*SITHOLE	Siphumelele
MNGUNI	Zibuyile	SITHOLE	Talente
MNISI	Bonisile Zinhle		CUM LAUDE

National Diploma in ANALYTICAL CHEMISTRY

BUTHELEZI	Similo Layezile	NTULI	Peni Ntobeko
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MAVUSO	Fanelesibonge	TABARO	Akonkwa
MNGADI	Langelihle Mbheki		

National Diploma in BIOTECHNOLOGY

BHENGU	Zamangcolosi Sibongiseni	MASIMONG	Olivia Mmathapelo
BRIJMOHAN	Nivedita	MATHEBULA	Sindle Precilia
DLAMINI	Anele Confidence	MHLONGO	Sihle Helen
GOVENDER	Hannah Melita	MKHIZE	Sisanda Thembelenkosini
GOVENDER	Karina	MNGONYAMA	Zokugcina Barbara
GOVENDER	Rayhaan	CUM LAUDE	Nombuso Patience Melba
HLOPHE	Nosipho	MTHEMBU	Kesree
JAGANNATH	Kiren	NAIDOO	CUM LAUDE
JILI	Fuzelihle Mthunzi	NAIR	Kimeshan
KEENAN	Serene	NDLOVU	Siphephelo Siyamukela
KHAN	Muhammed Mubashir	NGCOBO	Lungani Andile
KHANYE	Ayanda Gabriel	NGEMA	Nompumelelo Zuziwe Perfect
KHOSO	Nombuso Nomzamo	NKOSI	Nokubekezela Peacemaker
LANGA	Lethukuthula Njabulo	NTSHALINTSHALI	Sonto
LUBISI	Sebenzile Prudence	*PILLAY	Nkosinathi
MALINGA	Thoko Winnie	POONSAMY	Brynita
			Thivendhran

RAMIAH	Laveenia Danielle	SISHI	Sandile Emmanuel
RAMKISHWAR	Smeetha	SITHOLE	Nondumiso Cheefully
SHANGASE	Asanda	SUBROYEN	Sueyanka
SHOYISA	Fanelesibonge	VAN ROOYEN	Nicolene
SIBANGO	Lindokuhle	ZONDI	Anele Godfrey
SILINDA	Excellent Leonard	ZUMA	Thabiso Sinakhokonke

National Diploma in CLOTHING MANAGEMENT

BASSDEV	Shahil	MAVUNDLA	Nhlanhla Nkululeko
BHENGU	Pearl	MJOLI	Nobuhle Happiness
CHIYA	Samkelisiwe Siziphiwe Zamakhasi	MLABA	Siyabonga
DLAMINI	Nonjabulo Yoliswa	MNGUNI	Simulindele Renaissance
DUTYWA	Othembele	MTHEMBU	Samkelo, Victor
DZANIBE	Ntokozzo Andrew	MTHIYANE	Siphamandla Innocent
FANI	Sipho	NAKASA	Sinalo
GUMEDE	Emmanuel	NDLOVU	Philisiwe
GUMEDE	Zethu Siphumelele	NGEMA	Nothando Promise
GUSHA	Vuyo	NTSIMBI	Zamile Sukoluhle
HLELA	Thobeka	NZIMANDE	Nomfundo Promise
KIRK	Stacey Louise	PEDLAR	Brittany Bianca
MANQELE	Nokwanda Patricia	RAMDIAL	Kiara Cheyenne
MANZI	Nosipho	SHABALALA	Sandile Austin
MASONDO	Zothando Nokulunga	ZWANE	Manqoba Erick

National Diploma in CONSUMER SCIENCE: FOOD AND NUTRITION

CELE	Thamsanqa	MYENI	Nosihle Vanessa Yolanda
DELFAVA	Tazlyne	NDIMANDE	Minenhle
DEZI	Bongeka	NDLOVU	Samukelisiwe
DLAMINI	Anne Khayelihle	NGCOBO	Sindisiwe Goodness
DUMAKUDE	Samkelisiwe	NGCONGO	Nonjabulo Zamaphambuka
GASA	S'Bahle	NGEMA	Mdumiseni Smanga
GOGELA	Similo	NHLEBELA	Langelihle Nkosenhle
GOVENDER	Kimrishka	NKOSI	Sakhiseni Emmanuel
GOVENDER	Surasha	NYAKAMBI	Onesimo Aneliseka
GULE	Ncamsile Millicent	NZIMANDE	Philile Noxolo
HLONGWANE	Thandeka Meltah	PAYNIVALOO	Lauren
KHOZA	Nompilo	PILLAY	Alyssa Adeline
KHUBONI	Nothando Philisiwe	RUNGASAMY	Levi Emmanuel
KUBHEKA	Nokwanda Cindy	SAMBO	Albetinah Elsie Makhosazane
MADLALA	Nontokozzo	SEHLAKO	Cum Laude
MADURAY	Chloe	*SELEPE	Kekeletso Jacqueline
MAHARAJ	Cavishka	SEREBA	Lerato
MAPEKULA	Zintle	SHABANE	Cum Laude
MAUBANE	Mary Dimakatso	SHAZI	Nomonde
MAYABA	Neliswa Sanelisiwe	SHEMBE	Lindelwa
MAYISE	Bathobile Valentia	SHEZI	Samukelisiwe Andile
MDLALOSE	Andile Nomonde	SIBIYA	Wandile Gcinani
MNGUNI	Gugu Precious	SONLALL	Sindiswa
MOKOATLE	Shweshwe	VILAKAZI	Mumsy Amanda
MOLOI	Sinenhlanhla Pallisa	ZAMA	Suvith
MSOMI	Zwanini Cecil	ZIKALALA	Thando Owethu
MTHEMBU	Siphelele Sibongakonke		Sanelisiwe Pearl
			Ntokozzo

National Diploma in FOOD TECHNOLOGY

ADAM	Noorjehan	MOODLEY	Thashnie	CUM LAUDE
CELE	Vumile Nomthandazo	MOTSA	Sibuyiselo Phetsile	
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DLAMINI	Nomile Zipho	MTHEMBU	Siphehle Nontokozo	
GINA	Bongani Lungisani	MTHETHWA	Minenhle Millicent	
GUMEDE	Pride Nokuphila	MUDALY	Parushka	
GUMEDE	Zandile Zethu	MZOBE	Fortunate Kwenele	
HURBURAN	Jesma	NAIDOO	Jadine	
KALKAPERSAD	Sherilyn	NCALA	Zamaswazi Noluthando	
KESWA	Londiwe Alicia	NTSHINGILA	Busisiwe Ayanda	
MAHABEER	Jitan	NZUZA	Sithembele Mlamuleli Sikelela	
*MAHARAJ	Sushmita	PADAYACHEE	Alisha	
MAKHANYA	Sbongile Nondumiso	PERUMAL	Thavendran Justin	
MAPISA	Olwethu Nokuzoza	RAMPARSAD	Rensha	
MAZIBUKO	Nokwanda Prisca	SIBIYA	Sabelo Rudolph	
MBELE	Zanele	SIMELANE	Khulekani Trinity	
MKHIZE	Zasembo Mbali	SINGH	Shivecka	
MLAMBO	S'Phumelele Docas	SITHOLE	Sicelo Mhlonishwa	
MLAMBO	Senamile Happyness	SOKHELA	Sinethemba Phathumusa Quentin	
MONGO	Theophilus Siphamandla	XIMBA	Sinenhlanhla Valentine	
MOODLEY	Jamie Lee			

National Diploma in HORTICULTURE

CELE	Nolwazi Angel	MTHIMKHULU	Wendy S'Phesihle	
CHILIZA	Nelisiwe Portia	MTSUMA	Andy Asiphe	
DLAMINI	Thabani Nicholus	NDLOVU	Nosipho Noluthando	
DUBE	Nompumelelo Rosett	NDLOVU	Nosipho Pearl	
DUMA	Thobeka Sinenhlanhla	NENE	Nompumelelo Lucia	
GASA	Phumla	NGCOBO	Sandile Prince	
GOVINDASAMY	Silicia Anne	NGCOBO	Zamatenza Felicia	
GUMEDE	Londeka Pretty	NGCONGO	Sithandokuhle Wendy	
GUMEDE	Musa Welcome	NGOBESE	Phindile Sithembile Favourite	
GUMEDE	Siyethemba	NKOSI	Nhlakanipho Gratitude	
HLONGWA	Nosipho Melody Dingo	NTANZI	Anele Kyle	
KHANYEZA	Gcinile Happy	PHOSWA	Sibusisiwe Sibahle	
KHUZWAYO	Hlangu Nhlanzeko	RADEBE	Zola Thando	
MADUBANDLELA	Nduduzo Christian	SHABALALA	Thembokuhle Msawenkosi	
MAGINI	Awonke Solomzi Bamanye	SHINGA	Nomkhosi Zandile	
MAMANE	Zizipho	*SIBIYA	Siphehle Precious	
MANCI	Nolwazi Valencia	SIGCAU	Athi	
MBONAMBI	Bheka	SIKAKHANE	Bongeka Prudence	
MEMELA	Nokuzola Clemence	SITHOLE	Langelihle Sifundo Cyril	
MILANZI	Zama	SOKHABASE	Khayelihle Khabase Nkululeko	
MKHIZE	Siphilile Nqobile	SONGIYA	Nzolo	
MKHUNGO	Zamasodi	SUKHLAL	Saish	
MKUKWANA	Amahle Ayakha	THUSI	Cebisile	
MNCUBE	Brian Sphamandla	VOKO	Tokozani Zine	
MOKOENA	Lerato	VUNDLA	Nondumiso Anita	
MOKWENA	Nondumiso Valencia	ZACA	Zandile Pretty	
*MORAI	Seja Molleloa Pride	ZIQUBU	Mhlonipheni	
MTAMBO	Mthobisi	ZONDI	Hlengiwe Nonkululeko	
MTHEMBU	Noxolo			

National Diploma in MARITIME STUDIES

CELE	Lungisile Confidence	MSANE	Advice Mnqobi
GQIBA	Khanyisa	MSIMANG	Sinenhlanhla Nomonde Ziningi
KHOLISA	Bakholise	MTEMBU	Goodness Xolisile
KHUZWAYO	Thabiso	MTSHALI	Nkosinathi Emmanuel
LUTHULI	Lungelo Mphumeleli	NDLOVU	Princess Philisiwe
MAILA	Lesiba Refentje	NDZIMANDE	Mzolisi Goodman
MBANJWA	Senzo	NOMPUMZA	Avela
MBATHA	Samukelisiwe Siphehlile	ZONDI	Mnqobi Sibusiso
MBHELE	Michael Maqili Nhlanhla	ZONDO	Nzuko Mvikeleni
MKIZE	Imryn Sphehlile	ZWANE	Sandile Good-Enough
MOODLEY	Ryan Llewelyn		

National Diploma in SPORT MANAGEMENT

BAM	Ntobeko Sboniso	MAJOLA	Bongumenzi Jacob
BINDA	Philani Nkululeko	MAMFENGU	Zintle
BIYELA	Thandeka Minenhle	MANUEL	Joel
BLOSE	Philani Given	MARTIN	Jasmine
CELE	Mzamo Nettleton	MASENGEMI	Sibonokuhle Mandisa
CELE	Sifundo Vusumuzi Thamsanqa	MATEYISI	Luyolo
CHONCO	Thobani Kwanda	MGWABA	Thenjiwe
DLAMINI	Jabulani	MHLONGO	Lusanda Nonhlakanipho
DLAMINI	Lindani Mthobisi	MHLONGO	Sinenhlanhla Zibuyile Cebisile
DLAMINI	Sibongokuhle Praise-God	MKHIZE	Londiwe Innocentia Nontethelelo
DLAMINI	Steve	MKHIZE	Sbusiso Anele Siyabonga
DUMISA	Sisekelo Sithabile	MKHIZE	Simphiwe Emmanuel
DUMISA	Yandisa	MKONGWA	Iviwe
GCWENSA	Xolo Konke	MKUZO	Thabo
GCWENSA	Ziphozonke	MLONDO	Sikhona Sandile
GODLO	Asanda Pamella	MNCWABE	Qhawe Lwazi
GOVENDER	Cowyn Rogers	MNQAYI	Mduduzi Ndukebandla
GOVENDER	Glenn	MONA	Athini
GOVENDER	Iain Gabriel	MOSES	Wade Neville
GWACELA	Amanda Thulile	MSWELI	Siyabonga Senzo
GWALA	Sithembile	MTAWALI	Alfeo Michael
HLENGWA	Nombuso Londeka	MTETWA	Mphilisi
JACA	Amanda Akhona	MTHEMBU	Siphokuhle Thandanani
JOHN	Samkelisiwe	MTHETHWA	Lungisani
KESWA	Zime Thobile	MTHETHWA	Nhlakanipho Innocent
KHAMBULA	Phiwokuhle Mbuso	MTSHALI	Khethelo Magalela Khondlo
KHAMBULE	Thabiso Shaun	MVELASE	Bongumusa
KHAN	Ismaael	MZULWINI	Luyanda Bagciniwe
KHAN	Khadija	NAICKER	Theesan
KHAN	Reza	NALA	Thobile Sonto
KHESWA	Brendon Mphumeleli	NDLANGISA	Ongeziwe
KHOSO	Simbonile	NDLOVU	Khanyisani Cyril
KHUZWAYO	Bonginkosi	NELANI	Gugu Zimvo Gwiba
KHUZWAYO	Dumisile Ntandoyenkosi	NENE	Ndumiso
KHWELA	Mthokozisi Teddy Thandokuhle	NGCAMU	Manelisi Owen-Bridge
KHWELA	Snenhlanhla	*NGCOBO	Amanda Sinesipho
KROON	Heinrich Luan	NGCOBO	Thembelihle S'Noluthando
KWINANA	Ntombizamazotsho	NGQULUNGA	Slindile Queeneth
LENGS	Precious Zinhle	NGUBO	Sizwe
LINDA	Lindokuhle Ricardo	NGWAZI	Khethiwe Precious
LUKHELE	Nkosinathi Marwick	NKABINI	Xolani
LUTHULI	Nondumiso Nokuphiwa Sibahle	NOMBIBA	Mzingisi
MABASO	Thobile Daphney	NTSHANGASE	Bayanda Mncedisi
MADLALA	Bridget Gcinile	NXUMALO	Lindokuhle Vincent
MADULINI	Sanele	NXUMALO	Ntando
MAGUBANE	Sanele Modestus	NYIDE	Melody Londiwe
MAGULA	Thabo Godfrey	NZAMA	Khethukulunga Prosper

PHAKATHI	Nokwazi Zamaphakathi	TSHAMBULA	Mveleli Aphelele
SEETAL	Keaton	ZONDI	Nkanyiso Siphephelo
SHANGE	Philani	ZONDI	Phekeleni Sibusiso
SHANGE	Sphesihle	ZULU	Lungelo Senzo
SHEZI	Nkosingiphile Sithembiso	ZULU	Sifanele Zibusiso
SHONGWE	Nqobile Ritta	ZULU	Thembi
SIBAYA	Mayenziwe Advocate	ZUMA	Sfundo
SIYOTULA	Chulekazi	ZUNGU	Sifiso Albert
STOOP	Bernard Abt		

National Diploma in TEXTILE TECHNOLOGY

BIYASE	Ntandoyenkosi Mhlonipheni	NDLOVU	Bongumenzi Bongumusa
DUBAZANE	Nkululeko Ruth	NGQULUNGA	Zandile
GOVENDER	Karishma	NGWENYA	Belinda Tamera
MDINGI	Zanele		

Higher Certificate in SPORT MANAGEMENT SCIENCE

BIYASE	Sanele	*MKHWELA	Thethelela Lelethu Tabita	CUM LAUDE
BUTHELEZI	Minenhle Melusi	MNGADI	Siyabonga Peacemaker	
CARTER	Ross	CUM LAUDE	Bandiswa	
CELE	Mthuthuzeli	MNGOMEZULU	Mandisa Precious	
CHIYA	Amanda Prisca	MPUNGOSE	Ntokozo Andile	
DLADLA	Lindokuhle	MSIBI	Anele Ntombifuthi	
DUBE	Nhlosenhlle Sthembale Zola	MTHEMBU	Thobisa	
DUBE	S'Nothile Pamela	MTHETHWA	Mfanafuthi Bhekuyise	
DZANIBE	Nkosibonile	MYENI	Thembelihle	
GROOTBOM	Crownin	MYENI	Sanelisiwe Vumile	
GUMBI	Siyethemba	NDEBELE	Amanda Zama	
JWARA	Thabani Elphas	NDLOVU	Mxolisi Christian	
KHANYILE	Mbekezeli Sibongakonke	NDLOVU	Mandisa Pammela	
KHANYILE	Truchid Silindile	NENE	Sixolile Nondumiso	
KHASIBE	Moses Simo	NGUBANE	Wongiswa	
KHOZA	Kwanele	CUM LAUDE	Silindile Pumeza	
KHUMALO	Vusimuzi Alphoes	NGWABENI	Thabang	
KWELA	Siphiwo Emmanuel	NGWADLA	Amanda Lungelo	
LOTZ	Andrew James	NKOMO	Sicelo Sakhumuzi	CUM LAUDE
LUTHULI	Nombulelo Sinethemba	NTULI	Nosisa Lucretia	
MABASO	Samkele Nosipho	NZIMANDE	Mcebisi	
MANYAMALALA	Sivuyisile Khanya	SHABANE	Kholeka Thulile Zandile	
MBONAMBI	Samkelisiwe Hlobisile	SHELEMBE	Wandile	
MBONGWA	Zizipho	SITHOLE	Cameron Matthew	CUM LAUDE
MBUTHO	S'Busiso Blessing	SITHOLE	Snenhlanhla Andiswa	
MCHUNU	Nokwanda Phindile	SMITH	Hlengiwe	
MJOLI	Nozibusiso	ZIKODE	Nokukhaya	
MKHIZE	Sanelisiwe	ZUMA	Phiwayinkosi Cyril	CUM LAUDE
MKHIZE	Zanele Zamani	CUM LAUDE	ZUNGU	
		CUM LAUDE	ZWANE	