

agriculture & environmental affairs Department: Agriculture & Environmental Affairs PROVINCE OF KWAZULU-NATAL

## **Research and Demonstration Projects 2013**

Research Leader	Short Title	Location	Period
A Nunkumar	Monitor aphid number in seed potato production	Cedara	2006-2020
A Nunkumar	Epidemiology and control of <i>Phaeosphaeria</i> leaf spot in maize	Cedara & UKZN, PMB campus	2009-2016
A Nunkumar	Epidemiological research into grey leaf spot and northern corn leaf blight in KwaZulu-Natal	Cedara	2011-2014
A Nunkumar M Relihan	Plant Health Clinic	Cedara	1998-2030
AD Manson	Cover crops for maize silage system production	Cedara	2011-2020
AD Manson	Soil fertility for truffles	Underberg (D Little farm)	2010-2020
AD Manson	Nitrogen use efficiency for vegetables	Cedara	2013-2023
AJ Arathoon	National soybean cultivar trial	Cedara & Kokstad	- 2020
AJ Arathoon	The evaluation of vegetable soybean cultivars for adaptability and yield	Cedara, Kokstad & Dundee	2009-2013
AJ Arathoon	Influence of different phosphorus and potassium rates on the production of three vegetable soybean cultivars	Cedara	2012-2015
AJ Arathoon	Vegetable soybean cultivar versus seeding rate trial	Cedara	2012-2014
CF Luthuli	Manure as alternative fertilizer for pastures	OSCA	2010-2015
CN Mchunu	Effect of tillage on carbon dynamics in KZN's small- scale farming systems	KZN	2009-2011
D Nash	Raising and managing Friesland dairy heifers for optimum milk production	Cedara	2014-2019
E van Zyl	Genetic conservation and characterization of indigenous sheep	Dundee Research Farm	2007-2020
E van Zyl	Investigate the potential of <i>Sericea lespedeza</i> as summer grazing for sheep and establish production norms for NW KZN	Dundee Research Farm	2010-2015
E van Zyl	Bio-active forages: To determine the value of chicory for small stock in a system where chicory is primarily use for root	Dundee Research Farm	2010-2015
F Khubone	Dry bean production in the llembe District	llembe District	2008-2013

FNP Qwabe	Development of fresh maize hybrid model	Dundee Research Farm	2010-2015
FNP Qwabe	Improving productivity and quality of green maize: Green maize potential of Orange Pro-Vitamin A and Yellow Quality Protein maize	Makhathini, Ukulinga, Tugela Ferry, Dundee & Vryheid	2012-2015
FNP Qwabe	Consumer acceptability of pro-vitamin A bio-fortified green maize	Makhathini Research Farm, Ndumo, Tugela Ferry	2013-2015
FNP Qwabe & C Dlamini	High density litchi cultivar evaluation	Makhathini Research Farm	1997-2014
FNP Qwabe & C Dlamini	Evaluation of mango cultivars under irrigation conditions at high density planting	Makhathini Research Farm	1997-2014
FNP Qwabe & C Dlamini	Demonstration of mango grafting and pruning	Makhathini Research Farm	Ongoing
FNP Qwabe & C Dlamini	Sweet potato demo	Makhathini Research Farm	2004-2018
FNP Qwabe & VAD Gcabashe	Mango cultivar demo	Makhathini Research Farm	Ongoing
FNP Qwabe & VAD Gcabashe	Sweet potato demonstration in support of emerging farmers	Makhathini Research Farm	Ongoing
GR Thibaud	Soil acidity interactions with no-till	Karkloof, KZN	2001-2015
GR Thibaud	Tillage effect on N requirements	Loskop, KZN	2005-2015
J du Toit	Characterization of indigenous goats	OSCA	2007-2014
J du Toit	Night feeding indigenous goats	OSCA	2012-2015
J Mann	Biological control of the blue tick using entomopathogenic fungi in cattle on Cedara	Cedara	2010-2012
J Mann	The grazing of beef breeding cows on kikuyu for 12 months of the year	Cedara	1989-ongoing
M de Figueiredo	The production of rose geranium in tunnels at Cedara	Cedara	2009-2013
M de Figueiredo	The study of factors affecting the oil quality and quantity of rose geranium in a growth room environment	Cedara	2009-2013
M de Figueiredo	Establishment and maintenance of an essential oil trial for demonstration purposes	Cedara	2007-2020
M Khanyile	Feed intake and metabolic response of large white pigs fed on incremental levels of <i>Acacia tortilis</i> leaf meal	UKZN, Pietermaritzburg	2012-2013
M Naidoo	Commercial potato cultivar trial	Cedara	- 2020

M Naidoo	Elite potato cultivar trial	Cedara	- 2020
M Naidoo	Potato production demonstrations	Umthentweni, Harding, Ixopo	2009-2015
M Naidoo	Small-scale farmer potato cultivar trials at different Bio-Resource Units in KZN	Highflats, Bulwer	- 2020
M Relihan	Effects of diversely acidic soil sites on mineral levels of potato foliage and on late blight susceptibility, as modified by pre-plant soil application of gypsum, lime or biochar	Cedara	2011-2014
M Relihan	In depth research on diseases associated with infection by <i>Lagena</i> sp on pepper & other crops	University of KZN	2009-2015
MF Msomi	Plant introductions – evaluate commercially available summer fodder species for use in KZN livestock production systems	OSCA	Ongoing
MP Sikhakhane	Maize silage cultivar evaluation trial	Kokstad Research Farm	2009-2013
N Mtum-tum	Long season maize cultivar trial	Kokstad, Dundee & Loskop area	- 2020
N Mtum-tum	Short-season maize cultivar trial	Kokstad , Cedara & Dundee Research Farm	- 2020
N Vilakazi	Evaluation of cheaper and more easily accessible agricultural waste for substrate in oyster mushroom production ( <i>Pleurotus ostreatus</i> )	Cedara	2013-2015
NC van Rij	Effectiveness of six different fungal storage procedures in maintaining the viability of mushroom cultures	Cedara	2013-2014
NC van Rij	Using spent mushroom substrates of Oyster mushroom ( <i>Plueurotus ostreatus</i> ) to produce vegetables	Cedara	2013-2014
NJ Findlay	Catalysis of phosphodieterase by manganese dioxide	Cedara, Danesfort Farm, Kamberg	2013-2014
NJ Findlay	Improving N-use efficiency in pastures	Rosetta	2010-2012
NJ Tembe & NC van Rij	Optimizing substrate requirement in production of Oyster mushroom	Cedara	2012-2013
PA Oosthuizen	An investigation into the effect of different breeding strategies on an Nguni herd's performance	Dundee Research Farm	2008-2020
PA Oosthuizen	Small scale dairying in an integrated farming system	Dundee Research Farm	2003-2020
R Osborne	Sweet potato cultivar evaluation	Cedara and OSCA	2009-2020
S Ammann	Germplasm conservation	Estcourt & other Research Farms	2014-2020
S Madiba	Plant spacing under no-till in maize production in rural communities of KZN	Potshini	2010-2014

S Moodley	Use of essential oils on the control of agricultural pathogens	Cedara, KZN	2009-2015
S Ngcamu	The effect of different management / breeding strategies has on Nguni performance	Bartlow Combine	2012-2022
SA Gumede	The current state, role and the future of goat commercialization in communal areas of KwaZulu-Natal	KZN	2012-2014
SB Radebe	Mulch effect on weed growth, soil moisture, yield and yield components of groundnuts under conditions of KZN Province	Matiwane	2010-2016
SB Radebe	National Soyabean cultivar trial	Dundee Research Farm	2013-2020
SD Househam	The effect of cattle to sheep ratio and stocking rate on veld condition (Simulation Trial) on Kokstad Research Farm	Kokstad Research Farm	1989-2014
SD Househam	The effect of a two-camp "blaze and graze" system on sheep performance, veld condition and soil loss	Kokstad Research Farm	1992-2014
SD Househam	Lucerne cultivar evaluation at Kokstad Research Farm	Cedara & Kokstad Research Farm	2014-2018
SD Househam	Control of <i>Senecio</i> species in the Dry Highland Sourveld of KwaZulu-Natal	Kokstad Research Farm	2013-2025
SR Bezuidenhout	Influence of cover crops and crop rotations on weed density and Zea mays (maize) competitiveness	Dundee Research Farm	2013-2023
SR Bezuidenhout	The management of cover crop residues to reduce weed growth in maize	Cedara	2011-2015
SR Bezuidenhout	The influence of different weed types on the growth and development of maize and sunflower	Cedara & Kokstad Research Farm	2008-2014
SR Bezuidenhout	Characterization of the biology of <i>Cyperus esclentus</i> (yellow nutsedge) growth	Cedara	2012-2014
ST Gcumisa	The untold story of the pig farming sector of rural KwaZulu-Natal: A case study of Uthukela District	Ladysmith area	2009-2013
TE Ntombela & MP Sikhakhane	National dry bean cultivar trial	Cedara and Kokstad Research Farm & Loskop	- 2020
TP Mpanza	Examining the potential of using grey water generated by the rural households for irrigation of the homestead vegetable gardens	Ladysmith area	2011-2015
VG Roberts	Soil P requirements of vegetables	Dundee Research Farm	2011-2016
VG Roberts	Phosphorus fertilizers for resource-poor farmers on acid soils	Mbabazane	2013-2018
VG Roberts	The improvement of FERTREC nitrogen recommendations	Cedara	1999-2019