

SOIL AND WATER SCIENCE DIVISION : COMPLETED PROJECTS SINCE 2005

Project Number	Project Title	Project start and end date	Project Leader	Funding source
280010	Evaluation of soil surface and mulching practices for organic production of deciduous fruit.	1/08/2003-31/07/2013	Ms. M.E. Joubert	Deciduous Fruit Producers' Trust
280018	Effect of soil surface management practices on soil and root microbiology, rootzone parameters and tree performance in apple.	1/04/2007-31/03/2010	Mr. A.H. Meyer	Deciduous Fruit Producers' Trust
280019	Survey on mycorrhizal fungi in apple orchards.	1/04/2008-31/03/2011	Mr. A.H. Meyer	Deciduous Fruit Producers' Trust
280020 //000291 // P04000024	Cover crop management on apple trees.	1/04/2012-31/08/2018	Dr. J.C. Fourie	Hortgro Science
280021 // 000320 // P04000026	Index for testing soil health.	1/04/2014-31/03/2018	Mr. A.H. Meyer	Hortgro Science
281014	The effect of varying drip irrigation frequencies on apple tree production and water use.	01/04/2002-31/03/2007	Dr. T. Volschenk	Deciduous Fruit Producers' Trust
281015	The effect of deficit irrigation on apple tree performance.	1/04/2005-31/03/2009	Dr. T. Volschenk	Deciduous Fruit Producers' Trust
281016	The effect of deficit irrigation on pear tree performance.	1/04/2008-31/03/2012	Dr. T. Volschenk	Deciduous Fruit Producers' Trust
281017 // 100357 // P04000030	Evapotranspiration of high performance apple tree orchards.	1/04/2014-31/04/2018	Dr. T. Volschenk	Hortgro Science
282010	Evaluation of soil management practices for organic production of deciduous fruit for small scale farming	1/08/2003-31/03/2011	Ms. M.E. Joubert	Deciduous Fruit Producers' Trust
282013	Seasonal trends of nutrients of the Honeybush tea plants	1/04/2000-31/03/2011	Ms. M.E. Joubert	Department of Agriculture
282037	Organic production of vegetables, fruit & grapes	11/10/2006-31/03/2010	Dr. J. Wooldridge	ARC
282038	Improvement of honeybush tea production and commercialisation This projects consist of the following projects: <ul style="list-style-type: none"> • Improvement of honeybush (Cyclopia spp.) through breeding, selection and evaluation. • Seasonal trends of nutrients in honeybush plants • Soil preparation for honeybush plants • Improvement of honeybush tea production and commercialisation – horticultural aspects • Medicinal properties of indigenous teas 	1/4/2004-31/3/2009	Ms. M.E. Joubert	National Department of Agriculture

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WW02/06	Evaluation of different soil management practices in a vineyard at Robertson specifically for competition and environmental effects.	1/03/1993-31/03/2006	Dr. J.C. Fourie	Winetech
WW02/07	Evaluation of different cover crop species and cover crop management practices according to soil physical and chemical qualities, water consumption and performance of vines growth in a sandy soil at Lutzville.	1/03/1993-30/11/2006	Mr. J.C. Fourie	Dried Fruit Technical Services / Winetech
WW02/08	Evaluation of different cover crop species and cover crop management practices according to soil physical and chemical qualities, water consumption and performance of vines growth in the Coastal region.	1/03/1993-30/11/2006	Mr. J.C. Fourie	Winetech
WW02/14	Soil preparation for honeybush plants	1/04/2004-31/03/2010	Ms. M.E. Joubert	DOA W-Cape
WW02/16	Nursery mycorrhizas as an integral part of proactive disease and pest control measures.	01/04/2005-31/03/2007	Mr. A.H. Meyer	Winetech
WW02/17	The effect of irrigation method and frequency on the performance of selected cover crops and the effect of these management practices on grapevine performance and soil quality in the Breede River Valley.	1/04/2006-30/11/2011	Dr. J.C. Fourie	Winetech
WW02/19	The evaluation of different herbicides and herbicide application techniques for total chemical control of leaf-roll infected grapevines, as part of a strategy to prevent the transfer of the virus to newly planted grapevines.	1/04/2006-31/03/2012	Dr. J.C. Fourie	Winetech
WW02/20	The evaluation of different indigenous Renosterveld species for cover crop management in the Coastal region, specifically for competition and environmental effects.	1/04/2006-31/03/2010	Dr. J.C. Fourie	Winetech
WW02/21	Cover crop potential to fumigate soil	1/04/2009-31/03/2014	Dr. J.C. Fourie	Winetech
WW03/10	Determination of the seasonal uptake of nutrients by grapevines in the Lower Orange River Region, for establishing fertilization guidelines.	01/04/1998-31/03/2005	Dr. W.J. Conradie	Deciduous Fruit Producers' Trust
WW03/12	The effect of irrigation with enriched water on the performance of table grapes.	01/04/2001-31/03/2005	Dr. P.A. Myburgh	Deciduous Fruit Producers' Trust

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WW03/13	The effect of different cultivation practices on the incidence of waterberry on table grapes in the Lower Orange river region.	1/04/2004-31/03/2009	Ms. M.S. Laker // Dr. J.C. Fourie	Deciduous Fruit Producers' Trust
WW03/14	Effect of soil surface management practices and soil parameters on soil microbiology and grapevine performance.	1/04/2008-31/03/2011	Mr. J. Wooldridge	Winetech
WW04/11	Evaluation of sub-surface irrigation with regard to effective water consumption and grapevine performance on the low-lying soils of the Lower Orange River region.	1/04/1999-31/03/2005	Dr. P.A. Myburgh	Dried Fruit Technical Services
WW04/17	Determining the effect of deficit irrigation on yield and wine quality of drip irrigated vineyards.	1/04/2001-31/03/2008	Dr. P.A. Myburgh	Winetech
WW04/21	Developing guidelines for the PRD irrigation approach from a soil texture perspective.	1/04/2004-31/03/2007	Mr. E.L. Lategan	Winetech
WW04/22	Determination of the effect of ion balances in saline soils on the ion composition of grapevines in the Lower Orange river region.	01/04/2004-31/03/2007	Ms. C.L. Howell	Winetech
WW04/23	Determining optimum irrigation schedules for drip irrigated vineyards in the Breede River valley and Coastal region.	1/04/2005-31/03/2010	Dr. P.A. Myburgh	Winetech
WW04/24 // 000265	Reduce canopy management with deficit irrigation.	1/04/2011-31/03/2015	Mr. E.L. Lategan	Winetech / WRC
WW13/01	Quantification of the effects of soil and climate on wine quality and character, aimed at scientific demarcation.	01/04/1993-31/03/2005	Dr. W.J. Conradie	Winetech
WW13/11	Interpretation of information concerning the geology of each wine producing region with regard to geological impact on soil, wine characteristics and marketability.	01/04/2001-31/03/2006	Mr. J. Wooldridge	Winetech
WW13/13	Quantification of the effects of geology, soil and climate on wine style/quality in Helderberg.	1/04/2004-31/03/2010	Ms. P. Shange	Winetech
WW13/14	Determining the contribution of soil water status and selected atmospheric variables on water stress in grapevines.	1/04/2005-31/03/2010	Dr. P.A. Myburgh	Winetech
WW13/15	Effect of soil mineralogy and potassium buffer capacity on wine quality.	1/04/2005-31/03/2012	Mr. J. Wooldridge	Winetech
WW13/16	Quantification of the effects of different terroirs on wine quality in the Overberg region.	1/04/2005-31/03/2010	Ms. P. Shange	Winetech
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WW18/22	The development of a central irrigation scheduling system, and continuous training in the application thereof, for grape producers of Eksteenskui.	01/04/1999-31/03/2005	Dr. P.A. Myburgh	Winetech
WW18/25	Introduction of the waggon-wheel system to different target groups in the Western and Northern Cape.	1/10/2001-31/03/2010	Dr. K.R. du Plessis	ARC
WW18/26	Evaluation of soil management practices for organic production of grapes with special emphasis on its viability for small to medium size rural enterprises.	1/04/2000-1/08/2008	Ms. M.S. Laker // Dr. J.C. Fourie	Winetech
WW18/27	Developing organic production of wine grapes for resource limited farmers.	1/04/2001-31/03/2006	Ms. M.S. Laker // Dr. J.C. Fourie	Winetech
WW18/29	The irrigation of cash crops in rural areas with treated winery wastewater.	1/04/2003-31/03/209	Mr. A.R. Mulidzi	Winetech
WW18/32	Transforming community gardens : Khayelitsha.	1/04/2006-31/03/2010	Ms. N.S. Zingelwa	ARC
WW18/36	Waterharvesting and sustainable food production.	1/04/2006-31/03/2010	Ms. M.E. Joubert	ARC
WW18/39	Small Farm Holding Trust Spier.	1/04/2007-31/03/2011	Dr. K.R. du Plessis	ARC
WW18/44 // 000315 // P04000025	Rural Development in Mamre.	1/07/2013-30/06/2015	Ms. N.S. Zingelwa	DRDLR
WW19/01	Investigation into the chemical composition of effluent from wine cellars and distilleries for the evaluation of artificial wetlands as a secondary treatment for purification.	1/04/1999-31/03/2006	Mr. A.R. Mulidzi	Winetech
WW19/03	The development, implementation and continual improvement of an ISO 14001 Environmental Management System for the ARC-Fruit, Vine and Wine Research Institute.	27/08/1998-31/03/2010	Ms. B.B. Gysman	ARC
WW19/05	The role of macrophytes during winery wastewater treatment in constructed wetlands.	1/04/2004-31/03/2007	Ms. N.S. Zingelwa	Winetech
WW19/07	Increased bioreactor surface area for optimum biofilm formation in winery/distillery effluent treatments systems.	1/04/2004-31/03/2008	Dr. K.R. du Plessis	Winetech

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WW19/08	Salt removal and nutrient uptake by salt accumulating plants as means of secondary wastewater treatment.	1/04/2004-31/03/2006	Ms. N.S. Zingelwa	Winetech
WW19/09	Use of ozone as pre-treatment to wetland treatment of winery/distillery effluent.	1/04/2004-31/03/2006	Dr. K.R. du Plessis	Winetech
WW19/10	Environmental impact assessment: winery effluent	1/04/2005-31/03/2008	Mr. A.R. Mulidzi	Winetech
WW19/11	Disposal of herbicide & pesticide wastewater	1/04/2006-31/03/2009	Dr. K.R. du Plessis	
WW19/12	The environmental impacts and benefits of winery solid waste: filter materials and fining agents.	1/04/2006-31/03/2007	Ms. N.S. Zingelwa	Winetech
WW19/13	The impact of shorter retention time on wastewater treatment by constructed wetlands.	1/04/2006-31/03/2009	Mr. A.R. Mulidzi	Winetech
WW19/14	Irrigation with effluent water	1/04/2009-31/03/2014	Dr. P.A. Myburgh	Winetech
WW19/15 // 000264	Beneficial use of winer solid waste: composting	1/04/2011-31/03/2015	Ms. L.P. Shange	Winetech
WW21/09	Bemarking van Grondkunde tegnologie en kapasiteit aan die bedryf.	1/04/2002-31/03/2006	Mr. A.R. Mulidzi	Winetech
WW21/23	Training grape growers in the use of instruments for irrigation scheduling.	01/04/2004-31/03/2006	Ms. C. L. Howell	Winetech
WW21/24	Compilation of a practical manual for vineyard irrigation.	01/04/2005-31/03/2007	Dr. P.A. Myburgh	Winetech
P04000027 // 100556 // P04000027	Evaluation of selected grass and broadleaf crops suitable for fodderas interception crops where winery wastewater is re-used for irrigation.	1/04/2015-31/06/2020	Dr. J.C. Fourie	Winetech
P04000215	Rootzone water and nutrient retention in crop production through zeolite application.	1/04/2018-31/03/2021	Dr. N. Lewu	NRF CSUR
P04000216	Soil enzymes as indicators of agro-ecosystem health in deciduous fruit orchards and vineyards.	1/04/2018-31/03/2021	Dr. A.H. Meyer	NRF CSUR
101651 // P04000028	Sustainable production and commercialisation strategies in the Agri-Food sector in South Africa.	1/01/2016-30/06/2018	Dr. A.R. Mulidzi	UNEP
P04000147	Pomegranate irrigation survey.	1/04/2017-31/03/2018	Dr. T. Volschenk	POMASA
P04000253	WRC scoping study on water use of pomegranate orchards.	1/03/2019-28/02/2020	Dr. T. Volschenk	WRC