

NAME OF FIRM: OABS Development Pty Ltd
NAME OF STAFF: Andreas Jacobus Alberts
PROFESSION: Associate and Subtropical crop expert
DATE OF BIRTH: 27 December 1946
YEARS WITH FIRM: 8 years
NATIONALITY: South African

QUALIFICATIONS

1968 Nat. Dip. (Horticulture), Tswane University of Technology
 2002 National Fertilizers Advisors Course, Tswane University of Technology

MEMBERSHIP IN PROFESSIONAL ASSOCIATES:

Registered professional natural Scientist with the South African Council for Natural Scientific Professions (SACNASP) - Pr.Sci.Nat: 400457/04

OTHER TRAINING AND INTERNATIONAL EXPERIENCE:

1993 - Visited Namibia – Consult to Dusan Vasiljevic regarding joint venture with mangos in Aussenkehr area for Redbank Fruit Farms.
 1995 - Visited Namibia – Consult to Namfo, regarding subtropical fruit production for Tsumeb area.
 2003 - Visited Australia for second international macadamia symposium. Presented a paper on Area wide Integrated Pest management with special reference to macadamia pests.
 2009 - Visited Kenya – Consult to Vishal Shah of the Swiss Group regarding avocado and litchi development and marketing prospects for Specialized Oils.
 2009 - Visited Uganda –Consult to Kifaru Chemicals Ltd. Regarding joint ventures with avocados for export and processing of avocado oil for Specialized Oils. Investigated the possibility of macadamia production in northern Uganda.
 Training of Department of Agriculture - Extension officers in macadamia production. Current course: 2016 to 2018 for the South African Macadamia Grower’s association. (SAMAC). Thulamela, Makhado and Mutale districts.

COUNTRIES OF WORK EXPERIENCE:

South Africa, Australia, Namibia. Uganda, Kenya

LANGUAGES:

Language	Reading	Speaking	Writing
English	Excellent	Excellent	Excellent
Afrikaans	Excellent	Excellent	Excellent

EMPLOYMENT RECORD:

Period	Employer	Positions held
1994 – Current	Own Business and OABS Associate	Agricultural consultant
1990 – 1993	Redbank Fruit Farms, Levubu	Technical manager
1988 – 1990	Levubu Cooperative, Levubu,	Extension officer
1978 - 1988	Institute for Tropical & Subtropical Crops, Nelspruit	Officer in Charge. Levubu Experiment Farm, Levubu
1976 - 1977	Farm with subtropical crops and vegetables- Levubu	Private farmer
1966 - 1975	Horticultural Research Institute, Pretoria, Station: Roodeplaat, Pretoria	Chief Agricultural Research Technician

RECENT PROJECT INVOLVEMENT:

Detailed task assigned
<p>Horticultural research on and management of various crops:</p> <p>Temperate fruits: Peach, apricot, plum, cherry, apple, pear, quince, pomegranate, fig, olive, table grapes,</p> <p>Sub-tropical fruits: Avocado. Mango, litchi, papaya, pineapple, jaboticaba, mangosteen, guava, cherry guava, granadilla, jackfruit, citrus, sapodilla</p> <p>Tropical fruit: Banana, pepper (Piper nigrum) Herbs: Ginger, turmeric, bixa, coffee, tea, Berries: Strawberries</p> <p>Nuts: Pecan, pistachio, almond, macadamia, cashew</p> <p>Vegetables: potato, sweet potato, tomato, onions, cabbage, peppers, paprika, carrots, brinjals, lettuce, watermelon, pumpkins, beans, peas, okra,</p> <p>Cut flowers: roses, chrysanthemums, anthuriums, carnations, gladiolus,</p> <p>Ornamentals: palm trees, cycads</p> <p>Nursery: General nursery management and cultivation of fruit and nut trees by budding, grafting and layering.</p>
Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned
<p>Name of assignment or project: Macadamia farm development.</p> <p>Year: 2000</p> <p>Location: Levubu. South Africa</p> <p>Client: Vhavenda bricks</p> <p>Main project features: The goal was to develop a newly acquired farm with 100ha macadamia orchards for export market.</p> <p>Positions held: Consultant</p> <p>Activities performed: Farm planning. Orchard layout. Cultivar choice. Planting plan. Choice of irrigation system.</p>

Name of assignment or project: Macadamia farm development

Year: 1999 - 2014

Location: Louis Trichardt. Limpopo province. South Africa

Client: The Molozi Trust

Main project features: The goal was to develop three newly acquired farms with 1000ha macadamia orchards for export market. 320hectares are already established.

Positions held: Consultant

Activities performed: Farm planning. Orchard layout. Cultivar choice. Planting plan. Choice of irrigation system. Irrigation automation and fertigation systems. Dehusking operation planning. Drying and curing of macadamias after harvest. Integrated pest management system. Training of farm managers.

Name of assignment or project: Area wide integrated pest management project for Soutpansberg district, Limpopo Province. South Africa

Year: 2002 - 2004

Location: Soutpansberg. Limpopo Province. South Africa

Client: South African Macadamia Grower's Association (SAMAC)

Main project features: Established an area wide integrated pest management system with internet network.

Positions held: Project Leader

Activities performed: Weekly reporting of 3 pest insect species with area wide distribution maps to all macadamia farmers in the Soutpansberg district. The aim was an early warning system to assist farmers planning their chemical spraying programs.

SCIENTIFIC PUBLICATIONS:

Bolt, L. C. and A. J. Alberts. 1984. Pruning of Guava Trees. Guavas G-1. Department of Agriculture of the Republic of South Africa. Pretoria.

Robinson, J.C & Alberts, A.J. 1986, Growth and yield responses of banana (cultivar Williams) to drip irrigation under drought and normal rain conditions in the subtropics. *Sci. Hort.* 30: 187 – 202.

Robinson, J.C & Alberts, A.J. 1987. The influence of under canopy sprinkler and drip irrigation systems on growth and yield of banana (cultivar Williams) in the subtropics. *Sci. Hort.* 32: 49-66

Robinson, J.C & Alberts, A.J. 1989, Seasonal variations in the seasonal crop water-use coefficient of banana (cultivar Williams) in the subtropics. *Sci. Hort.* 40:215-225

Oosthuizen, J.H., A.J. Alberts, and A.J. Joubert. 1989. Evaluation of macadamia nut cultivars and selections at two localities in South Africa. *Inform. Bul., Citrus and Subtropical Fruit Res. Inst.* 203:9–12.

Alberts, A.J. 2004 First report on the identification of possible causes of pimple-like skin protuberances on avocado fruit in the Soutpansberg area. *South African Avocado Growers' Association Yearbook* 27, p. 28 – 31

Alberts, A.J. 2005 Heteropterans causing epidermal protuberances on avocado fruit and investigation of possible chemical control methods. *South African Avocado Growers' Association Yearbook* 28, p. 53 - 55

Alberts, A.J. 2009 Minute sucking bug complex causing pimples on the skin of avocado fruit in the Soutpansberg district. SOUTH AFRICAN AVOCADO GROWERS' ASSOCIATION YEARBOOK 32.

Alberts, A.J. 2010 Defining economical action levels for avocado bugs (Miridae) and the use of area wide IPM to warn growers of possible outbreaks. SOUTH AFRICAN AVOCADO GROWERS' ASSOCIATION YEARBOOK 33,

Alberts, A.J. 2011 Avocado fruit sucking bugs – Development of a forecasting model for an area wide monitoring system. South African avocado growers' association yearbook 34, 2011

Alberts, A.J. 2012 Modelling possible avocado bug outbreaks using a practical GIS reporting system. SOUTH AFRICAN AVOCADO GROWERS' ASSOCIATION YEARBOOK 35

Economic value of bat predation services - a review and estimates from Macadamia orchards - Peter John Taylor, Dries Alberts, Ingo Grass, Elsje Jourbert & Teja Tschardt Submitted for publication in the journal *Ecosystem Services*.

Expert's contact information: (e-mail: driesa@mweb.co.za, phone: +27 84 5825585)

CERTIFICATION:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience, and I am available to undertake the assignment in case of an award. I understand that any misstatement or misrepresentation described herein may lead to my disqualification or dismissal by the Client, and/or sanctions by the Bank.



A.J. Alberts

18/10/2019

Name of Expert

Signature

Date