

## CURRICULUM VITAE

### **Prof. Sue WALKER**

Dept. Agrometeorology  
University of Free State  
P O Box 339  
BLOEMFONTEIN 9300  
South Africa

Tel: 27-51-401-2222  
Fax: 27-51-  
email: swalker.sci@mail.uovs.ac.za

### **PERSONAL DATA:**

Female  
Born 19 June 1956 at Pinetown, South Africa  
Marital status - single  
Health excellent  
South African citizen

### **EDUCATION:**

Matriculated - Kloof High School, First Class Pass, 1973. Mathematics (distinction), Physical Science, Geography, Accountancy, Additional Mathematics, English, Afrikaans

B.Sc. Agric. - Univ. of Natal, Pietermaritzburg, 1977.

Major - Agrometeorology, other subjects included crop science, pasture science, soil science, horticulture, agricultural botany, agricultural engineering, agricultural law, biometry, computer science, botany, chemistry, mathematics, physics

B.Sc. Agric. Hons. cum laude - Univ. of Orange Free State, Bloemfontein, 1979.

Major - Agrometeorology

M.Sc. Agric. cum laude - Univ. of Natal, Pietermaritzburg, 1981.

Thesis title: Field Measurement of Leaf Water Potential Components using Thermocouple Psychrometers. Supervisors - Mr MJ Savage and Dr DM Oosterhuis.

Ph.D. - Univ. of California, Davis, USA, 1988.

Dissertation title: Spatial Pattern of Leaf Growth of Sorghum as affected by Water Stress and Implications for Canopy Development. Promoter - Dr TC Hsiao,

Diploma in Project Management, University of Stellenbosch, 1996.

### **PROFESSIONAL EXPERIENCE:**

1998-present **Head of Department** of Agrometeorology at the University of Orange Free State, Bloemfontein, South Africa

Duties include teaching (undergraduate and graduate levels), research (externally funded projects) and community service, with responsibility for the management of the department and supervision of graduate students.

1997 **Professor** in the Department of Agrometeorology at the University of Orange Free State, Bloemfontein, South Africa.

- 1995-97 **Research Division Manager** for Small-scale and Developing Agriculture Programme at the Institute for Soil, Climate and Water, Pretoria, Agricultural Research Council.  
Duties include management and research tasks for all aspects of personnel, finance and programmes. Including coordinating multi-disciplinary projects from proposal to completion stages, between other ARC institutes and outside organisations specialising in small-scale farmers projects.
- 1992-94 **Programme Manager** for Water Utilization and Small-scale Farmer Programmes of Institute for Soil, Climate and Water, Pretoria, Agricultural Research Council.  
Duties include management and research tasks needed to run successful projects from proposal stage through implementation and technology transfer to completion, in connection with the scientific, personnel and financial aspects.
- 1989-92 **Assistant Director / Crop Physiologist** in Agrohydrology Section of Soil and Irrigation Research Institute, Dept. of Agricultural Development.
- 1983-88 **Research Assistant** at University of California, Davis, USA, Department of Land, Air and Water Resources for full-time research and study towards a doctorate degree in Plant Physiology (Seconded from the Dept. of Agriculture, RSA).
- 1980-83 **Agrometeorologist/Plant Physiologist** in the Agrohydrology Section, Soil and Irrigation Research Institute, Department of Agriculture, South Africa. Specific duties included managing, designing and organising field irrigation trials, scheduling irrigation, agrometeorological data acquisition, plant physiology and growth measurements, and analysing data and writing progress reports.
- 1978-79 **Agrometeorologist** in the Agrometeorology Section, Dept. of Agriculture, Pretoria, South Africa.

#### **AWARDS:**

- DF Malan Trophy for the best paper at the Crop Production Congress, 1989.  
Fullbright Scholarship for post-graduate study toward a Ph.D. at the University of California, Davis awarded for 1983-88.  
M.Sc. Agric. cum laude in the Agrometeorology Department of the University of Natal, 1981.  
Certificate of Merit for Agrometeorology Final year course, Univ. of Natal, 1977.  
Bursary for four year B.Sc. Agric. degree from Dept. Agricultural Technical Services for 1974 -77.

#### **MEMBERSHIP AFFILIATION:**

- Agronomy Society of America  
Crop Production Society of South Africa  
Soil Science Society of Southern Africa  
South African Society of Agricultural Extension  
Southern African Association of Farming Systems Research-Extension

**RESEARCH INTERESTS:**

Research in the field of crop physiology, agrometeorology and developing agriculture.

Water use of crops and drought adaptations.

Modelling of crop growth and development and water use of agronomic crops.

Adaptation of large scale irrigation practises for small-scale farmers.

Water relations in the soil/plant/atmosphere continuum, including measurement of water potential components and water flow for agronomic crops and fruit trees.

Irrigation scheduling models.

Peri-urban agriculture, including back-yard and community garden vegetable production.

The use of Farm Systems Research and Extension methods.

Participatory Rural Appraisal.

**PUBLICATIONS** (details attached)

- 1) International scientific articles - 10
- 2) Local scientific articles – 5
- 3) Proceedings – 12 (5 International)
- 4) Project reports - 9.
- 5) Theses - 2

**CONFERENCES ATTENDED** (details attached)

- 1) Over 50 papers presented at conferences both locally and overseas.
- 2) At least 25 conferences were attended at national level between 1980 and 1999.
- 3) Total of 17 International conferences and symposia were attended between 1983 and 1998.
- 4) Papers presented at South African Crop Production Congress most years from 1979 to 1983 and 1989 to 1999.
- 5) Papers presented at 7 International Conferences from 1983 to 1996.

**OVERSEAS STUDY TOURS:** (details attached)

Fourteen study tours to Israel, USA, Australia, Europe, Malawi, Zimbabwe, Namibia, Swaziland, Ghana, Mozambique and Morocco.