

## Publications by SAAB Members — 2001

### Papers and books published by South African Association of Botanists (SAAB) Members — 2001

**New Initiative** — In order to create a greater awareness and increase the profile of South African Botanical Research, provide prospective students some indication of the type of research done at Botanical Research Organisations and Universities, and provide a degree of exposure for SAAB Members, I decided to, once a year, publish a list of Research Papers (published in ISI approved Journals) and Books (or chapters in books) generated by our Members, in *South African Journal of Botany*.

This list, and all future ones, will no doubt never be exhaustive as it depends on Membership participation. It will include the information submitted timeously by SAAB Members (end of June of each year).

Johannes van Staden  
Editor-in-Chief  
*South African Journal of Botany*

---

#### ANGUELOVA-MERHAR VS (DR) — University of Natal-Durban

**Anguelova-Merhar VS**, Van Der Westhuizen AJ, Pretorius ZA (2001)  $\beta$ -1,3-Glucanase and chitinase activities and the resistance response of wheat to leaf rust. *Journal of Phytopathology (Phytopathologische Zeitschrift)* **149**: 381–384

#### BALKWILL K (DR) — University of Witwatersrand

Reddy RA, **Balkwill K**, McLellan T (2001) Is there a unique serpentine flora on the Witwatersrand? *South African Journal of Science* **97**: 485–495

#### FARRANT JM (PROF) — University of Cape Town

**Farrant JM**, Kruger LA (2001) Effects of long-term drying on the resurrection plant *Myrothamnus flabellifolius*. *Plant Growth Regulation* **35**: 109–120

Ndima TB, **Farrant JM**, Thomson JA, Mundree SG (2001) Molecular characterization of XVT8, a stress-responsive gene from the resurrection plant *Xerophyta viscosa* Baker. *Plant Growth Regulation* **35**: 137–145

Van der Willigen C, Pammenter NW, **Farrant JM** (2001) Anomalous pressure-volume curves of resurrection plants do not suggest negative turgor. *Annals of Botany* **88**: 537–543

Van der Willigen C, Pammenter NW, Mundree SG, **Farrant JM** (2001) Some physiological comparisons between the resurrection grass, *Eragrostis nindensis*, and the related desiccation-sensitive species, *Eragrostis curvula*. *Plant Growth Regulation* **35**: 121–129

Whittaker A, Bochicchio A, Vazzana C, Lindsey G, **Farrant JM** (2001) Changes in leaf hexokinase activity and metabolite levels in response to drying in the desiccation-tolerant species *Sporobolus stapfianus* and *Xerophyta viscosa*. *Journal of Experimental Botany* **352**: 961–969

#### FENNELL CW (DR) — University of Natal-Pietermaritzburg

**Fennell CW**, Crouch NR, Van Staden J (2001) Micropropagation of the River Lily, *Crinum variable* (Amaryllidaceae). *South African Journal of Botany* **67**: 71–73

**Fennell CW**, Van Staden J (2001) *Crinum* species in traditional and modern medicine. *Journal of Ethnopharmacology* **78**: 15–26

#### HERMAN PPJ (MR) — National Botanical Institute

**Herman PPJ** (2001) Observations on hairs in the capitula of some southern African Asteraceae genera. *South African Journal of Botany* **67**: 65–68

**Herman PPJ**, Condry G (2001) *Kleinia galpinii*. *Flowering Plants of Africa* **57**: t. 2177, 92–95

**Herman PPJ**, Condry G (2001) *Tarchonanthus obovatus*. *Flowering Plants of Africa* **57**: t. 2180, 108–112

Müller MAN, **Herman PPJ**, Kolberg HH (2001) *Eriocephalus* and *Lasiospermum*. *Flora of Southern Africa* Vol. 33: Asteraceae Part 4: Anthemideae Fascicle 1

#### MANNING JC (DR) — National Botanical Institute

**Manning JC** (2001) Eastern Cape: Wild Flower Guide 11. Botanical Society of South Africa, Cape Town

**Manning JC** (2001) SASOL First Field Guide to Succulents of Southern Africa. Struik Publishers, Cape Town

**Manning JC** (2001) SASOL Eerste Veldgids tot Vetplante van suider-Afrika. Struik Publishers, Cape Town

**Manning JC**, Goldblatt P (2001) The greater glory. In: Arnold M (ed) *Botanical Art in Southern Africa*. Fernwood Press, Cape Town, pp 105–142

**Manning JC**, Goldblatt P (2001) A synoptic review of *Romulea* (Iridaceae: Crocoideae) in sub-Saharan Africa, the Arabian Peninsula and Socotra, including new species, biological notes, and a new infrageneric classification. *Adansonia* **23**: 59–108

**Manning JC**, Goldblatt P (2001) A new species of *Emilia* (Senecioneae) from South Africa. *Bothalia* **31**: 46–48

**Manning JC**, Goldblatt P (2001) Three new species of *Tritoniopsis* (Iridaceae: Crocoideae) from the Cape Region of South Africa. *Bothalia* **31**: 175–181

**Manning JC**, Goldblatt P (2001) A remarkable new species of *Androcymbium* (Colchicaceae) from Northern Cape, South Africa. *Bothalia* **31**: 203–205

**Manning JC**, Goldblatt P (2001) Two new renosterveld species of Iridaceae: Crocoideae from South Africa. *Bothalia* **31**: 189–192

Goldblatt, P, **Manning JC**, Bernhardt P (2001) Radiation of pollination systems in *Gladiolus* (Iridaceae: Crocoideae) in southern Africa. *Annals of the Missouri Botanical Garden* **88**: 713–734

#### **NAIDOO G (PROF) — University of Westville**

**Naidoo G** (2001) Effects of salinity and nitrogen on growth, ion relations and proline accumulation in *Triglochin bulbosa*. *Wetlands Ecology and Management* **9**: 491–497

Tuffers AV, **Naidoo G**, Von Willert DJ (2001) Low salinities adversely affect photosynthetic performance of the mangrove *Avicennia marina*. *Wetlands Ecology and Management* **9**: 225–232

#### **NEWTON LE (DR) — University of Kenyatta-Nairobi**

**Newton LE** (2001) A new *Sansevieria* cultivar in Kenya. *Sansevieria* **1**: 8–10

**Newton LE** (2001) Stem-succulent species of *Cissus* in Kenya. *British Cactus and Succulent Journal* **19**: 17–20

**Newton LE** (2001) How many *Sansevieria* species are there? *Sansevieria* **2**: 10

**Newton LE** (2001) Notes on Kenyan aloes: a new record and a new species. *Cactus and Succulent Journal (US)* **73**: 154–158

**Newton LE** (2001) *Aloe*. In: Eggl U (ed) *Illustrated Handbook of Succulent Plants: Monocotyledons*. Springer-Verlag, Berlin, pp 103–186

**Newton LE** (2001) *Gasteraloe*. In: Eggl U (ed) *Illustrated Handbook of Succulent Plants: Monocotyledons*. Springer-Verlag, Berlin, pp 190–192

**Newton LE** (2001) *Sansevieria*. In: Eggl U (ed) *Illustrated Handbook of Succulent Plants: Monocotyledons*. Springer-Verlag, Berlin, pp 261–272

**Newton LE** (2001) CITES *Aloe* and *Pachypodium* Checklist. Royal Botanic Gardens, Kew, 160pp. [*Aloe* by LE Newton, *Pachypodium* by GD Rowley]

**Newton LE** (2001) Poisonous aloes. *East Africa Natural History Society Bulletin* **31**: 8–9

Smith GF, **Newton LE** (2001) Aloaceae. In: Eggl U (ed) *Illustrated Handbook of Succulent Plants: Monocotyledons*. Springer-Verlag, Berlin, pp 102–103

Viljoen AM, Van Wyk B-E, **Newton LE** (2001) The occurrence and taxonomic distribution of the anthrones aloin, aloinoside and microdantin in *Aloe*. *Biochemical Systematics and Ecology* **29**: 53–67

#### **PAMMENTER NW (PROF) — University of Natal-Durban**

Walters C, **Pammenter NW**, Berjak P, Crane J (2001) Desiccation damage, accelerated aging and respiration in desiccation tolerant and sensitive seeds. *Seed Science Research* **11**: 135–148

Wesley-Smith J, **Pammenter NW**, Berjak P, Walters C (2001) The effects of two drying rates on the desiccation tolerance of embryonic axes of jackfruit (*Artocarpus heterophyllus* Lamk.) seeds. *Annals of Botany* **88**: 653–664

Van der Willigen C, **Pammenter NW**, Farrant JM (2001) Anomalous pressure volume curves of resurrection plants do not suggest negative turgor. *Annals of Botany* **88**: 537–543

Wesley-Smith J, Walters C, **Pammenter NW**, Berjak P (2001) Interaction of water content, rapid (non-equilibrium) cooling to -196°C, and survival of embryonic axes of *Aesculus hippocastanum* L. seeds. *Cryobiology* **42**: 196–206

Van der Willigen C, **Pammenter NW**, Mundry SG, Farrant JM (2001) Some physiological comparisons between the resurrection grass, *Eragrostis nindensis*, and the related desiccation-sensitive species, *E. curvula*. *Plant Growth Regulation* **35**: 121–129

#### **SMITH GF (PROF) — National Botanical Institute**

**Smith GF**, Steyn EMA (2001) Noble aloes: a case study of *Aloe* 'Spiraal'. *Alsterworthia International* **1**: 3–4

**Smith GF**, Steyn EMA, Crouch NR, Condy G (2001) *Kleinia longiflora*. *Flowering Plants of Africa* **57**: 96–102

**Smith GF**, Steyn EMA, Van Wyk AE (2001) *Crassula tetragona* subsp. *acutifolia* (Crassulaceae). *Curtis's Botanical Magazine* **18**: 23–27

Steyn EMA, **Smith GF** (2001) *Talinum paniculatum*, a naturalized weed in South Africa. *Bothalia* **31**: 195–197

Steyn EMA, **Smith GF** (2001) Are ovules and seeds in *Lomatophyllum* Willd. (*Aloe* sect. *Lomatophyllum sensu auct.*) anatropous and exarillate? *Bothalia* **31**: 237–240

Steyn EMA, Van Wyk AE, **Smith GF** (2001) A study of the ovule and young seed of *Guthriea capensis* (Achariaceae). *South African Journal of Botany* **67**: 206–213

#### **TILNEY PM (DR) — Rand Afrikaans University**

**Tilney PM**, Van Wyk B-E (2001) A revision of *Annesorhiza* Cham. & Schlecht. (Apiaceae). *Nordic Journal of Botany* **21**: 615–649

Van Wyk B-E, **Tilney PM** (2001) The generic position of *Annesorhiza filicaulis* Eckl. & Zeyh. (Apiaceae). *Edinburgh Journal of Botany* **58**: 383–387

#### **VAN STADEN J (PROF) — University of Natal-Pietermaritzburg**

Abrie AL, **Van Staden J** (2001) Development of regeneration protocols for selected cucurbit cultivars. *Plant Growth Regulation* **35**: 263–267

Abrie AL, **Van Staden J** (2001) Micropropagation of the endangered *Aloe polyphylla*. *Plant Growth Regulation* **33**: 19–23

Arthur GD, Jäger AK, **Van Staden J** (2001) The release of cytokinin-like compounds from *Ginkgo biloba* leaf material during composting. *Environmental and Experimental Botany* **45**: 55–61

Arthur GD, Jäger AK, **Van Staden J** (2001) Uptake of [<sup>3</sup>H]DHZ by tomato seedlings. *South African Journal of Botany* **67**: 661–666

De Ronde JA, Cress WA, **Van Staden J** (2001) Interaction of osmotic and temperature stress on transgenic soybean. *South African Journal of Botany* **67**: 655–660

Elgorashi EE, **Van Staden J** (2001) Alkaloids from *Crinum lugardiae*. *Biochemical Systematics and Ecology* **29**: 751–752

Elgorashi EE, Drewes SE, **Van Staden J** (2001) Alkaloids from *Crinum macowanii*. *Biochemical Systematics and Ecology* **29**: 749–750

Elgorashi EE, Drewes SE, **Van Staden J** (2001) Alkaloids from *Crinum moorei*. *Phytochemistry* **56**: 737–740

Eloff JN, Jäger AK, **Van Staden J** (2001) The stability and the relationship between anti-inflammatory activity and antibacterial properties of southern African *Combretum* species. *South African Journal of Science* **97**: 291–293

- Fennell CW, **Van Staden J** (2001) *Crinum* species in traditional and modern medicine. *Journal of Ethnopharmacology* **78**: 15–26
- Fennell CW, Crouch NR, **Van Staden J** (2001) Micropropagation of the river lily, *Crinum variabile* (Amaryllidaceae). *South African Journal of Botany* **67**: 74–77
- Gardner MJ, Dalling K, Light ME, Jäger AK, **Van Staden J** (2001) Does smoke substitute for red light in the germination of light-sensitive lettuce seeds by affecting gibberellin metabolism? *South African Journal of Botany* **67**: 636–640
- Hare PD, Cress WA, **Van Staden J** (2001) The effects of exogenous proline and proline analogues on *in vitro* shoot organogenesis in *Arabidopsis*. *Plant Growth Regulation* **34**: 203–207
- Hills PN, **Van Staden J**, Viljoen CD (2001) Differences in polypeptide expression in thermoinhibited and germinating achenes of *Tagetes minuta* L. *Plant Growth Regulation* **34**: 187–194
- Jones NB, **Van Staden J** (2001) Improved somatic embryo production from embryogenic tissue of *Pinus patula*. *In Vitro Cellular and Developmental Biology — Plant* **37**: 543–549
- Jones WR, **Van Staden J** (2001) The reproduction sequences of four important commercial *Eucalyptus* species in South Africa. *Proceedings — Developing the Eucalypt of the Future*, pp 1–12
- Kowalski B, **Van Staden J** (2001) *In vitro* culture of two threatened South African medicinal trees — *Ocotea bullata* and *Warburgia salutaris*. *Plant Growth Regulation* **34**: 223–228
- Kowalski B, **Van Staden J** (2001) Micropropagation of *Podocarpus henkelii* and *P. elongatus*. *South African Journal of Botany* **67**: 362–366
- Liu T, **Van Staden J** (2001) Partitioning of carbohydrates in salt-sensitive and salt-tolerant soybean callus cultures under salinity stress and its subsequent relief. *Plant Growth Regulation* **33**: 13–17
- Liu T, **Van Staden J** (2001) Growth rate, water relations and ion accumulation of soybean callus lines differing in salinity tolerance under salinity stress and its subsequent relief. *Plant Growth Regulation* **34**: 277–285
- McGaw LJ, Rabe T, Sparg SG, Jäger AK, Eloff JN, **Van Staden J** (2001) An investigation into the biological activity of *Combretum* species. *Journal of Ethnopharmacology* **75**: 45–50
- Pan M, **Van Staden J** (2001) The effect of activated charcoal on the production and development of somatic embryos in cultures of *Daucus carota*. *South African Journal of Botany* **67**: 629–635
- Pillay CCN, Jäger AK, **Van Staden J** (2001) Cyclooxygenase inhibiting and anti-bacterial activities of South African *Erythrina* species. *Journal of Ethnopharmacology* **74**: 231–237
- Reid KA, Jäger AK, **Van Staden J** (2001) Isolation of the anti-bacterial vernodalin from traditionally used *Vernonia colorata*. *South African Journal of Botany* **67**: 71–73
- Reid KA, Jäger AK, **Van Staden J** (2001) Pharmacological and phytochemical properties of *Dombeya rotundifolia*. *South African Journal of Botany* **67**: 349–353
- Stirk WA, **Van Staden J** (2001) Some physical factors affecting adsorption of heavy metals from solution by dried brown seaweed material. *South African Journal of Botany* **67**: 615–619
- Stirk WA, **Van Staden J** (2001) The role of cytokinins in root development of pea seedlings. *Plant Growth Regulation* **34**: 173–180
- Taylor JLS, **Van Staden J** (2001) The effect of age, season and growth conditions on anti-inflammatory activity in *Eucomis autumnalis* (Mill.) Chitt. plant extracts. *Plant Growth Regulation* **34**: 39–47
- Taylor JLS, **Van Staden J** (2001) The effect of nitrogen and sucrose concentrations on the growth of *Eucomis autumnalis* (Mill.) Chitt. plantlets *in vitro*, and on subsequent anti-inflammatory activity in extracts prepared from the plantlets. *Plant Growth Regulation* **34**: 49–56
- Taylor JLS, **Van Staden J** (2001) Anti-inflammatory activity in extracts prepared from callus cultures of *Eucomis autumnalis* (Mill.) Chitt. *Plant Growth Regulation* **34**: 331–337
- Taylor JLS, **Van Staden J** (2001) *In vitro* propagation of *Eucomis* L'Herit. species — plants with medicinal and horticultural potential. *Plant Growth Regulation* **34**: 317–329
- Taylor JLS, **Van Staden J** (2001) Cox-1 inhibitory activity in *Eucomis* L'Herit. species. *Journal of Ethnopharmacology* **75**: 257–265
- Taylor JLS, Rabe T, McGaw LJ, Jäger AK, **Van Staden J** (2001) Towards the scientific validation of traditional medicinal plants. *Plant Growth Regulation* **34**: 23–37
- Tetyana P, **Van Staden J** (2001) Micropropagation of *Cussonia paniculata* — a medicinal plant with horticultural potential. *South African Journal of Botany* **67**: 367–370
- Van Staden J**, Pan M (2001) Genetic diversity of blue-flowered *Scilla* species as determined by random amplified polymorphic DNA. *South African Journal of Botany* **67**: 344–348
- Wang H, **Van Staden J** (2001) Resolving problems that impede *in vitro* culture of Chinese tree peonies. *South African Journal of Botany* **67**: 358–361

---

Joint International Conference  
*South African Association of Botanists*  
&  
*The International Society for Ethnopharmacology*

7-11 January 2003  
Pretoria, South Africa

---

The Department of Botany at the University of Pretoria and the National Botanical Institute of South Africa are pleased to invite you to the 29<sup>th</sup> Conference of the South African Association of Botanists, which will convene jointly with the 7<sup>th</sup> International Society for Ethnopharmacology's Congress at the University of Pretoria's Conference Centre, Pretoria, South Africa.

**Main disciplines covered will include:**

Ethnobotany / Pharmacology, Plant Anatomy, Biogeography, Plant Biotechnology, Plant Ecology, Plant Genetics, Plant Morphology, Plant Physiology, Plant Taxonomy / Systematics, Phytodiversity, Natural Product Chemistry

---

**Pre-conference Symposia**

**Apiales Symposium** — An international symposium on the families Apiaceae and Araliaceae will be held on 6-7 January 2003  
Contact Dr Pat Tilney (pmt@na.rau.ac.za) for further information

**Asteraceae Symposium** — An Asteraceae symposium of the DEEP ACHENE group will be held on 7-8 January 2003  
Contact Vicki Funk (Funk.Vicki@nmnh.si.edu) or Marinda Koekemoer (mk@nbipre.nbi.ac.za)

An Asteraceae field trip will be taken to Eastern Free State, Lesotho and Natal Drakensberg from 11-17 January 2003. Interested persons can contact Marinda Koekemoer

**Post-Conference Tours**

Post-conference tours/field trips have been arranged for interested delegates. Field trip destinations are, besides their historical and landscape attractions, also botanical treasures. Tours available include:

- the Succulent Karoo and Cape Floristic Region
- the Little Karoo and Cape Fynbos
- the unique Soutpansberg
- the Pilanesberg National Park

Interested delegates are requested to contact Mr Kotie Retief for more information and bookings at:

Tel: +27 (0)12 991 1807      Mobile: +27 (0)82 779 2612      Fax: +27 (0)12 991 2988      e-mail: gariep@succulents.net

---

Address for all correspondence:

**René Swart** — SAAB/ISE 2003 Conference  
Department of Botany, University of Pretoria, Pretoria 0002, South Africa  
e-mail: rswart@postino.up.ac.za  
Fax no: +27 (0)12 3625099  
Tel no: +27 (0)12 4203770

<http://www.up.ac.za/academic/botany/index.html>

---

Membership of one of the most highly-regarded professional scientific societies in the country. SAAB provides a forum for professional botanists to interact with their colleagues on a regular basis and freely exchange ideas and information. You get access to the SA Journal of Botany is currently published by Elsevier. The journal usually consists of more than 600 published pages of which about 40% are from authors outside South Africa. Who qualifies to become a SAAB member? Ordinary membership is focused on individuals with a minimum academic qualification of a three year bachelor's degree with Honours in Botany or related science (or a four year degree with a major in a plant-related science) and who are active in their fields. SAAB is defined as South African Association of Botanists somewhat frequently. We have 18 other meanings of SAAB in our Acronym Attic. [Link/Page Citation](#). [Page/Link](#). [Page URL: HTML link](#)