

## BEN-ERIK VAN WYK

Born in Belville, Cape, 27.12.1956. Educated at the Universities of Stellenbosch (B.Sc. in Forestry/Nature Conservation 1979; M.Sc. *cum laude* 1983) and Cape Town (Ph.D 1989).

Awards include the Schlich Medal in 1980, the FRD President's Award in 1991, a research grant from the Innovation Fund for R3 mil. (2004-2006), the 2006 Havenga prize for Biology from the South African Academy of Science and Arts and the SAAB Silver Medal from the South African Association of Botanists (2007).

Lecturing Botany at the University of Johannesburg since 1984 (Professor since 1990).

Involved in various professional associations and advisory committees, e.g. the National Research Foundation's Indigenous Plant Use Forum (chairman since 1996). Organiser of the annual IPUF conferences. Member of the Presidential Task Team on African Traditional Medicine.

Research interest in medicinal plants, useful plants, plant classification and chemosystematics (see later).

Commercial interests - product development, new crop development and quality control of herbal products since 1993 (with South African Druggists - now Aspen Pharmacare, later founding Director of Phyto Nova (Pty) Ltd; 2003-2006 with the "New Drug Development Platform" at the Medical Research Council of SA - funded by the DTI). Member of Briza Publications CC (Publisher of botanical books). Chairman of the Aloe Council of South Africa (Pty) Ltd., a section 21 (non-profit) company.

Author or co-author of some 220 research papers in scientific journals, about 260 lectures at conferences and 12 books.

### BOOKS:

**Van Wyk, B-E.** 1991. *A synopsis of the genus Lotononis (Fabaceae: Crotalariaeae)*. Contributions from the Bolus Herbarium 14. (292 pages).

**Van Wyk, B-E.** & Smith, G.F. 1996. *Guide to the aloes of South Africa*. Briza Publications, Pretoria. (303 pages). (Revised edition 2004, reprinted 2005).

**Van Wyk, B-E.**, Van Oudtshoorn, B. & Gericke, N. 1997. *Medicinal Plants of South Africa*. Briza Publications, Pretoria. (304 pages). (Revised edition 2000, reprint 2002, 2005).

Smith, G.F., Chesselet, P., Van Jaarsveld, E., Hartmann, H., Hammer, S., **Van Wyk, B-E.**, Burgoyne, P. Klak, C. & Kurzweil, H. 1998. *Mesembs of the World: Illustrated guide to a remarkable succulent plant family*. Briza Publications, Pretoria. (405 pages).

**Van Wyk, B-E.** & Gericke, N. 2000. *People's Plants: a guide to useful plants of southern Africa*. Briza Publications, Pretoria. (351 pages). (Reprinted 2002, 2005).

Van Jaarsveld, E., **Van Wyk, B-E.** & Smith, G.F. 2000. *Succulents of South Africa: a guide to regional diversity*. Tafelberg, Cape Town. (144 pages). (Also in Afrikaans: Vetplante van Suid-Afrika: 'n gids tot die streekverskeidenheid).

Van Wyk B., Van Wyk, P. & **Van Wyk, B-E.** 2000. *Photographic guide to trees of southern Africa*. Briza Publications, Pretoria. (360 pages). (Revised edition 2008).

**Van Wyk, B-E.**, Van Heerden, F.R. & Van Oudtshoorn, B. 2002. *Poisonous Plants of South Africa*. Briza Publications, Pretoria. (288 pages). (Reprinted 2005).

**Van Wyk, B-E.** & Wink, M. 2004. *Medicinal Plants of the World*. Briza Publications, Pretoria. (480 pages). (reprinted 2004, 2005) Also in German: Van Wyk, B-E., Wink, C., Wink M. 2004. *Handbuch der Arzneipflanzen*. Wissenschaftliche Verlagsgesellschaft, Stuttgart. (480 pages). (reprinted 2004). Polish and Korean translations in 2007.

**Van Wyk, B-E.** 2005. *Food Plants of the World*. Briza Publications, Pretoria. (480 pages). Also in German: Van Wyk, B-E. 2005. *Handbuch der Nahrungspflanzen*. Wissenschaftliche Verlagsgesellschaft, Stuttgart. (480 pages).

Smith, G.F. & **Van Wyk, B-E.** 2008. Guide to Garden Succulents. Co-production: Briza Publications, Pretoria (ISBN 978-187-5093670) and Timber Press (USA). ISBN-13: 978-0-88192-954-6

Dugmore, H. & **Van Wyk, B-E.** (in press). Muthi and Myths from the African Bush. Briza Publications, Pretoria. (Also in Afrikaans: "Muti en Mites uit Afrika").

Wink, M. & **Van Wyk, B-E.** (in press). Mind-Altering and Poisonous Plants of the World. Co-production: Briza Publications, Pretoria; Medpharm Publishers, Germany; Timber Press, USA.

## SELECTED SCIENTIFIC PAPERS:

**Van Wyk, B-E.** 2002. A review of ethnobotanical research in southern Africa. *South African Journal of Botany* 68: 1–13.

Geldenhuys, C.J. & **Van Wyk, B-E.** 2002. Indigenous biological resources of Africa. In: Baijnath, H. & Singh, Y. (eds). *Rebirth of Science in Africa. A Shared Vision for Life and Environmental Sciences*, pp. 116-132. Umdaus Press, Pretoria.

**Van Wyk, B-E.** 2003. The value of chemosystematics in clarifying relationships in the genistoid tribes of papilionoid legumes. *Biochemical Systematics & Ecology* 31: 875-884.

Van Heerden, F.R., **Van Wyk, B-E.**, Viljoen, A.M., Steenkamp, P.A. 2003. Phenolic variation in wild populations of *Aspalanthus linearis* (rooibos tea). *Biochemical Systematics & Ecology* 31: 885-895.

Treutlein, J., Smith, G.F., **Van Wyk, B-E.**, Wink, M. 2003. Phylogenetic relationships in the *Asphodelaceae* (subfamily *Aloooideae*) inferred from chloroplast DNA sequences (*rbcl*, *matK*) and from genomic fingerprinting (ISSR). *Taxon* 52: 193-207.

Liu, M., **Van Wyk, B-E.**, Tilney, P.M. 2003. The taxonomic value of fruit structure in the subfamily Saniculoideae and related African genera (Apiaceae). *Taxon* 52: 261-270.

**Van Wyk, B-E.** & Tilney, P.M. 2004. Diversity of Apiaceae in Africa. *South African Journal of Botany* 70(3): 433-445.

**Van Wyk, B-E.** 2004. Phyto Nova and Wildland Plants – An approach to HIV/AIDS. In: Martin, V.G. & Muir, A. (eds), *Wilderness and Human Communities. The Spirit of the 21 st Century*. Proceedings of the 7 th World Wilderness Congress, Port Elizabeth, South Africa (2-8 November 2001), pp. 262-277. Fulchrum Publishing, Golden, Colorado, USA.

**Van Wyk, B-E.** 2005. Tribe Podalyrieae. In: L. Lewis, B. Schrire, B. Mackinder and M. Lock (eds), *Legumes of the World*, pp. 267-271. Royal Botanic Gardens, Kew.

Steenkamp, P.A., Harding, N.M., Van Heerden, F.R., **Van Wyk, B-E.** 2006. Identification of atractyloside by LC-ESI-MS in alleged herbal poisonings. *Forensic Science International* 163 (1-2): 81-92.

- Moteetee, A., **Van Wyk, B-E.** 2006. A revision of the genus *Melolobium* (Genisteae, Fabaceae). South African Journal of Botany 71(4): 51-98.
- Liu, M., Plunkett, G.M., Lowry P.P., **Van Wyk, B-E.**, Tilney, P.M. 2006. The taxonomic value of fruit wing types in the order Apiales. American Journal of Botany 93(9): 1357-1368.
- Calviño, C.I., Tilney, P.M., **Van Wyk, B-E.**, Downie, S.R. 2006. A molecular phylogenetic study of Southern African Apiaceae. American Journal of Botany 93: 1828-1847.
- Magee, A.R., **Van Wyk, B-E.**, Van Vuuren, S. 2007 The ethnobotany and anti-microbial activity of *sieketroos* (*Arctopus echinatus*, Apiaceae). South African Journal of Botany 73: 159-162.
- Le Roux, M.M., **Van Wyk, B-E.** 2007. A revision of *Lebeckia* sect. *Lebeckia*: the *L. sepiaria* group. South African Journal of Botany 73: 118-130.
- Liu, M, **Van Wyk, B-E.**, Tilney, P.M. 2007. A taxonomic revision of the genus *Choritaenia* (Apiaceae). South African Journal of Botany 73: 184-189.
- Moteetee, A., **Van Wyk, B-E.** 2007. The concept of 'Musa-pelo and the use of shrubby legumes (Fabaceae) in Lesotho. Bothalia 37: 75-77.
- Winter, P.J.D., Magee, A.R., Phephu, N., Tilney, P.M., Downie, S.R., **Van Wyk, B-E.** 2008. A new generic classification for African peucedanoid species (Apiaceae). Taxon 57: 347-364.
- Magee, A.R., **Van Wyk, B-E.**, Tilney, P.M. 2008. A taxonomic revision of the South African endemic genus *Arctopus* (Saniculoideae, Apiaceae) – Annals of the Missouri Botanical Garden (in press)
- Oskolski, A., **Van Wyk, B-E.** 2008. Systematic wood anatomy of the tribe Heteromorphae (Apiaceae). Botanical Journal of the Linnean Society (in press)
- Van Wyk, B-E.**, De Wet, H., Van Heerden, F.R. 2008. An ethnobotanical survey of medicinal plants in the southeastern Karoo, South Africa. South African Journal of Botany (in press)
- Boatwright, J.S., Marianne M. Le Roux, M.M., Wink, M., Morozova, T., **Van Wyk, B-E.** 2008. Molecular systematics of the tribe Crotalariae (Fabaceae). Systematic Botany (in press)
- Magee, A.R., Tilney, P.M., **Van Wyk, B-E.** 2008. A revision of the woody Cape genus *Notobubon* (Apiaceae). Systematic Botany 34(1) (in press)
- Van Wyk, B-E.** 2008. A broad review of commercially important Southern African medicinal plants. Journal of Ethnopharmacology (in press).
- Brendler, T., **Van Wyk, B-E.** 2008. A review of *Pelargonium sidoides*. Journal of Ethnopharmacology (in press).
- Van Wyk, B-E.** 2008. A review of Khoi-San and Cape Dutch medical ethnobotany. (Journal of Ethnopharmacology)(in press)
- Olivier, D., **Van Wyk, B-E.**, Van Heerden, F.R. 2008. The chemotaxonomic and medicinal significance of phenolic acids in *Arctopus* and *Alepidea* (Apiaceae subfamily Saniculoideae). Biochemical Systematics and Ecology (in press)
- Van Wyk, B-E.**, Albrecht, A. 2008. A review of the taxonomy, ethnobotany, chemistry and pharmacology of *Sutherlandia*. Journal of Ethnopharmacology (in press).

## **CONTACT DETAILS:**

### **Ben-Erik van Wyk (Professor of Botany)**

#### **Department of Botany and Plant Biotechnology**

**University of Johannesburg**, P.O. Box 524, Auckland Park 2006,  
South Africa; Tel: +27 (0)11 559 2412; Fax: +27 (0)11 559 2411;  
Mobile phone: 082 800 4134; Email: bevanwyk@uj.ac.za;  
Secretary: Maretha Schwimm Tel: +27 (0)11 559 2436

### **Chairman: Aloe Council of South Africa (Pty) Ltd**

Secretary: Helen Coventry; Tel: +27 (0)11 559 3469;  
Mobile phone: 076 125 0467; Email: phytomed@uj.ac.za  
website: www.aloesa.co.za

### **Member: Briza Publications CC** (publishers of botanical books)

Tel: +27 (0)12 329 3896; Fax: +27 (0)12 329 4525  
Email: books@briza.co.za; website: www.briza.co.za

### **Chairman: Indigenous Plant Use Forum** (national scientific forum)

Secretariat: Bernard de Villiers; Email: ipuf@uj.ac.za

## **RESEARCH INTERESTS:**

A. Taxonomy, systematics and chemosystematics of African plant families, mainly Apiaceae (Umbelliferae), Fabaceae (African genistoid legumes) and Asphodelaceae (Aloe and related genera).

B. Medicinal plants and ethnobotany, including Khoi-San and Cape Dutch ethnobotany, quality control, product and crop development.

## **CURRENT GROUP MEMBERS OF RESEARCH GROUP:**

### **Apiaceae Research Group:**

Prof Patricia M. Tilney, University of Johannesburg  
Prof Mei (Rebecca) Liu (Harbin, China)  
Dr Alexei Oskolski (St Petersburg, Russia)  
Dr Elena Yu. Yembaturova (Moscow, Russia)  
Anthony R Magee, Ph.D. student, University of Johannesburg  
Pieter J.D. Winter, Ph.D. student, SANBI  
Bernard de Villiers, Ph.D. student, University of Johannesburg

### **Fabaceae Research Group:**

Dr Annah Moteetee, University of Johannesburg  
Stephen Boatwright, Ph.D. student, University of Johannesburg  
Marianne Le Roux, Ph.D. student, University of Johannesburg

## **Medicinal Plants and Ethnobotany Research Group:**

Dr Carl Albrecht, National Cancer Association of South Africa

Dr Annah Moteetee, University of Johannesburg

Dr Helene de Wet, University of Zululand

Helen Long, University of Johannesburg

Denise Olivier, University of Johannesburg

Margaret Hulley, M.Sc. student, University of Johannesburg



The Apiaceae group (from left): A.R. Magee, M. Liu, P.M. Tilney, B-E. van Wyk, P.J.D. Winter

## **COLLABORATORS:**

Dr Carl Albrecht, National Cancer Association of South Africa.

Prof E. Dagne, Dept of Chemistry, University of Addis Abeba, Ethiopia.

Dr H. de Wet, Dept of Botany, University of Zululand.

Prof S.R. Downie, Dept of Plant Biology, University of Illinois at Urbana-Champaign, Urbana, Illinois, USA.

Prof M.G. Pimenov, Botanical Garden, Moscow State University, Moscow, Russia.

Prof M. Liu, Dept of Botany, Harbin Normal University, Harbin, Peoples Republic of China.

Dr A. Oskolski, Komarov Botanical Institute, St Petersburg, Russia.

Prof G.M. Plunkett, Dept of Biology, Virginia Commonwealth University, Richmond, Virginia, USA.

Dr Porter P. (Pete) Lowry II, Missouri Botanical Garden, St Louis, Missouri, USA and  
Département Systématique et Evolution, Muséum National d'Histoire Naturelle, Paris, France.

Prof F.R. van Heerden, School of Chemistry, University of KwaZulu-Natal.

Prof M. Wink, Dept of Pharmaceutical Biology, University of Heidelberg, Germany.