

TELOPEA

A journal of plant systematics

CONTENTS

Obituary: L.A.S. Johnson	Barbara G. Briggs	177
The cytotaxonomy of four Tasmanian genera of Proteaceae	R.J. Wiltshire & H.M. Stace	181
New taxa in <i>Eucalyptus</i> (Myrtaceae) from New South Wales and Queensland	K.D. Hill	187
<i>Persoonia hindii</i> (Proteaceae), a new species from the Newnes Plateau, New South Wales	Peter H. Weston and L.A.S. Johnson	199
The relationships of <i>Amphipogon</i> , <i>Elytrophorus</i> and <i>Cyperochloa</i> (Poaceae) as suggested by <i>rbcL</i> sequence data	Nigel P. Barker	205
<i>Muehlenbeckia tuggeranong</i> (Polygonaceae), a new species from the Canberra district	R.O. Makinson and D. J. Mallinson	215
The sexual status of <i>Colebrookea</i> (Labiatae)	G. Raza Bhatti and Martin J. Ingrouille	221
Taxonomic studies in <i>Euphrasia</i> (Scrophulariaceae). VIII. <i>E. ruptura</i> , a name for a species apparently extinct in northeastern New South Wales	W.R. Barker	227
Four rare and/or threatened new species of <i>Prostanthera</i> Section <i>Prostanthera</i> (Labiatae) from New South Wales	Barry J. Conn	231
A revision of <i>Baeckea</i> (Myrtaceae) in eastern Australia, Malesia and south-east Asia	A.R. Bean	245
Nomenclatural corrections in the <i>Rytidosperma</i> complex (Danthonieae, Poaceae)	H. Peter Linder	269
Relationships of the Wollemi Pine (<i>Wollemia nobilis</i>) and a molecular phylogeny of the Araucariaceae	S. Gilmore and K.D. Hill	275
Notes on <i>Verbena officinalis</i> sensu stricto and <i>V. macrostachya</i> (Verbenaceae) with new combinations in two closely related taxa	P.W. Michael	293
SHORT COMMUNICATIONS		
A putative hybrid in <i>Verbena</i> (Verbenaceae) and the application of the name <i>V. brasiliensis</i> .	P.W. Michael	299
<i>Jarava plumosa</i> (Gramineae), a new combination for the species formerly known as <i>Stipa papposa</i>	S.W.L. Jacobs and J. Everett	301

TELOPEA 7(3): 177–302 DECEMBER 1997

Scientific Editor
Peter Wilson

General Editor
Kristina Resanceff

Editor of Publications
Gary Bridle

Typesetting and Production Assistance
Debby McGerty

Other members of Editorial Committee
Barbara Briggs, Joy Everett, Gwen Harden, Karen Wilson

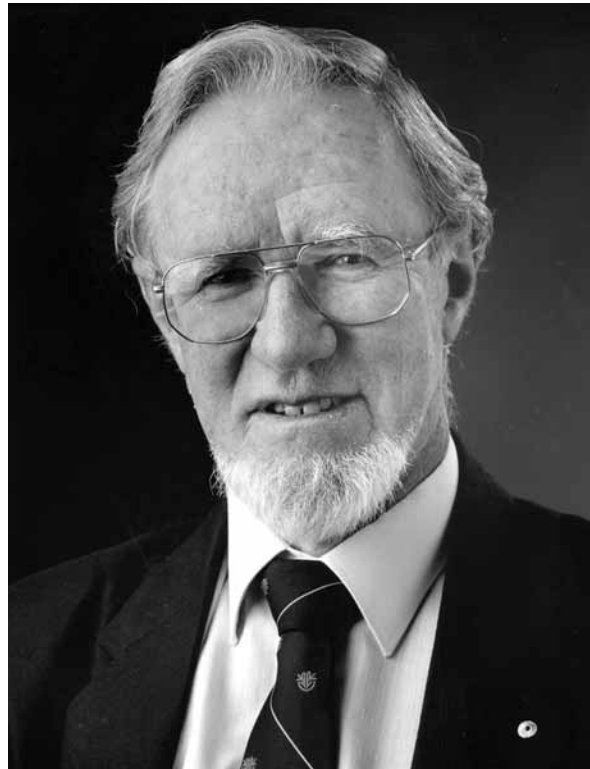
ISSN 0312-9764

Telopea 7(2) was distributed on 8 July 1997.

National Herbarium of New South Wales
Royal Botanic Gardens Sydney
Mrs Macquaries Rd
Sydney NSW Australia 2000

Lawrence Alexander Sidney Johnson

26 June 1925–1 August 1997



Australian botanical science and Sydney's Royal Botanic Gardens both show a strong imprint of the life and work of Lawrie Johnson.

Lawrie was associated with the Gardens and botanical systematics for 50 years: as botanist, 1948–1972; Director, 1972–1985 and, after retirement, Director Emeritus and Honorary Research Associate, 1986–1997. He received many honours, being a Member of the Order of Australia and a Fellow of the Australian Academy of Science, awarded the Clarke and Mueller Medals in recognition of his scientific achievements, and Honorary memberships of the Botanical Society of America, the American Society of Plant Taxonomists and the Linnean Society of London.

As a systematist with a strong interest in phylogeny, Johnson's work was both characteristically intensive and wide-ranging. His publications have included systematic treatments of Oleaceae and Zamiaceae; Casuarinaceae and Juncaceae with Karen Wilson; Proteaceae, Myrtaceae and Restionaceae with myself and *Persoonia* with Peter Weston. Most of all he is associated with studies of the eucalypts, for which he produced classifications covering the more than 800 species and studies of many groups in detail. This work was joint with Lindsay Pryor (later Professor of Botany at

the Australian National University), Ken Hill and Don Blaxell. His eucalypt colleagues especially shared his enthusiasm for studying plants in the field.

All who worked closely with Lawrie gained much from this experience. They saw his intensive but broadly-based style of investigation, combined with insight based on wide-ranging thought and knowledge.

Johnson's 13 years as Director transformed the Royal Botanic Gardens Sydney into a much more vigorous and forward-looking organisation. There was planning and development of the Mount Tomah and Mount Annan Botanic Gardens leading towards opening these to the public, and planning of the Sydney Tropical Centre glasshouses. Better facilities were obtained for the scientific and community programs; education programs began, as did the Friends of the Royal Botanic Gardens. In addition, the scientific activities were broadened and international links strengthened, with more emphasis on ecology and the information needed for the preservation of biodiversity. Communicating enthusiasm for the Gardens, and especially its scientific programs, he raised awareness of them in the community.

Strongly committed to environmental conservation, over 20 years ago Johnson was in the vanguard in warning of issues that are only now receiving attention. Especially he emphasised the link between weed invasion and altered nutrient status in soils of naturally low fertility, the value of retaining remnants of native vegetation in rural areas, and the importance of safeguarding the detailed regional record of genetic diversity by using local provenances in plantings of native species.

An issue of *Telopea* (Volume 6(4)) dedicated to him and published on 1 July 1996 includes full accounts and discussions of his career and botanical work to that stage, by Briggs, Benson and Hull.

The satisfactions Lawrie and his family had from the 'Festschrift' issue and the expressions of support and respect from his colleagues and other contributors to that publication were soon overlain by difficulties.

During his retirement Lawrie had become increasingly out of sympathy with trends in management and priorities at the Gardens, and made this apparent in his often outspoken comments. This eventually led to his status as an Honorary Research Associate being terminated.

His status as an Associate was restored in early 1997. But by then he had suffered another blow: diagnosis of brain tumours that had spread from a melanoma removed the previous year. After radiotherapy he made an apparent improvement and returned briefly to botanical work. He was working on manuscripts of studies on *Eucalyptus* (joint work with Ken Hill) to within a few hours of his last conscious time.

Shortly before he died, the University of Sydney chose Lawrie to be among its notable graduates featured on its home page on the World Wide Web.

In his last years he continued active work on the plant groups with which he had long been concerned. He had always been interested in major Southern Hemisphere families, being concerned with their biogeographic history as well as their phylogeny. Johnson therefore particularly welcomed opportunities to see for the first time parts of South Africa in 1996 and southern South America in early 1997, both with botanical colleagues.

A complete list of Johnson's botanical publications cannot yet be written. Late in 1996 he gave the introductory speech at the International Proteaceae Conference in Melbourne and this will be published. Jointly with Ken Hill are nearly completed manuscripts on the *Dumaria*, *Sociales* and *Eudesmia* groups of *Eucalyptus* and on various tropical and subtropical eucalypts. Also there is work on *Juncus* and

Casuarinaceae with Karen Wilson to be finalised, while a new *Persoonia* species jointly authored with Peter Weston is included in this issue.

Three accounts of Restionaceae and allies are in press, variously joint with Peter Linder, Kathy Meney, John Pate and myself. He contributed to a paper on the flavonoids of Anarthriaceae that has recently been published and one on Restionaceae in press. In addition, much of the joint work that he and I have done in Restionaceae and its allies with Carolyn Porter, Siegfried Krauss, Anna-Louise Quirico and others remains to be completed. He would have particularly regretted that he did not see finalisation of the DNA studies in these families with Simon Gilmore, Adam Marchant and Carolyn Porter, since he was enthusiastic about the new insights coming from these approaches.

Lawrie held views passionately and was articulate and sometimes vehement in expressing them; always emphasising truth, scholarship, the importance of the natural environment, and freedom from superstition. He made available to his colleagues his wide botanical knowledge and was their authority on a wide range of languages. Managerialism and the excesses of commercialism in modern life he condemned to the last. He appreciated the help of colleagues and was a friend, leader and guide to many younger botanical associates. His lively wit, humour and wide-ranging erudition will long be remembered.

The report of his death has brought accolades from around the world and many parts of Australia. Typical of the comments from those who knew him best were those of Peter Raven at the Missouri Botanical Garden: 'Lawrie was a truly extraordinary person, who made a huge contribution to botany. Difficult he could be, but true to himself and his values he always was. Those that did not understand that missed a great deal.'

He is survived by his wife Merle, who was always such a strong support to him, sons Chris, Nicholas, Quentin and Alexander (Sandy), daughter Sylvia and grandchildren Melissa, young Quentin, Madison, Miles, Hugh, Claire, Angharad and Callum.

Knowing that he could expect little time to live, Lawrie left comments to be read at his funeral. He spoke of the many opportunities he had to lead a satisfying life, concluding 'I have been happy to accept death as the natural end of life, which treats some of us well and some of us ill. It has treated me well'.

Lawrie Johnson in turn treated botanical science very well.

Publications by L.A.S. Johnson, additional to the 103 publications listed in *Telopea* 6 (507–509).

Johnson, L.A.S. (1996) Sense and Systematics. *South African Journal of Science* 92: 303–308.

Smith, G.F. & Johnson, L.A.S. (1996) South African plant systematics: needs, priorities and actions. *South African Journal of Science* 92: 314–320.

Briggs, B.G. & Johnson, L.A.S., (1997) *Classification and southern connections in Restionaceae*. Southern Temperate Biota and Ecosystems, 2nd Southern Connection Congress, Abstracts p.93.

Weston, P.H. & Johnson, L.A.S. (1997) *Persoonia hindii* (Proteaceae), a new species from the Newnes Plateau, New South Wales. *Telopea* 7(3): 199–203.

Williams, C.A., Harborne, J.B., Greenham, J., Briggs, B.G. & Johnson, L.A.S. (1997). Flavonoid evidence and the classification of the Anarthriaceae within the Poales. *Phytochemistry* 45: 1189–1196.

Submitted or in press

Briggs, B.G. & Johnson, L.A.S. A guide to a new classification of Restionaceae and allied families. In Meney, K.A. & Pate, J.S. (eds) *Australian Restionaceae — Biology, Identification and Conservation*. (University of Western Australia Press)

Conti, E., Graham, S.A., Litt, A., Wilson, P.G., Briggs, B.G., Johnson, L.A.S. & Sytsma, K.J. Interfamilial relationships in Myrtales: molecular phylogeny and patterns of morphological evolution. *Systematic Botany*.

Linder, H.P., Briggs, B.G. & Johnson, L.A.S. Anarthriaceae. In K. Kubitzki (ed.) *The Families and Genera of Flowering Plants*. (Springer-Verlag: Berlin)

Linder, H.P., Briggs, B.G. & Johnson, L.A.S. Ecdeiocoleaceae. In K. Kubitzki (ed.) *The Families and Genera of Flowering Plants*. (Springer-Verlag: Berlin)

Linder, H.P., Briggs, B.G. & Johnson, L.A.S. Restionaceae. In K. Kubitzki (ed.) *The Families and Genera of Flowering Plants*. Springer-Verlag: Berlin.

Meney, K.A., Pate, J.S., Dixon, K.W., Briggs, B.G. & Johnson, L.A.S. Conservation of Australian Restionaceae. In Meney, K.A. & Pate, J.S. (eds) *Australian Restionaceae — Biology, Identification and Conservation*. (University of Western Australia Press)

Williams, C.A., Harborne, J.B., Greenham, J., Briggs, B.G. & Johnson, L.A.S. Flavonoid patterns and the revised classification of Australian Restionaceae. *Phytochemistry*.

Biographical details

Lawrence Alexander Sidney Johnson, A.M., F.A.A., F.L.S., third child (only son) of Algernon Sidney (Sid) Johnson (accountant in NSW Public Service) and Emily Margaret Johnson. Born at Cheltenham, 26 June 1925; educated at Parramatta High School and University of Sydney (B.Sc. Hons, D.Sc.); married Merle Margaret Asta Hodge, 18 November 1950; resided mainly at Northbridge; died at Royal North Shore Hospital, St Leonards, 1 August 1997; buried Northern Suburbs Cemetery. [Cheltenham, Northbridge and St Leonards are northern suburbs of Sydney, Australia.] **Awards:** Clarke Medal of Royal Society of New South Wales 1979, Mueller Medal of ANZAAS 1984, elected a Fellow of Australian Academy of Science 1986, awarded Membership of Order of Australia (AM) 1987. **Web Site** (of University of Sydney): <http://www.scifac.usyd.edu.au/Faculty/johnson.html>.

References

- Benson, D. (1996) L.A.S. Johnson: taxonomist, ecologist, conservationist ... botanist *sens. lat.* *Telopea* 6: 521–526.
 Briggs, B.G. (1996) L.A.S. Johnson — a botanical career. *Telopea* 6: 511–520.
 Hull, D.L. (1996) Rainbows in retrospect: L.A.S. Johnson's contributions to taxonomic philosophy. *Telopea* 6: 527–539.

Barbara G. Briggs