

**THEUNIS WILLEM NAUDÉ** (October 28, 1932, Pretoria, South Africa – March 15, 2010, Pretoria, South Africa).

*Veterinarian*; Son of Theunis Johannes Naudé and Elizabeth Maria Naudé (née Theron). Married Eleen van der Merwe, 27 November 1954. The couple had a son, Johan, and two daughters, Jeanne and Susan.

**EDUCATION:** Pretoria-Oos Skool (primary school) and Afrikaanse Hoër Seunskool (secondary school), Pretoria, 1949; Onderstepoort Faculty of Veterinary Science, Pretoria, 1954: BVSc; University of Pretoria, South Africa, 1966: MSc (Agric) (*cum laude*) in Biochemistry; Faculty of Veterinary Science, Pretoria, 2009: DVSc (*honoris causa*).

**CAREER:** 1955 – 1961: State veterinarian in various places in South Africa; 1961 - 1974: Veterinary researcher in the Toxicology Section of the Veterinary Research Institute, Onderstepoort; 1974 – 1984: Head of Toxicology Section and Deputy Director of the Institute; 1984 – 1986: Coopers Professor in Animal Health at the Onderstepoort Faculty; 1986 – 1992: Professor and Head of Department of Pharmacology and Toxicology at the Onderstepoort Faculty; 1972 – 1978: Technical advisor to the Department of Agriculture for the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act 36, 1947. 1983 – 1992: Chairman of the Veterinary Committee of the Medicines Control Council.

**CONTRIBUTIONS:** Naudé had a consuming interest in South Africa's flora, particularly indigenous trees, and a remarkable knowledge of plant species, especially those that are toxic to the herbivores that consume them. His most important scientific contribution was the isolation of the cardiotoxin contained in yellow tulip, a bulbous plant named *Moraea pallida*, which is annually responsible for the death of a large number of livestock in South Africa. Gousiekte, a common cause of cardiac failure causing sudden death of sheep and cattle in South Africa, was originally only ascribed to poisoning with the plant *Pachystigma pygmaeum*. Naudé was involved in identifying and incriminating several other species of plants not previously known to be toxic. He was also involved in many field investigations on unusual causes of death of livestock that were difficult to diagnose due to unusual symptoms and lack of expertise of the investigators initially involved in investigating such fatalities. In these cases his in depth of knowledge of plant poisoning in general often led to the recognition of atypical pathogeneses caused by either known toxic plants or the identification of ones not previously known to be poisonous. He was well known for his ability to engage the best team of experts in other relevant disciplines in conducting research projects or arriving at correct diagnoses.

Naudé is a co-editor of the book ***Plant Poisonings and Mycotoxicoses of Livestock in Southern Africa***, which has already seen two editions. It is internationally regarded as the most authoritative book that has appeared in the discipline.

He played a leading role in the acceptance of international standards for the registration of livestock remedies in South Africa. From 1972-1978, for example, he served as the first co-ordinating technical advisor and advisor on toxicology for the registration of such products in terms of Act 36 of 1947. He was also a member of the Scheduling Committee of the Medicines Control Council (MCC), established in terms of Act 101 of 1965, from 1974 and a member of the MCC and its executive committee from 1980-1995. He was furthermore chairman of the then newly created Veterinary Committee of the MCC from 1983-1990.

Naudé also played a leading role in the organised South African veterinary profession and in organised science. Having served as elected member on the Federal Council of the South African Veterinary Association for several years, he was elected as its Vice President in 1984 and as President in 1986 for the customary two-year terms. He also served as an elected member of the statutory South African Veterinary Council for 12 years. Before this, in 1977, he was President of the South African Biological Society. He was also involved in the promotion of social welfare, serving as chairman of the 'Round Table' in Pretoria for six years.

#### HOMAGES AND DISTINCTIONS:

Naudé was Visiting Associate Professor in Toxicology at the Veterinary School of the University of Illinois from 1978 – 1980.

The South African Veterinary Association awarded Naudé its prestigious Silver Medal in 1989 shortly after his term of office as its President.

In 1998 he was invited by the Onderstepoort Faculty of Veterinary Science to deliver its authoritative Theiler Memorial Lecture.

At its centenary in 2008 the University of Pretoria selected Naudé as one of its 100 'leading scientific minds'.

He was finally awarded an honorary doctorate in veterinary science, the DVSc (*honoris causa*), in 2009 for his contribution as researcher and teacher at the Onderstepoort Faculty of Veterinary Science.

WRITINGS: He was sole author or co-author of 57 refereed articles in scientific journals; no published reference available. Representative publications are the following:

Naudé, T.W. & Potgieter D.J.J., 1971. Studies on South African cardiac glycosides. I. Isolation of toxic principles of *Homeria glauca* (W & E) N.E. Br. and observations on their chemical and pharmacological properties. *Onderstepoort Journal of Veterinary Research*, 38, 255 – 278.

Naudé, T.W., 1977. The occurrence and significance of South African cardiac glycosides. *Journal of the South African Biological Society*, 18, 7 – 20.

Naudé T.W. & Schultz R.A., 1982. Studies of South African cardiac glycosides. II. Observations on the clinical and haemodynamic effects of cotyledoside. *Onderstepoort Journal of Veterinary Research*, 49, 247 – 254.

Naudé, T.W., Anderson L.A.P., Schultz R.A. & Kellerman T.S. 1992. 'Krimpsiekte': A chronic paralytic syndrome of small stock caused by cumulative bufadienolide cardiac glycosides. In: James, L.F., Keeler, R.F., Bailey, E.M., Cheeke, P.R. & Megarty, M.P. (eds). *Poisonous plants*,

*Proceedings of the Third International Symposium*, pp. 392 – 396. Ames, Iowa: Iowa State University Press.

Kellerman, T.S., Naudé, T.W. & Fourie, N. 1996. The distribution, diagnosis and estimated economic impact of plant poisonings and mycotoxicoses in South Africa. *Onderstepoort Journal of Veterinary Research*, 63, 65 – 90.

#### REFERENCES/OBITUARIES:

Smuts, M.M.S., 2010. In Memoriam – Theunis Willem Naudé, 28.10.1932 – 15.03.2010. *VetNews/Nuus*, July 2010, p15.

Naudé, T.W. In: Honouring our Leading Minds/Hulde aan ons Denkleiers, 1908 – 2008, pp. 76 – 77. Publisher: University of Pretoria.

RD Bigalke

7 November 2012