**VAN TONDER, ELIA MARIUS** (26 September 1938, Platrug, Vryburg – 7 Augustus 1989 Middelburg, Eastern Cape, South Africa). *Veterinarian, Bacteriologist, expertise in small ruminants*. Son of Joof van Tonder and Kitty (maiden name unknown). Married Dorette Strohmenger in De Aar in 1963.

### **EDUCATION:**

Matriculated at Hoër Landbouskool Noord-Kaap in Jan Kempdorp Onderstepoort Veterinary Faculty of University of Pretoria, 1961: BVSc Onderstepoort Veterinary Faculty of University of Pretoria, 1977: DVSc

### CAREER:

1962 - 1967, state veterinarian, De Aar;

1967 – 1988, Regional Veterinary Laboratory at Grootfontein, succeeding Dr KM van Heerden as Veterinarian in Charge of the Laboratory on the untimely death of the latter in 1968;

1967 – 1988, Lecturer on Animal Health at the Grootfontein Agricultural College of the Department of Agriculture;

1975 – 1980 & 1982 – 1983, Mayor of the Middelburg Town Council.

### **CONTRIBUTIONS:**

KM van Heerden can be regarded as the first South African veterinarian who studied sheep and goats intensively from a flock and herd health viewpoint, but it was Marius van Tonder who gained national (and even international) prominence for his many contributions to the small stock industry. His main field of interest was reproduction, and the diseases that affected success. His doctorate research on *Actinobacillus seminis*, as a cause of epididymitis in sheep rams, was extensive and groundbreaking, and is still widely quoted.

Van Tonder's studies on the reproduction of small ruminants involved wide-ranging and practical ways of testing rams for genital soundness, including developing a cheap, sturdy and practical electro-ejaculation apparatus that was used for many decades. His systematic approach formed the basis for all subsequent methods of ram testing adopted in South Africa.

As state veterinarian in charge of a diagnostic laboratory he was obliged to gain further knowledge in bacteriology and pathology, but developed such expertise that he was included in the national team which standardised testing for brucellosis using the Rose Bengal and complement fixation tests, the basis of which was still used many decades later.

Other important contributions were made in toxicology, including geeldikkop (reconfirming that the plant *Tribulus terrestris*, and not selenium, was the cause), enzootic icterus (proposing it was a form of copper poisoning), and urolithiasis (suggesting the major role of phosphorus in its aetiology). Another notable interest was the bacterial diseases of sheep and goats.

Disease prevention and the promotion of systems that improved livestock farming profits sustainably were two major guidelines for his contributions. He was thus one of the early supporters of the holistic approach that led to herd/flock health and production work by veterinarians in South Africa in the 1970s. By his example and enthusiasm, he inspired a generation of veterinarians to take up his approach. His knowledge of almost all matters relating to sheep and sheep farming was legendary and virtually unrivalled. His drive, encouragement and persistence led to the expansion and improvement of the Veterinary Investigation Centre at Grootfontein into the foremost diagnostic and veterinary research centre for small ruminants in South Africa. Because the management of the Onderstepoort Research Institute of

that time was of the opinion that government veterinary laboratories should confine themselves to diagnostic work, Dr Van Tonder's research was disguised as 'investigations'. Staff, facilities and equipment were expanded and improved to cope with a wide variety of diagnostic and research problems. At farmers' days and meetings he was a popular contributor with a mixture of practical advice, simplifications of complex matters, and down-to-earth humour.

## **PERSONALITY:**

Marius van Tonder was generous, inspirational, and very supportive of his staff. He was fearless and could be very combative when he felt a key issue had to be defended. He had a huge appetite for work and wrote and motivated prolifically to facilitate matters in his laboratory. In social situations, and even in the work sphere, he had a great sense of humour, deflating puffed-up egos, parodying characters and telling a wide variety of yarns. He was a great family man and spent any spare time at home, often in the garden.

# HOMAGES AND DISTINCTIONS:

Dr Van Tonder was awarded the Silver Medal of the South African Veterinary Association in 1985.

# WRITINGS:

Author or co-author of at least 23 traced articles in peer-reviewed journals; his website biography records 'over 40' and 'over 100' including articles written for lay readers. The following is an extract of the peer-reviewed articles:

Van Tonder, E.M., 1972. A review of some aspects concerning mating and reproduction in sheep. *Journal of the South African Veterinary Medical Association*, 43, 329-42.

Van Tonder, E.M., 1979. *Actinobacillus seminis* infection in sheep in the Republic of South Africa. 1. Identification of the problem. *Onderstepoort Journal of Veterinary Research*, 46, 129-133.

Van Tonder, E.M., 1979. *Actinobacillus seminis* infection in sheep in the Republic of South Africa. 2. Incidence and geographical distribution. *Onderstepoort Journal of Veterinary Research*, 46, 135-140.

Van Tonder, E.M., 1979. *Actinobacillus seminis* infection in sheep in the Republic of South Africa. 3. Growth and cultural characteristics of *Actinobacillus seminis*. *Onderstepoort Journal of Veterinary Research*, 46, 141-148.

Van Tonder, E.M., 1977. Examination of rams for genital soundness. *Journal of the South African Veterinary Association*, 48, 267-272.

E.M. van Tonder. 1975. Aufzeichnungen uber einige Krankheitsprobleme bei Angoraziegen in Südafrika. *Veterinar-Medizinische Nachrichten*, 1/2, 106-135.

Van Tonder, E.M., Basson, P.A. Van Rensburg. I.B., 1972. Geeldikkop: experimental induction by feeding the plant *Tribulus terrestris* L. (Zygophyllaceae). *Journal of the South African Veterinary Medical Association*, 43, 363-75.

### **REFERENCES/OBITUARIES**:

1.Obituary (in Afrikaans). *VETNEWS* (Newsletter of the South African Veterinary Association), November 1989, p.6.

2. Marius van Tonder jnr - family records.

3. Marlow, C.H.B., 2010. A brief history of equine private practice in South Africa. *Journal of the South African Veterinary Association*, 81, 190-200.

4. Posthumus, P.J. *Past veterinarians in South Africa*. 10<sup>th</sup> Edition. Undated and unpublished collection of summarised *curricula vitae* of deceased veterinarians. Archives of the South African National Veterinary Museum.

5. Personal memories: Gareth Bath & Liezel Jansen.

GF Bath August 2014