September 2023

# PLANT HEALTH AND PROTECTION

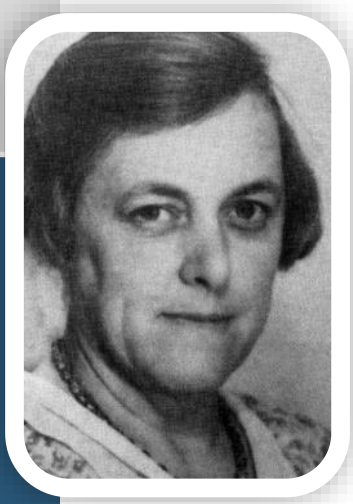
# Jubilee Newsletter Edition


***Top to bottom:*** *Vredehuis (part of the Union Buildings Estate), Rietondale campus (Soutpansberg road) and PHP Roodeplaat campus showcasing the newly build Weeds quarantine building.*

*'The Plant Protection Research Institute (PPRI), now Plant Health and Protection, was created in 1962 with the re-organization of the then, Department of Agriculture. During this re-organization the former Divisions of Entomology and Plant Pathology were united and the researchers could proceed according to a joint mandate, namely the protection of natural resources and food sources against pests, diseases and weeds"* - and so the story started. One way in which we have chosen to celebrate our 60th year of existence, is to honor the Pioneers of PHP. These scientists laid the foundation for the largest natural and scientific collections on the African continent. They span across multiple genera and reflecting the rich biodiversity and heritage of our beautiful country, South Africa. The establishment of the various research disciplines, which formed the blueprint for much of the current scientific work, can largely be attributed to these courageous and exceptional scientists. They forged ahead, in many cases, with their life-long careers and under conditions that were uniquely challenging. It is our hope that you will enjoy this reflective journey with us in the months to come.

***- Dr Ansa van Vuuren (Senior Manager: Plant Health and Protection)***

# PHP Founders



*Dr Ethel Mary Doidge*

## *Dr Ethel Mary Doidge*

### *Founder of Mycology*

**1887 – 1865**

*In 1914, Ethel Mary Doidge became the first woman to receive a doctorate from the University of the Cape of Good Hope (which became Unisa). She later served on the first Unisa Council.*

Ms Doidge was appointed on probation in 1908 to assist Pole Evans, a founder himself in the field of South African mycology. Later employed as Principal Plant Pathologist of the Phytopathological Section in 1929 (now the Mycology Unit), she became the successor to Pole Evans and apart from specialists in other disciplines, the cryptogam collection then had a complement of three mycologists (Doidge pre-1945). Under Doidge's direction, the collection rapidly grew. She undertook numerous collecting trips, often under extremely difficult circumstances, and obtained many sets of named duplicate specimens from international authorities. Reference material identified in collaboration with overseas mycologists provided her an essential research base and this still forms a substantial part of PREM. The name PREM was derived from the city in which the collection is situated, Pretoria (PRE), and the M defines the collection as being mycological.

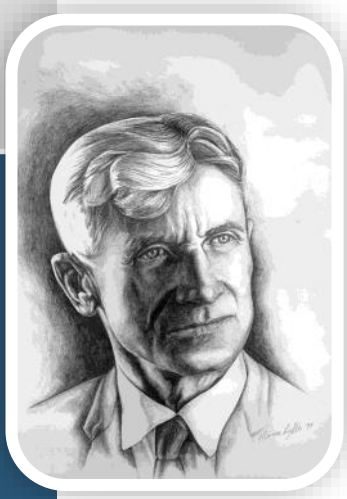
Doidge's vision was not limited to collecting. She firmly believed in the value of basic research, stating in her "Scope of the Phytopathological Section" that only a thorough knowledge of indigenous and exotic organisms would allow optimal utilization of the natural resources of South Africa, and that this goal was not possible without fundamental research. She used the work of Pasteur and Mendel to support her statements. During the 1940's the science of plant pathology was applied almost entirely to diseases caused by fungi: consequently the term "plant pathology" was practically synonymous with "fungus diseases of plants".

*One of Ethel Doidge's numerous collecting field trips, made often under extremely difficult circumstances*

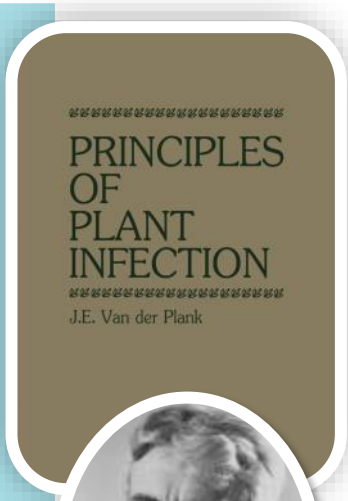
Her contribution to mycology spanned some 40 highly productive years until she retired in 1942. She is best remembered for her contribution to systematic mycology. She published 30 major works covering a wide range of fungi, including rusts, powdery mildews, sooty moulds, pythiaceous fungi, Ascomycetes, the genera *Fusarium* and *Synchytrium*, as well as checklists of plant pathogens of South Africa. She completed her monumental treatise, "*The South African fungi and lichens*" towards the end of 1945 after retirement. It was based on records in the cryptogam section of the National Herbarium, which includes data from other South African collections.

Doidge had completed her catalogue and a momentous era marked by extensive collecting and recording of South African fungi ended around 1940.

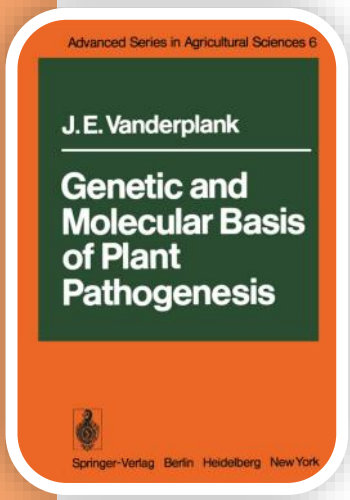
# PHP Founders



*Pencil rendering, courtesy of PHP*




*James E. Vanderplank (photo courtesy of Elspeth van Duuren)*




## *Dr James Edward Vanderplank*

### *Founder of Plant Pathology*

**1908 – 2 June 1997**

*James Edward Vanderplank, best known to plant pathologists globally simply as 'Vanderplank', is widely regarded as one of the world's most influential plant scientists*.

In 1928, Vanderplank was appointed as a mycologist in the then South African Department of Agriculture. After completing his PhD at the Imperial College London, he returned to South Africa and to his employment in the Department. He moved within the Department to Cape Town to work as a biochemist on the preservation of fruit for export. While there, he developed a method of bleaching oranges to remove rust spots and this formed the basis of his second doctoral thesis in chemistry, conferred by the University of South Africa in 1944.

He returned to Pretoria in 1941 and began his research career in plant pathology. In 1958, he became Chief of the Division of Plant Protection. He was appointed director of the newly established Plant Protection Research Institute in 1962 and remained in that position until 1973 when he retired. He was particularly proud that one of his potato cultivars was named after him. Yet the cultivar 'Van Der Plank', known for its excellent eating and processing qualities, remains the most popular early maturing potato variety in South Africa. While plant breeders and potato growers in South Africa know of Vanderplank for his potato breeding, his global fame rests on introducing a theoretical framework to our understanding of plant disease epidemics and disease resistance. He was often heard to say that he had never attended a single course in plant pathology, genetics or plant breeding.

Through his extensive work, he produced and published his book, *Plant Diseases: Epidemics and Contro*l, in 1963. This book has been reprinted several times and has been cited at least 2800 times. More importantly, it was often used as a textbook, which over the years has introduced scores of plant pathologists and plant breeders to the world of plant disease epidemiology.

He proposed a unifying theory on plant disease epidemiology were he suggested that epidemiology represents the science of diseases and pathogens in populations. These ideas were not only new and applicable to plant pathology but also to the broader field of epidemiology and across many fields of biology. Following on this work, he established the terms 'vertical resistance' and 'horizontal resistance' in his 1963 book and extended this concept in 1968 in his second book *Disease Resistance in Plants*. These remain fundamental principles of plant pathology and terms crucial to the field of disease resistance breeding. He published three additional books: *Principles of Plant Infection* in 1975, *Genetics and Molecular Basis for Pathogenicity* in 1978 and *Host-pathogen Interactions in Plant Disease* in 1982. In the last of these, he extended and elaborated on some of his earlier basic ideas and re-argued the basis of resistance and the development of epidemics.

These are just some of the most important highlights of Vanderplanks accomplishments during his time at the ARC—Plant Protection Research Institute. The contribution he has made to science is long lasting.

# PHP Founders

*Dr William Geoffrey Harrower Coaton*

*Sampling termite mounts with the help of an ox team*

Termite colony samples mapped out in Southern Africa

## *Dr William Geoffrey Harrower Coaton*

### *Founder of Isoptera (Termites)*

**1911 – 28 September 1983**

*Dr Coaton studied the taxonomy and distribution of termites at which was then the ARC- Plant Protection Research Institute. He worked for the ARC for 46 and a half years .*

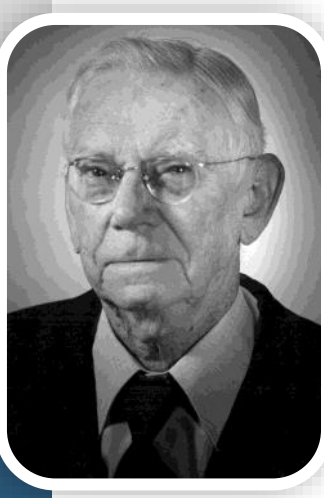
His most well know work is the intensive quarter-degree sampling of southern African termites during his lifetime. These extensive and almost military-like expeditions were very well planned. His expeditions were completely self contained. Dr Coaton and his team carried additional fuel, spare parts, food and gear. For the uninhabited areas, dumps of fuel were often deposited at pre-arranged points along the route beforehand. Expeditions lasted from 5-6 weeks each and covered thousands of kilometers. Every quarter degree, which is every 16km, was sampled for termites. He undertook two such trips annually. In his collecting, Bill confined himself mainly to southern Africa. His most distant travels in Africa were to Zambia (then Northern Rhodesia) in 1957, when he was seconded to the Department of Forestry to advise on termite damage to eucalyptus plantations. Whilst there he collected in the Southern Province and the Copperbelt, which was about as far north as he ever worked.

Apart from this incomparable legacy, Bill's major contribution to the taxonomy of African Isoptera, lies not only in the field of descriptive taxonomy - 22 new taxa having been introduced by him - but also in the detailed distributional information which he provided for each termite genus. Appreciating the limitations of many earlier distributional patterns, which more accurately reflected the route taken by the collector than the true geographical distribution of the species, he set himself the formidable task of comprehensively sampling the entire southern African region for termites on a scale almost unique for entomology in Africa.

With the restructuring of the Division of Entomology in 1957, which in turn became the Plant Protection Research Institute, he was appointed Head of the National Collection of Insects, a post which he held for 19 years. It was during his tenure that the National Collection underwent tremendous expansion, attracting a number of first rate researchers in many different insect orders. It was quite the most productive section in the Institute as far as publications went. Free now to concentrate on basic research, his work on the taxonomy of the African Isoptera began in earnest. Accurate determination of material had always been difficult in the termites, the full extent of intra-specific variation had not been fully appreciated and too much emphasis had been placed on minor differences by certain earlier workers, and it was therefore imperative to build up a properly identified collection.

A total of 33400 colony samples were collected by Dr Coaton during these surveys. These specimens are housed at the ARC—Plant Health and Protection South African National Collection of Insects.

# PHP Founders



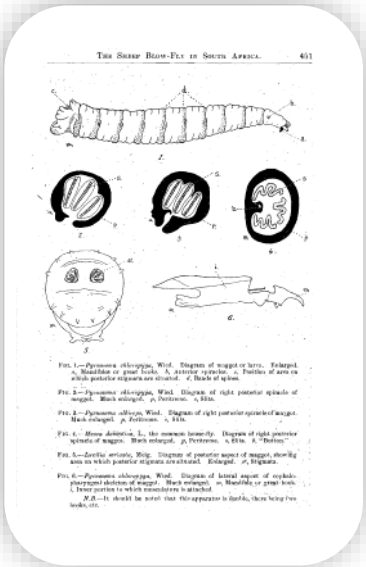
*Dr Hugh Kenneth Munro*

## *Dr Hugh Kenneth Munro*

### *Founder of Entomology*

**1 July 1919 – 1973**

Dr Munro developed an interest in entomology through contact with the lepidopterist A. J. T. Janse while working at the Department of Agriculture of the then Union of South Africa. This section later developed into the Plant Protection Research Institute.

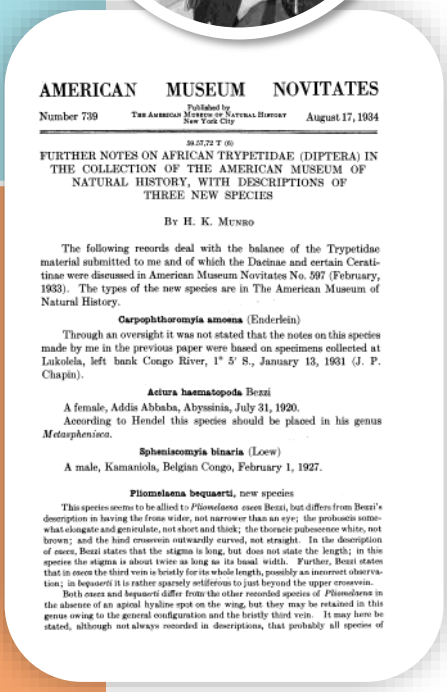


Dr Munro was appointed as entomologist in East London in 1921, where he found some time to conduct research on the blowfly problem in sheep. This work led to the publication of "*The sheep blow-fly in South Africa*" in the Journal of the Department of Agriculture in 1922. In 1925 he returned to Pretoria and was put in charge of the insect collection. Over the years he developed this into the National Collection of Insects, of which he remained the officer in charge until his retirement. In 1936 he designed a standard insect cabinet, many of which were used to house the collection. At the same time he continued with his research in systematics and became increasingly active in collecting and rearing fruit flies of the family Trypetidae.

He undertook various collecting expeditions to various parts of southern Africa. A highlight of such a trip, was the expedition, the Bernard Carp expedition to Barotseland. This took place in 1952 and took him through Botswana, the Caprivi Strip (Namibia) and Zimbabwe to Zambia. He collected important foundation records on fruit flies. He published many contributions to the systematics of fruit flies, culminating in a thesis on African Trypetidae for which the University of the Witwatersrand awarded him the degree Doctor of Science (DSc) in 1946.

Dr Munro was a member of the Pretoria Entomological Club, founded in 1933. It ceased to exist in 1936. He then became a foundation member of the Entomological Society of Southern Africa in 1937, serving as joint vice-president in 1940, 1943, 1946-1950 and 1955, and as president in 1944. He was a Fellow of the Royal Entomological Society, and a foundation member, life member and at one time president of the South African Biological Society. The Society awarded him its Captain Scott Memorial Medal for his contributions to Entomology in 1945.

Dr Munro was well known as a biologist and systematist and a world authority on fruit flies. He was also interested in the association between these insects and their plant hosts, and his collection of some 1000 host plants is kept in the National Herbarium, Pretoria.



AMERICAN MUSEUM NOVITATES

Number 739 — Published by The American Museum of Natural History New York City — August 17, 1934

FURTHER NOTES ON AFRICAN TRYPETIDAE (DIPTERA) IN THE COLLECTION OF THE AMERICAN MUSEUM OF NATURAL HISTORY, WITH DESCRIPTIONS OF THREE NEW SPECIES

By H. K. Munro

The following records deal with the balance of the Trypetidae material submitted to me and of which the Dacinae and certain Ceratitinae were discussed in American Museum Novitates No. 597 (February, 1933). The types of the new species are in The American Museum of Natural History.

**Carpophthoromyia amoena** (Enderlein)

Through an oversight it was not stated that the notes on this species made by me in the previous paper were based on specimens collected at Lukolela, left bank Congo River, 1° 5′ S., January 13, 1931 (J. P. Chapin).

**Acidura haematopoda** Bezzi

A female, Addis Abbaba, Abyssinia, July 31, 1920.

According to Hendel this species should be placed in his genus *Metasphenisca*.

**Sphenisconyia binaria** (Loew)

A male, Kamaniola, Belgian Congo, February 1, 1927.

**Pliomelaena bequaerti**, new species

This species seems to be allied to *Pliomelaena caeca* Bezzi, but differs from Bezzi's description in having the frons wider, not narrower than an eye; the proboscis somewhat elongate and geniculate, not short and thick; the thoracic pubescence white, not brown; and the hind crossvein outwardly curved, not straight. In the description of *caeca*, Bezzi states that the stigma is long, but does not state the length; in this species the stigma is about twice as long as its basal width. Further, Bezzi states that in *caeca* the third vein is bristly for its whole length, possibly an incorrect observation; in *bequaerti* it is rather sparsely setiferous to just beyond the upper crossvein.

Both *caeca* and *bequaerti* differ from the other recorded species of *Pliomelaena* in the absence of an apical hyaline spot on the wing, but they may be retained in this genus owing to the general configuration and the bristly third vein. It may here be stated, although not always recorded in descriptions, that probably all species of

*An African Trypetidae (Diptera) article published by Dr Munro in August 1934*

# PHP Founders

*Dr David Paul Annecke*

**From the top:** Carina Cilliers, Stefan Neser & Helmuth Zimmermann

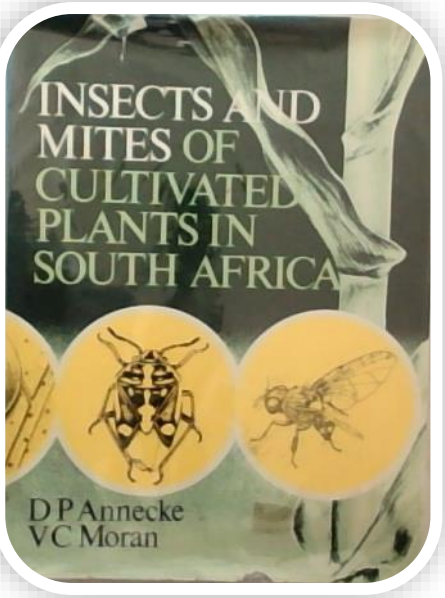
## *Dr David Paul Annecke*

### *Founder of Weeds Biocontrol*

***8 June 1928 – 24 February 1981***

*Dr Annecke is widely regarded as the founder within the ARC for his research initiatives from the early 1960s on invasive alien plant biological control in South Africa.*

Dr David Paul Annecke (1928–1981) is widely regarded as the founder of invasive alien plant biological control in South Africa . During the early years of his career, Dr Annecke spent time in California, Australia and South America understanding the role of biological control on invasive plants. After obtaining his DSc degree (cum laude) in entomology from the University of Pretoria in 1965, he used his position as head of the Biological Control Section of the Plant Protection Research Institute (PPRI) within the Department of Agriculture (later the Agricultural Research Council) to launch the careers of what was to become a productive team of biological control scientists. He went on to become Deputy Director (1975) and Director (1979) of PPRI, but continued to remain active in research. Gifted with a brilliant intellect and strong leadership capabilities, he nurtured others while always holding them to his own exacting standards (Moran and Prinsloo 1981). Sadly, he was to take his own life at the age of 52, the day after he submitted the complete manuscript of a book entitled "The *insects and mites of cultivated plants in South Africa"* (Annecke and Moran 1982).




One of Dr Annecke's first initiatives was to select a small group from the PPRI to re-start alien plant biological control research and implementation in South Africa. He perceptively chose Stefan Neser, and then later, Helmuth Zimmermann and Carina Cilliers, as his core group. Neser completed his PhD from the Australian National University in 1968, where he was mostly interested in potential biological control agents for use against Hakea shrubs. Neser rapidly became known as an explorer and naturalist extraordinaire—if Annecke was the founder of plant biological control in this country, Neser was the undisputed catalyst for much that happened in this field in South Africa from the 1960s onwards. He discovered scores of new species and genera of plant-feeding insects and pathogens , and discovered more than 100 new species of mites. In 1986, he won the Dave Annecke Award from the South African Weed Science Society, and in 1994 the Senior Captain Scott Medal for his outstanding research contributions to biological control science.

# PHP Founders

*Dr Juan Heyns*

## *Dr Juan Heyns*

### *Founder of Nematology*

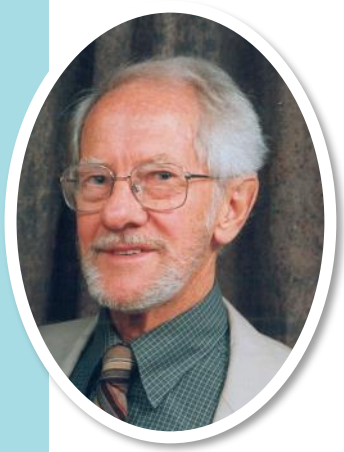
***26 April 1929 – 21 December 2001***

*Dr Heyns laid the foundation for South African nematology and for what is now the Nematology Unit in Biosystematics.*

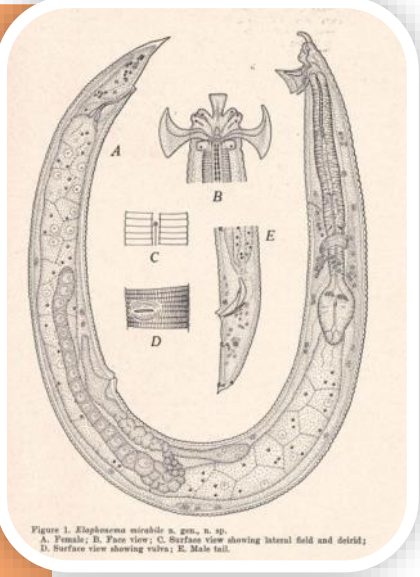
Dr Juan Heyns began his professional career in 1954, in the Department of Agriculture at the Tobacco Research Institute. He undertook various reach work focusing on entomology and nematology, working there until the middle of 1959. After receiving a bursary from the Department of Agricultural Technical Services the same year, he undertook his doctoral studies in nematology at the University of Wisconsin, USA, under the mentorship of Prof. Gerald Thorne, completing his PhD (Agric.) at the end of 1961. On completing his PhD, Dr Heyns joined the Plant Protection Institute where he worked from 1962 to1970. He headed the Nematology Section. Although initially involved in applied research, he gradually spent more time on the biosystematics and taxonomy of nematodes.

Dr Heyn is regarded as the father of nematology, in particular nematode taxonomy, in South Africa, and with his first article on the new nematode genus and species *Elaphonema mirabile* in 1961 he started a career in nematode taxonomy equaled by few.

By the end of 2000 he had published 235, mainly scientific, articles as sole author or together with students and colleagues, in which at least 520 new and known species, 27 new genera and two new families were described, mainly from southern Africa but also from at least 28 other countries in the world. He was a founding member of the nematology unit and played a pivotal role in South African nematology.



*Dr Jaun Heyns in later years*




*Elaphonema mirabile.*
From Heyns, 1962.

# PHP Founders

*Dr Lenie Meyer*

Tetranychidae (spider mites)

## *Dr Magdalena K P Meyer*

### *Founder of Acarology*

**9 October 1931 – 21 October 2004**

*Dr Meyer made a significant scientific contribution towards the founding and development of Acarology in Africa, and especially southern Africa. She was known as the mother of red-spider mites of the world.*

Dr Meyer started her long and productive career at the Plant Protection Research Institute (PPRI) in 1959. In 1964 she was promoted to manager of the Subdivision: Economic Zoology (Arachnida and Nematology) and in 1970 she became an Assistant-Director of PPRI. In 1989 she became one of the first researchers in PPRI to be awarded the position of Specialist Scientist, and just before her retirement in 1994 she was promoted to Senior Specialist Scientist.

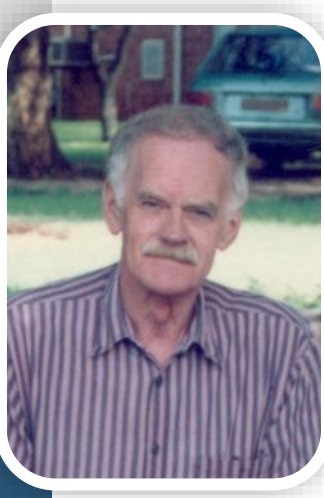
Dr Meyer contributed to a much clearer scientific understanding of the Tetranychidae and Tenuipalpidae mites, internationally. These families are some of the economically and agriculturally most important plant pests. She was regarded as a world authority on plant-feeding mites of agricultural importance. She described more than 700 new species and 25 new genera in Africa with most of these mites being of agricultural importance. She published more than 100 scientific papers, including seven *Memoirs* and two handbooks on mites of crops.

As long ago as 1983 she initiated the first biodiversity surveys of mites, registering a project on the mites and their predators in the national parks of South Africa. This resulted in four papers on the mite fauna of the various parks. From the survey work, she established the National Collection of Acari in 1959.

Dr Meyer was actively involved in applied research on mites and developed several collecting techniques for Acari. She made an important contribution to their control on different crops and published papers on the mites of citrus, cotton, deciduous fruit, grapes, berries, vegetables, tobacco, field crops and pastures, flowers and ornamental plants. She organised surveys to collect economically important mites from various crops in countries throughout southern Africa. This enabled her to provide the first species list containing the names of the 60 economically most important mite pest species in southern Africa.

Her knowledge of mites lifecycles, enabled Dr Meyer to provide an information service on mites and how to control them. She helped to develop techniques for the correct use of spraying equipment in the chemical control of mites. She was involved in the registration of new miticides (Act 1936/1947). She assisted chemical companies with the planning and layout of their spraying trials on different crops and assisted the Registrar in the evaluation of data. Throughout her years at PPRI, she assisted the Directorate Plant Health of the Department of Agriculture to prevent the importation of foreign mite species on plant material and fruit into South Africa.

# PHP Founders



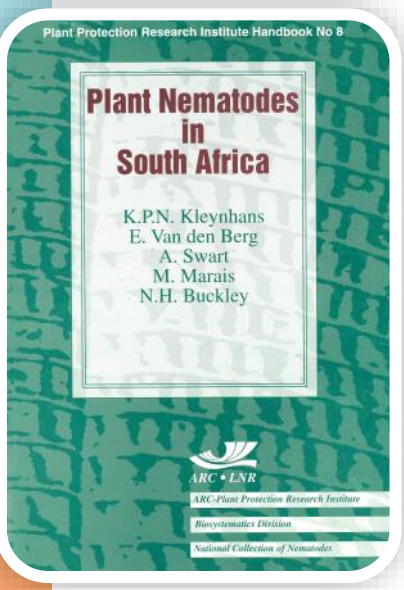
*Dr Kent P.N. Keynhans (Photo courtesy of the National Collection of*

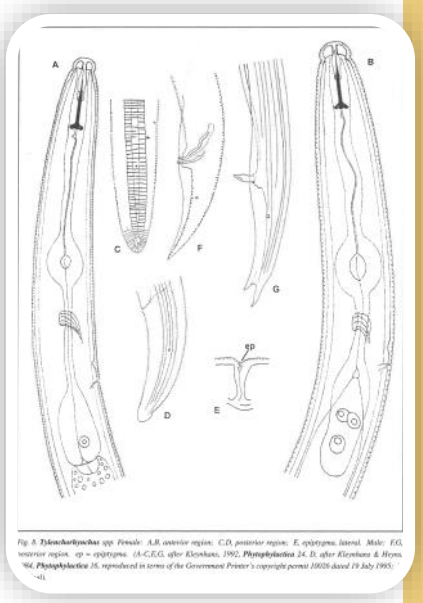
## Dr Kent Peter Noël Kleynhans

### *Founder of Nematology*

**10 October 1935 – 31 May 2006**

Dr Kleynhans had an unexpected twist in his planned journey with the ARC. At the end of 1968, while waiting for a position to be vacated at the National Collection of Insects in the Department of Agriculture, he temporarily joined the staff of the Nematology Section under Prof. Juan Heyns at the Plant Protection Research Institute. Here he discovered the world of plant-parasitic nematode taxonomy and immediately knew this was where he belonged.



Dr Kleynhans was involved in exciting work on the golden nematode of potato, maize and cotton nematodes, nematodes in nurseries and quarantine nematodes. His interest in the difficult taxonomy of root-knot nematodes once made him say that he, the worms and the roots were all tied up in knots, but he was thoroughly enjoying himself.

In his work Kent was a perfectionist. His PhD. thesis '*Taksonomie van sekere terestriële nematode van die ordes Tylenchida en Dorylaimida'* was the first thesis without any mistake submitted to the Rand Afrikaans University. It was also the first doctoral thesis in nematology presented in Afrikaans.

Apart from the taxonomic research, much effort went into the correct translation of nematological terms into Afrikaans, which was a first for South Africa. His articles were always returned by the referees who complimented him on his error-free work. He was meticulous in every aspect, from the study of morphological structures on the nematodes to his excellent use of the English language. His good sense of perception of the minute structures on nematodes, as well as his ability to delve into obscure and virtually unobtainable literature, helped him to develop a compendium of the family Tylenchorhynchidae, which was invaluable at that stage.

Kent was always willing to help anyone, collaborating with fellow scientists both within and outside the country. He was more than willing and eager to train young people in the science of nematology and consequently was asked to assist with nematology courses at the then Technikon Pretoria for a number of years.

# PHP Founders

*Professor Wally Marasas*

## *Professor Wally Marasas*

## *Founder of Plant Pathology*

**25 October 1941 – 6 June 2012**

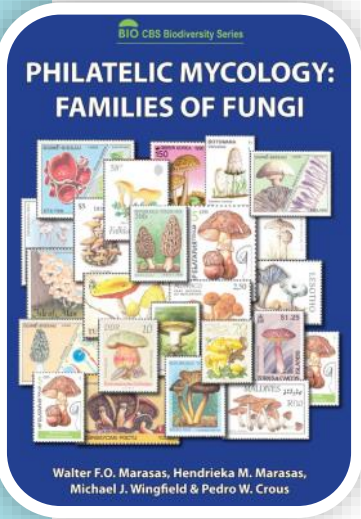
*Professor Marasas was a renowned expert on fungal taxonomy, specifically of Fusarium and the mycotoxicological effects of their mycotoxins.*

Prof Marasas received a Ph.D. in Plant Pathology from the University of Wisconsin, USA, in 1969. He returned to South Africa to the then Plant Protection Research Institute. He worked along side with Dr Fanie Kellerman of the Onderstepoort Veterinary Research Institute where they investigated equine leukoencephalomalacia, a disease that causes brain lesions in horses. Mouldy maize was a suspected cause, and Prof Marasas identified *Fusarium verticillioides* (then known as *F. moniliforme*) as the culprit. This launched a decades-long examination of this fungus and its impact on animal and human health.

He was internationally recognised for his scientific excellence which culminated in the USA National Academy of Sciences bestowing upon him membership of this prestigious Academy. Other awards for scientific achievements, to cite a few, included the Gold Medal by the South African Society for Plant Pathology, the Wellcome Gold Medal by Wellcome Pharmaceuticals, the 1995 African Academy of Sciences CIBA Prize for agricultural biosciences, the gold medal being handed over by the Vice-President of Kenya, the Medical Research Council silver medal for excellence, the M.T. Steyn Gold Medal by the SA Academy of Science and Art, and the distinguished service award by the Kansas State University. Prof Marasas was only the second South African to be elected a Fellow of the American Phytopathological Society. He was also appointed as honorary professor at the University of the Orange Free State and as extraordinary professor at the University of Pretoria, South Africa. In 1995, he was appointed as expert consultant on risk analysis to food standards, to the joint UN Food and Agriculture Organization/UN World Health Organization.

He authored three books, 54 chapters in scientific books, and had 273 articles published in scientific publications. He also delivered 190 papers at international scientific conferences, and even more at national scientific conferences. He served as promoter or examiner of 63 theses by post-graduate students. The Institute for Scientific Information in 2002 rated him as one of the most cited researchers worldwide in two categories.

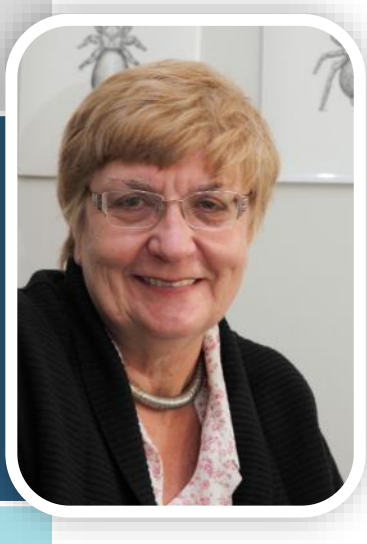
Aside from his own academic achievements, Wally was a great encourager and a scientific enthusiast who inspired others. He was a warm and generous collaborator with many colleagues across the world. His scientific excellence and strong motivation for public health distinguished him as a remarkable person.




The book was the end product of a life-long project of passion of the late Prof Walter Marasas.

Prof. Marasas, Dr Riana Jacobs, and Dr Mariette Truter with the Collection. As part of the DST/NRF survey of all National History Collections in South Africa, the Mycology Unit survey was conducted on 14 May 2010 by Prof Wally Marasas, formerly of the Medical Research Council (MRC).

# PHP Founders



Dr Ansie Dippenaar-

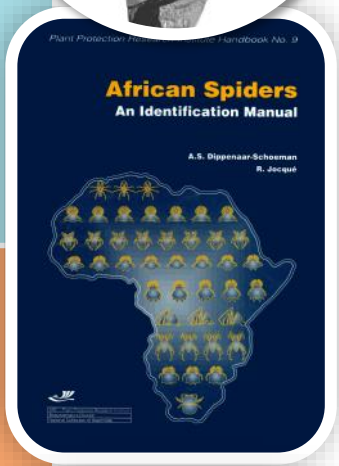
## *Dr Ansie Dippenaar-Schoeman*

### *Founder of Arachnology*

***13 October 1948***

*She is considered the First Lady of Arachnology for the African Continent.*

Ms Ansie Schoeman started working at the then Department of Agriculture [this department subsequently became the ARC (Agricultural Research Council) in 1994] as a technical assistant in 1967. She was appointed as a team member of a 5-year Dieldrin termite project, where fieldwork was undertaken near Dendron in the Limpopo Province, Pongola in KwaZulu-Natal and Edenville in the Free State, and spent two-thirds of the year sampling spiders as part of the project. The Dieldrin project would be the catalyst for a lifelong interest and dedication to spiders. This project was also the driving force behind the formation of the National Collection of Arachnida, a national public good asset managed by the ARC.





Over time, Dr Ansie Dippenaar-Schoeman completed her PhD and was eventually promoted to the position of a Specialist Scientist and Unit Manager of the Arachnology Unit of the Biosystematics Division, ARC – Plant Protection Research Institute. She retired in 2013 after 46 years of service to the organisation. There are various highlights within Dr Dippenaar-Schoeman's career. One of the most noted is the initiation of the South African National Survey of Arachnida (SANSA) in 1997, in response to South Africa's obligations to the Convention on Biological Diversity (CBD). The first decade of SANSA included activities such as the digitisation of museum and published specimen records, the improved organisation of surveys to sample arachnids, and the attraction of a large number of amateur collectors to participate in the project and contribute specimens from around the country. The work accumulated into the "*First Atlas of the Spiders of South Africa*". This piece of work would be instrumental in the evaluation and inclusion of South African spiders on the IUCN Red List, a collaborative project with SANBI's Threatened species programme.

Dr Dippenaar-Schoeman has also published a large number of publications and books during her time at the ARC. They included two important arachnological textbooks, namely "*African Spiders: an Identification Manual*" and "*Spider Families of the World*". She has supervised a large number of post-graduate students and assisted with various identifications for projects.