In Memoriam Dr J.P. (Paul) Van Den Bergh

On 20 May 2004, Dr J.P. (Paul) Van Den Bergh passed away, creating another hole in the list of the 'Great' (Dr Th. Alberda, Prof. R. Brouwer, Dr W. Dijkshoorn, Prof. W.H. Van Dobben, Dr P. Gaastra, Dr J.L.P. Van Oorschot, Prof. C.T. De Wit) who shaped Wageningen agricultural research in the 50s and 60s of the last century, originally in the Centraal Instituut voor Landbouwkundig Onderzoek (CILO – Central Institute for Agricultural Research).

Paul Van Den Bergh started his scientific career in 1954 in the framework of his studies at the then 'Landbouwhogeschool' (Wageningen Agricultural University), at the Botanical Laboratory of CILO, under Prof. D.M. De Vries, by re-analysing the results of 1700 soil and vegetation samples of old grasslands. The study was completed with a contribution to the 1954 Annual Report of CILO, 'Een bijdrage tot de oecologie van witte klaver (*Trifolium repens* L.) in oud grasland' (A contribution to the ecology of white clover (*Trifolium repens* L.) in old grasland).

Following his graduation, Paul took up a position at CILO, with a main interest in the botanical composition of old grasslands as affected by growing conditions. This work aroused his interest in the competition between plant species and in collaboration with Prof. De Wit he adapted the latter's theory on competition to perennial plant species. He introduced the term 'relative yield', a unitless characteristic to quantitatively describe competition between species.

To collect data for testing the competition theory, Paul in 1959 started a series of pot and field experiments with timothy and sweet vernal grass. These data formed the basis for his PhD thesis 'An analysis of yields of grasses in mixed and in pure stands', which he completed in 1968 under Prof. De Wit (whose first PhD graduate he was) and Prof. 'T Hart. One of the most important conclusions from his thesis was that in sowing permanent grassland for production purposes, preference should be given to a monoculture.

Paul's work on competition formed the basis for much of the research in *Vegetation Science* and *Weed Science* carried out in the 1970s and 1980s in Wageningen in general and in the Centre for Agrobiological Research (CABO) in particular. Especially the modelling work, in collaboration with Prof. De Wit, on the basis of the above-mentioned theory, was important at that time.

The work on competition also brought Paul in contact with developing countries, as in the middle of the 1970s CABO became the home base of the project 'Production Primaire au Sahel' and his theory provided an important input in the description of the vegetation dynamics of annual Sahelian pastures by Henk Breman.

Paul also played an important role in the publication of Dutch agricultural research as editor of the Netherlands Journal of Agricultural Science from 1966 till 1986, the first 15 years forming the Editorial Board, together with Prof. J.G.P. Dirven and subsequently as member of the extended board. In this capacity he taught many young scientists the finer details of publishing. The Netherlands Journal, currently 'NJAS – Wageningen Journal of Life Sciences', remembers with gratitude the contribution of Paul Van Den Bergh.

Paul not only was a creative and innovative scientist, but above all a social and friendly person who played a large role in the process of 'teambuilding' within the organization. He was one of the driving forces behind the famous 'coffee clubs' at CABO and during the coffee breaks contributed strongly to the discussions 'around science', for which he often set the agenda with one of his aphorisms.

This social function of Paul is strikingly illustrated by the personal memories of Henk Breman, a long-time colleague at CABO.

"Have I ever known anybody as amiable, as altruistic, as Paul Van Den Bergh", was the question I asked myself when I learned about his passing away and was asked to contribute to an In Memoriam. Two examples may serve to illustrate this characteristic.

When I entered CABO as an 'amateur-vegetation scientist' and became Paul's colleague, he went out of his way to turn me into a 'professional'. And he considered the problems of the Sahel so much more important than the Dutch problems that he actively moved attention and assistance in the direction of my field of interest.

Then his story about his re-visit to Java with his son Reinout. One day he was complimented on his excellent walking shoes, and the man asked whether Paul could not give him the shoes as a present. Paul would have liked to take them off on the spot, but did not quite see how to proceed then. In the course of the afternoon he witnessed a similar scene, this time regarding the shoes of Reinout. The latter reacted with: 'Are you crazy, this is my only pair of shoes. How do you imagine me to walk on?' 'Look', Paul said to me, 'I would never have thought about that'.

However, Paul was not a spineless person who did not set out his own path. Those who remember his pointed aphorisms that he displayed within the institute to the irritation of his superiors, will agree. Human relations were more important to him than vegetation science: that flower surpassed all other flowers (to become poetic in Paul's spirit).

At his retirement from CABO, I cited, to his pleasure, from a volume of aphorisms from Peuhl herdsmen. I looked into his eyes, when reading the aphorism that 'through the eyes one looks into the heart'. That heart was large and good.

The memories about the scientist and the person Paul Van Den Bergh will live on in 'Wageningen' for a long time to come.

Henk Breman/Herman Van Keulen