

# Proceedings of the informal meeting on physics in agriculture

Wageningen, The Netherlands

7-13 September, 1955

The increasing importance of physics for agriculture, and the similarity between the problems in agricultural physics studied in different parts of the world, formed an incentive for a number of physicists concerned with agriculture to discuss the present and the probable future role of physics in agriculture at an informal meeting held at Wageningen, The Netherlands, from the 7th to the 13th of September 1955. Evaporation in agriculture was the main subject for discussion.

The initiative in planning this meeting was taken by the following physicists :

Professor W. RENTSCHLER, Agricultural University, Stuttgart, Germany.

Dr. H. L. PENMAN, Rothamsted Experimental Station, Harpenden, Great Britain.

Dr. R. K. SCHOFIELD, Rothamsted Experimental Station, Harpenden, Great Britain.

Dr. D. A. DE VRIES, Agricultural University, Wageningen, The Netherlands.

Professor W. R. VAN WIJK, Agricultural University, Wageningen, The Netherlands.

Professor BJ. BJERKE, Agricultural University, Ås, Norway.

Dr. E. M. LINDBERG, Agricultural University, Uppsala, Sweden.

Professor DON KIRKHAM, Iowa State College of Agriculture, Ames, Iowa, U.S.A.

The Agricultural University of Wageningen gave moral and material support to the meeting. The interest shown by the Board of Governors of the University and in particular by the President Mr. J. M. VAN BOMMEL VAN VLOTEM, by the Secretary to the Board Dr. A. E. H. R. BOONSTRA, by the Rector Magnificus for 1955, Professor W. F. EIJSVOOGEL, and by several professors and other members of the staff was highly appreciated by those attending the meeting.

The Netherlands Ministry of Agriculture gave a generous subsidy and technical assistance. Mr. A. W. VAN DER PLASSCHE, Director General, Mr. A. H. JOUSTRAS, Head of Foreign Relations at the Ministry, Messrs. A. H. HAAK and S. H. THIO of the International Agricultural Study Centre, and Mrs. J. A. FRAHM, Secretary to the Editorial Board of the Netherlands Journal of Agricultural Science, contributed much to the success of the meeting.

The Food and Agriculture Organization of the United Nations was informed about the project, and the Director of the Agriculture Division welcomed the initiative in arranging a contact between physicists active in agricultural science, and expressed his belief that such a meeting can be of great value to them.

Mr. M. DE NIET, Mayor of Wageningen welcomed the participants on a reception offered to them by the Municipal Authorities.

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MRS. MONTEITH.  
MRS. MORTIER.  
MRS. PENMAN.

MRS. SCOTT BLAIR.  
MRS. SCHOFIELD.  
MRS. STAPLE.

# PROGRAMME OF THE MEETING

Chairman : Dr. R. K. SCHOFIELD.

Introduction to main subject : Dr. H. L. PENMAN.

## *Wednesday 7th*

- 14.00–14.15 Opening by Mr. J. M. v. BOMMEL VAN VLOTEM, President of the board of governors of the Agricultural University.  
14.15–15.30 PENMAN — Evaporation, an introductory survey.  
15.30–16.30 Discussions, discussion-leader : SCHOFIELD.  
20.00–22.00 Discussions, discussion-leader : SCHOFIELD.

## *Thursday 8th*

- 9.30–12.00 Short communications on evaporation :  
HOLMES, MONTEITH, STAPLE, BROUWER, NEALE, RAMSAUER, HESSE, MAKKINK,  
SLATYER, BUSINGER.  
Discussion-leader : SCHOFIELD.  
14.00–17.00 Short communications on miscellaneous subjects :  
SCOTT BLAIR, VAN STRALEN.  
Discussion-leader : KVIFTE.  
MORTIER—DE BOODT, RENTSCHLER.  
Discussion-leader : HESSE.  
SESTOFT, RENTSCHLER.  
Discussion-leader : MORTIER.  
BOEKEL, PEERLKAMP, ERNST.  
Discussion-leader : CHILDS.  
20.00–22.00 Reception by the Mayor of Wageningen.

## *Friday 9th*

- Field trip to the North East Polder.

## *Saturday 10th*

- 9.30–12.00 Short communications on miscellaneous subjects :  
RENTSCHLER.  
Discussion-leader : SCOTT BLAIR.  
DE VRIES, STERK.  
Discussion-leader : RENTSCHLER.  
Free discussion on soil moisture :  
Discussion-leader : SCHOFIELD.  
14.00–17.00 Discussion on future cooperation of physicists in agriculture.  
Introduction : VAN WIJK.  
Discussion-leader : SCHOFIELD.  
Discussion on education in physics and meteorology at the agricultural universities.  
Introduction : RENTSCHLER.  
Discussion-leader : SCHOFIELD.

## *Sunday 11th*

- 14.00–18.00 Excursion to "De Hoge Veluwe" (National Park).

## *Monday 12th*

- 9.30–12.30 Discussion on main subject.  
Short communication by HALLAIRE.  
Discussion-leader : SCHOFIELD.  
Afternoon Field trip to the horticultural district of Aalsmeer.  
19.30 Dinner for participants and guests.

## *Tuesday 13th*

- 9.30–12.00 Discussion on main subject, and conclusions arrived at the meeting.  
Discussion-leader : SCHOFIELD.

When the meeting was in progress a paper by Dr. L. CAVANILLAS in the Spanish language was received. It is incorporated in the proceedings of the meeting but it was not possible to have it discussed.