

the horticultural workers in many countries for a number of years in the past. The experiences of these workers have not been easily available in the past except to a limited few. The results of such previous work, although not been very successful, had furnished much useful information to form the basis of more recent attempts at preventing premature fall of fruit.

In recent years synthetic growth substances have been successfully used by practical horticulturists in inducing quicker and better rooting of cuttings of many plants. Some practical results have also been obtained in inducing parthenocarpy and there appears to be great possibilities of successful use of these substances in effecting good grafts. The success attained in these directions have led some workers to test the possibilities of growth substances in retarding fruit fall. The measure of success attained so far, though restricted to some varieties of fruits, has opened up the possibilities of discovering new substances which will work with varieties which have failed to respond to substances now used. The results obtained in controlling fruit drop by the use of synthetic growth substances forms the subject-matter of the publication under review.

The author has done a commendable piece of work in dealing with so many aspects of the work in such brief manner. The publication is divided into six parts. The first part deals with the causes of loss of potential fruit, viz., pre-blossoming losses, shedding of blossom and young fruit and pre-harvest drop. Under each sub-head the various principal and contributory causes are dealt with. In the second part is described the formation of abscission which is the underlying cause of shedding of fruit. The varietal differences to

abscission process, causes affecting abscission and the effect of growth substances on this process are discussed. The third part is devoted to the experimental procedure, viz., the different methods tested, systems of recording and presentation and interpretation of the experimental results. The fourth part which is the longest has for its subject the effect of growth substances on pre-harvest drop. A brief tribute is paid to pioneer work of Gardner, Marth and Batjer of which all subsequent works is an elaboration. The varietal difference in response, method and time of application, types of substances used and their concentration, compatibility of these substances with insecticides and fungicides, and their effect on quality of fruit are concisely dealt with. This part is concluded with a reference to other effects of the growth substances such as on disease of fruits, physiological processes, on young developing parts, leaf fall and the harmlessness of the substances to animals, etc. Part five contains practical recommendations and the final part includes tabular summary of the important results cited and a very useful bibliography.

The above publication will be found to be of inestimable value to fruit growers all over the world who are faced with the loss of potential fruit due to pre-harvest drop. The author deserves the thanks of all horticulturists for compiling together such important results not easily accessible and presenting it in such brief manner. It is needless to say that the Imperial Bureau of Horticulture and Plantation Crops has rendered great service in bringing out this very useful publication, the results of which cannot easily be assessed.

L. S. S. K.

---

## SCIENCE NOTES AND NEWS

---

University of Madras Endowment Lectureships, 1947-48.—The Syndicate will proceed shortly to select persons to deliver lectures under the following Endowments for the year 1947-48. Applications for Lectureships will be received by the undersigned not later than the 15th March 1947. Applicants are requested to give full particulars regarding their qualifications, etc., and the subject selected by them for the lectures. The lectures are to be delivered before January 1948. Separate application should be submitted for each lectureship.

The principal terms and conditions of award are given below:—

(1) *The Maharaja of Travancore Curzon Lectureships*.—Three lectureships of the value of Rs. 250 each, relating to (a) Medicine—Clinical, (b) Engineering, and (c) Agriculture. Applicants should be graduates of the University.

(2) *The Sir Subrahmanya Ayyar Lectureship*.—Value Rs. 250. The lectures should be on a subject connected with Physical Science. Applicants should be graduates of the University.

(3) *The Sankara Parvathi Lectureship*.—Value Rs. 250. The lectures should be on a subject connected with Ancient South Indian History. Applicants should be graduates of the University.

(4) *The Sir William Meyer Lectureship*.—Value Rs. 1,500. A course of not less than six lectures should be delivered on a subject in Economics. Half of the remuneration will be paid after the delivery of the lectures and the other half after the publication of the lectures.

(5) *The Principal Miller Lectureship*.—Value Rs. 350. A course of not less than two lectures should be delivered on a subject dealing with the Exposition of the Inner Meaning of Human History as disclosing the one Increasing Purpose that runs through the Ages.

(6) *The Dr. Elizabeth Matthai Lectureship*.—Value Rs. 300. A course of not less than three lectures should be delivered on a subject embodying the results of original investigation in some branch of Medicine and Surgery. Preference will be given to a subject having special reference to the requirements of women and children.

(7) *The Sundaram Ayyar-Krishnaswami Ayyar Lectureship*.—Value Rs. 200. The subject of lectures should be one relating to (a) Public International Law, or (b) Inter-State Relations of Indian States with British Indian Provinces, or (c) Comparative Legislation.

(8) *The Diwan Bahadur K. Krishnaswami Rao Lectureship*.—Value Rs. 200. The subject of lectures should be one relating to some aspect of Ancient Indian Culture studied from Original Sources.

(9) *The Father P. Carty Lectureship*.—Value Rs. 200. The subject of lectures should be one connected with Economics with particular reference to Indian conditions.

**Lady Tata Memorial Trust: Scientific Research Scholarships, 1947-48.**—The Trustees of the Lady Tata Memorial Trust are offering six Scientific Research Scholarships of Rs. 250 each per month for the year 1947-48 commencing from 1st July 1947. Applicants must be of Indian nationality and Graduates in Medicine or Science of a recognised University. The scholarships are tenable in India only and the holders must undertake to work wholetime under the direction of the head of a recognised Research Institute or Laboratory. The subject of scientific investigation must have a bearing either directly or indirectly on the alleviation of human suffering from disease. Applications must reach by March 15, 1947. Further particulars can be had from the Secretary of the Trust, Bombay House, Bruce Street, Fort, Bombay.

**Frans Verdoorn, First Recipient of Mary Soper Pope Medal.**—The first Mary Soper Pope Medal of the Cranbrook Institute of Science, Michigan, has been awarded (Dec. 12, 1946) to Dr. Frans Verdoorn, Editor of *Chronica Botanica*, of Waltham, Mass., in recognition of his editorial and international relations work in biology as well as for his researches in cryptogamic botany and the history of the plant sciences.

Dr. Verdoorn, who was born at Amsterdam, the Netherlands, in 1906, came to the U.S.A. in 1940. He is the Managing Editor of the *Chronica Botanica Co.*, which publishes *Chronica Botanica*, "A New Series of Plant Science Books", and *Annales Cryptogamici et Phytopathologici*. He is also Botanical Secretary of the International Union of Biological Sciences and Special Adviser to the Netherlands Indies Department of Agriculture. His principal books are: *de Frullaniaceis I-XVIII*, *Manual of Bryology*, *Manual of Pteridology*, *Plants and Plant Sciences in Latin America*, *Science and Scientists in the Netherlands Indies* (with P. Honig) and the *Index Botanicorum*, a biographical dictionary of plant scientists, now in preparation in co-operation with the Arnold Arboretum of Harvard University, with which Verdoorn has been connected since 1941. From January 1947 onwards Verdoorn will issue a monthly biological newsletter, *Biologia*, and an annual

review of progress, in international relations and co-operation in science, to be entitled *Pallas*.

**Indian Ecological Society.**—The Sixth Annual General Meeting of the Indian Ecological Society was held at Delhi in the Botany Section of the Indian Science Congress, on 4th January 1947, at 2 p.m., when Dr. S. L. Hora and Dr. F. R. Bharucha were elected President and General Secretary of the Society respectively for 1947.

**Indian Chemical Society.** The 23rd Annual General Meeting of the Indian Chemical Society was held on January 3, 1947, at the venue of the Indian Science Congress at Delhi, under the chairmanship of Dr. J. N. Mukherjee, the President. Election of the Office-bearers, four Members of the Board of Editorial Correspondents, two Honorary Auditors and four Ordinary Members of the Council was announced. Prof. P. Ray and Dr. B. N. Ghosh were respectively elected President and Secretary of the Society. The President addressed the meeting "On the Role of Chemists in the Promotion of Chemical Science, Research and Industries".

We acknowledge with thanks the receipt of the following:—

(1) *The Trematoda (with special reference to British and other European forms)*. By Ben Waves. (Cambridge University Press), 1946. Price 52/6 net.

(2) *Hydraulic Measurements* (II Edn.). By Herbert Addison. (Chapman & Hall), 1946. 21/- net.

(3) *Methods of Plane Projective Geometry* (based on the use of general homogeneous coordinates). By E. A. Maxwell. (Cambridge University Press), 1946. 12/6 net.

(4) *Electronic Theory of Acids and Bases*. By Luder and Zuffauti. (John Wiley & Sons, Inc., N.Y., and Chapman & Hall, London), 1946. \$3.00.

(5) *Forensic Chemistry*. By Henry T. F. Rhodes. (Chapman & Hall), 1946. 15/-.

(6) *Chemotherapy Yesterday, To-day and To-morrow*. By Fleming. (Cambridge University Press), 1946. 2/-.

## ERRATA

Vol. 15, No. 11, November 1946

Page 302, line 24: Under "Aviation Radio", for "Ultra-violet wave", read "Ultra-short wave"; lines 29 and 30: for "air port", read "air ports"; for "aircraft" read "aircrafts"; line 31: for "maker" read "marker". Under "Radio Direction Finding", line 25: for "makers", read "markers".

Page 304, line 7: Under "Radar and Associated Systems", for "impulse-modulated" read "pulse-modulated".