

method for estimating the amount of peroxydase in the tomato, and this method was applied to determining the proportions of peroxydase during the different stages of the ripening of the fruit. From the results obtained, it is concluded that the tissue of the tomato contains an enzyme which paralyses the oxidising action of the peroxydase. This is provisionally termed anti-peroxydase, and it is much more sensitive than the peroxydase to the influence of antiseptics. Even toluene destroys it fairly rapidly. The relations between these two enzymes during the ripening of the fruit is discussed.—A. **Jungelson**: Chemical intoxication and mutation of maize. Studies in the variations produced by treating the seed with a solution of copper sulphate.—H. **Vincent** and M. **Gaillard**: The purification of drinking water with calcium hypochlorite. Compressed tabloids of 0.015 gram calcium hypochlorite with 0.08 gram salt are used. These contain 3.5 mgr. of active chlorine, and one is capable of sterilising a litre of water in about twenty minutes. There is no appreciable taste. Bacteriological experiments are given showing the removal of pathogenic bacteria.—J. **Vallot**: An installation permitting the application of intensive heliotherapy, in winter, to wounded and military convalescents.—MM. **Hirtz** and **Gallot**: A new radiosopic method for the determination of the depth of a foreign body in the organism.

BOOKS RECEIVED.

- Year Book of the Royal Society of London. Pp. 250. (London: Harrison and Sons.) 5s.
Imperial University of Tokyo. Calendar 2573-2574. (Tokyo: Z. P. Maruya and Co.)
Royal Societies Club. Founded A.D. 1894. Foundation and Objects. Rules and By-Laws. List of Members. Pp. 354. (London.)
Practical Irrigation and Pumping. By B. P. Fleming. Pp. xvi+226. (New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd.) 8s. 6d. net.
The Design of Steam Boilers and Pressure Vessels. By Prof. G. B. Haven and G. W. Swett. Pp. vii+416. (New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd.) 12s. 6d. net.
Electrical Engineering. By Dr. T. C. Baillie. Vol. i., Introductory. Pp. vii+236. (Cambridge: At the University Press.) 5s. net.

DIARY OF SOCIETIES.

THURSDAY, APRIL 22.

ROYAL SOCIETY, at 4.30.—Deep Water Waves, Progressive or Stationary, to the Third Order of Approximation: Lord Rayleigh.—A Chemically Active Modification of Nitrogen, produced by the Electric Discharge. VI.: Hon. R. J. Strutt.—The Difference between the Magnetic Diurnal Variations on Ordinary and Quiet Days at Kew Observatory: Dr. C. Chree.—The Effects of Different Gases on the Electron Emission from Glowing Solids: F. Horton.—Heats of Dilution of Concentrated Solutions: W. S. Tucker.—The Origin of the "4686" Series: T. R. Merton.
ROYAL INSTITUTION, at 5.—The System of the Stars: The Stellar System in Motion: Prof. A. S. Eddington.

FRIDAY, APRIL 23.

ROYAL INSTITUTION, at 9.—Military Hygiene and the War: Major P. S. Lelan.
INSTITUTION OF MECHANICAL ENGINEERS, at 8.
PHYSICAL SOCIETY, at 5.—The Theories of Voigt and Everett Regarding the Origin of Combination Tones: Prof. W. B. Morton and Miss Mary Darragh.—Experiments on Condensation Nuclei Produced in Gases by Ultra-Violet Light: Miss Maud Saltmarsh.—The Self-Induction of Solenoids of Appreciable Winding Depth: S. Butterworth.

SATURDAY, APRIL 24.

ROYAL INSTITUTION, at 3.—Modern Artillery: Lieut.-Col. A. G. Hadcock.

MONDAY, APRIL 26.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—Geography of the War Theatre in the Near East: D. G. Hogarth.
ROYAL SOCIETY OF ARTS, at 8.—Foodstuffs: Dr. D. Sommerville.
INSTITUTE OF ACTUARIES, at 5.—The New National Life Tables: G. King.

TUESDAY, APRIL 27.

ROYAL INSTITUTION, at 3.—The War on Belgian Architecture: Banister Fletcher.
ZOOLOGICAL SOCIETY, at 5.30.—White Collar Mendelising in Hybrid Pheasants: Mrs. Rose Haig Thomas.—Two New Tree-Frogs from Sierra Leone, recently Living in the Society's Gardens: E. G. Boulenger.—The Foraminifera of the Kerimba Archipelago (Portuguese East Africa). Part II.: E. Heron-Allen and A. Earland.
ILLUMINATING ENGINEERING SOCIETY at 8.—Visibility: its Practical Aspects: C. C. Paterson and B. P. Dudding.
INSTITUTION OF CIVIL ENGINEERS, at 8.—Annual General Meeting.

WEDNESDAY, APRIL 28.

ROYAL SOCIETY OF ARTS, at 8.—The Utilisation of Solar Energy: A. S. E. Ackermann.
INSTITUTION OF ELECTRICAL ENGINEERS, at 7.45 (Students' Section).—Annual General Meeting.
GEOLOGICAL SOCIETY, at 8.—A Composite Gneiss near Barna (County of Galway): Prof. Grenville A. J. Cole.—Further Work on the Igneous Rocks associated with the Carboniferous Limestone of the Bristol District: Prof. S. H. Reynolds.

THURSDAY, APRIL 29.

ROYAL SOCIETY, at 4.30.—*Probable Papers*: The Transmission of Infra-red Rays by the Media of the Eye, the Transmission of Radiant Energy by Crookes's and other Glasses, and the Radiation from various Light Sources: H. Hartridge and A. V. Hill.—Surface Tension and Ferment Action: E. Beard and W. Cramer.—Surface Tension as a Factor controlling all Metabolism: W. Cramer.
ROYAL INSTITUTION, at 3.—Advances in General Physics: Prof. A. W. Porter.
INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—The Bombay Hydro-Electric Scheme: A. Dickinson.

FRIDAY, APRIL 30.

ROYAL INSTITUTION, at 9.—Emulsions and Emulsifications: Prof. F. G. Donnan.
INSTITUTION OF PETROLEUM TECHNOLOGISTS, at 8.—Oil Well Engineering: W. Calder.

SATURDAY, MAY 1.

ROYAL INSTITUTION, at 3.—Photo-Electricity: Prof. J. A. Fleming.

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