

the trans-ammonia is split off. Owing to this splitting, the transition from triaminosulphite to triamino-chloride is impossible. V. S. SADIKOV and V. A. VADOVA: Alcoholysis of serum albumin. On heating serum albumin in an autoclave at 180° for six hours with 99.5 per cent ethyl alcohol, 99 per cent of the albumin was liquified. Z. S. KATZNELSON: Mesenchymatic development of the striated muscles in Amphibia. Striated muscles of the extremities, gills, ventral wall and head develop by a local differentiation of the mesenchyme. Stages in their development are described. A. KHARIT and A. KOSTIN: The oxidation and reduction processes in working muscle. (4) Oxides and suboxides of iron in muscle during work. A muscle before and during stimulation contains organic oxides of iron which are transformed into suboxides. During work, this process greatly increases. I. J. SYROVATSKII: Biology of some Black Sea fishes. Notes on the seasons of reproduction in *Scomber scombrus*, L., *Sarda sarda*, L., *Caspialosa pontica*, Eichw., and *Spratella sprattus phalerica*, Risso. G. V. NIKOLSKIJ: Materials on the geographical variability of *Capoetobrama kuschakewitschi*, Kessl. (Pisces, Cyprionidæ). Description of a new sub-species from eastern Turkestan. A. I. KURENTOV: Contribution to the problem of the origin of the high-mountain fauna of the South Ussuri region. The ancient faunistic element is composed of the relics of the palæogenic fauna which have survived the Miocene glaciation on the spot. More recent elements belong to the palæarctic fauna which migrated south in the Quaternary period.

MELBOURNE

Royal Society of Victoria, May 10. C. W. WARK: An investigation into the influence of sulphate of ammonia on stubble-sown oat crops in Victoria. Field trials were established at Bannockburn and at Buangor. Sulphate of ammonia was applied at the rates of $\frac{3}{4}$ cwt. and $1\frac{1}{2}$ cwt. per acre. The application of these dressings caused an increase in the nitrate content of the soil in June–August, an increase in the average number of tillers per plant in spring, and a marked increase in the number of ears and grains produced at harvest. The percentages of nitrogen in the grain and in the straw were not affected. MISS F. J. HALSEY: A disease of cauliflowers in Victoria, Australia (*Gloeosporium concentricum*, (Grev.) Berk. and Br.). The disease is prevalent in Victoria, damaging the leaves, and also the inflorescences. The most characteristic symptom is the presence of minute white fluffy clusters of spores on both surfaces of the leaves. History connected with the fungus is discussed and as a result of this, together with the evidence disclosed by study of the pathogen on the host and in pure culture, it is named *Gloeosporium concentricum*, (Grev.) Berk. and Br. Spores from the host measure on the average $11.9 \times 3 \mu$ and are produced in subcuticular acervuli. The conidiophores are short and unbranched, constricting off at their apices, in succession, the cylindrical, one-celled, hyaline conidia. The pathogen was obtained in pure culture and growth on various media was studied. The conidia are formed at any point throughout the culture; in discrete spring areas (sporodochia); and in pseudopycnidia. Germinating spores possess a median septum. Inoculation experiments with seedling cauliflowers proved successful. The effect on spore germination of varying pH values was studied. Germination percentage fell sharply, especially on the acid side.

Forthcoming Events

- WOMEN'S ENGINEERING SOCIETY, September 21–23. Twelfth annual conference to be held at Norwich. Miss E. M. Kennedy: President.
- ASSOCIATION OF SPECIAL LIBRARIES AND INFORMATION BUREAUX, September 21–24. Eleventh Annual Conference to be held at Somerville College, Oxford. Sir Richard Gregory: "Science in the Public Press" (Presidential Address.)

Official Publications Received

GREAT BRITAIN AND IRELAND

- Report of the Progress of the Ordnance Survey for the Financial Year 1st April 1933 to 31st March 1934. Pp. 14+11 plates. (London: H.M. Stationery Office.) 3s. net.
- General Index to the Monthly Notices of the Royal Astronomical Society. Vols. 71–91, 1911–1931. Pp. v+168. (London: Royal Astronomical Society.) 5s.
- Sea-Fish Commission for the United Kingdom. First Report: The Herring Industry. (Cmd. 4677.) Pp. 51. (London: H.M. Stationery Office.) 9d. net.
- Memoirs of the Cotton Research Station, Trinidad. Series A: Genetics. No. 8: Further Experiments on the Inheritance of Chlorophyll Deficiency in New World Cottons. By S. C. Harland. Pp. 181–195. (London: Empire Cotton Growing Corporation.) 2s. 6d.
- Air Ministry: Aeronautical Research Committee: Reports and Memoranda. No. 1537 (Strut. 128): Method of Representing Spar Tests. By H. R. Fisher. Pp. 28+11 plates. (London: H.M. Stationery Office.) 1s. 9d. net.
- East London College (University of London). Calendar, Session 1934–1935. Pp. 237. (London.) 1s.
- Proceedings of the Royal Irish Academy. Vol. 42, Section B, No. 3: The Occurrence and Development of *Euphausia krohnii* off the South-West Coast of Ireland. By Winifred E. Frost. Pp. 17–40. (Dublin: Hodges, Figgis and Co.; London: Williams and Norgate, Ltd.) 1s.
- The Scientific Proceedings of the Royal Dublin Society. Vol. 21 (N.S.), No. 10: The Approximate Determination of the Vibration of Beams and the Whirling of Shafts. By Dr. H. H. Jeffcott. Pp. 87–112. 2s. 6d. Vol. 21 (N.S.), No. 12: The Influence of the Stage of Lactation on Fat Estimations by the Gerber Method. By J. Lyons and M. O'Shea. Pp. 123–131. 1s. (Dublin: Hodges, Figgis and Co.; London: Williams and Norgate, Ltd.)
- British Association for the Advancement of Science. A Scientific Survey of Aberdeen and District. Prepared for the Aberdeen Meeting, 1934. By various Authors. Pp. 128. (London: British Association.)

OTHER COUNTRIES

- Proceedings of the Academy of Natural Sciences of Philadelphia, Vol. 86. The Buckler Dory Descriptions of Three New Fishes from off New Jersey and Florida. By Henry W. Fowler. Pp. 353–361. (Philadelphia.)
- Conseil Permanent International pour l'Exploration de la Mer. Faune ichthyologique de l'Atlantique nord. Publiée sous la direction de Prof. Joubin. No. 15. 24 plates+text, 4.00 kr. Rapports et proces verbaux des reunions. Vol. 88: Scientific Report of the North-Eastern Area Committee, 1934. Published by Oscar Sund. Pp. iii+102. 4.00 kr. Vol. 89: 2^{ème} partie, Rapport administratif (1933–1934). Pp. 76. 3.50 kr. Vol. 89: 3^{ème} partie, Appendices (1933–1934). Pp. 103. 5.00 kr. Vol. 90: Size-Limits for Fish and Regulations of the Meshes of Fishing Nets; Reports of the Proceedings of the Special Biological Meeting held on June 4th and 8th, 1934, at Copenhagen. Pp. xv+61. 3.00 kr. (Copenhagen: Andr. Fred. Høst et fils.)
- U.S. Department of Agriculture. Technical Bulletin No. 404: The External Anatomy of the Red Date Scale, *Phenacoccus mariatti* Cockerell, and its Allies. By F. S. Stickney. Pp. 163. (Washington, D.C.: Government Printing Office.) 15 cents.
- Publications of the Dominion Observatory, Ottawa. Vol. 12: Bibliography of Seismology. No. 1: January, February, March, 1934. By Ernest A. Hodgson. Pp. 24. (Ottawa: King's Printer.) 25 cents.
- The Indian Central Cotton Committee. Note on the Improvement of Cotton in Sind. Pp. 8. (Bombay: Indian Central Cotton Committee.)
- Trinidad and Tobago: Forest Department. Administration Report of the Conservator for the Year 1933. Pp. 22. (Trinidad: Government Printing Office.) 10d.
- Rubber Research Institute of Malaya. Annual Report, 1933. Pp. ii+163. (Kuala Lumpur.) 1 dollar.
- Memoirs of the Geological Survey of India. Palaeontologia Indica, New Series, Vol. 20, Memoir No. 4: The Jurassic and Cretaceous Ammonites and Belemnites of the Attock District. By Dr. L. F. Spath. Pp. iv+39+6 plates. (Calcutta: Geological Survey; Delhi: Manager of Publications.) 4 rupees; 6s. 9d.

CATALOGUES

- Bismostab Injection of Bismuth B.P. Pp. iv+42. (Nottingham: Boots Pure Drug Co., Ltd.)
- Apparatus for Micro-Chemical Analysis according to Pregl and other Workers. (List No. 103.) Pp. 16. Rubber Testing: Experimental and Research Equipment. (List No. 104.) Pp. 60. (London: A. Gallenkamp and Co., Ltd.)