

characterised by the same association of species, at least in so far as the foraminifera are concerned. G. REVERBERI: Crossing experiments between eggs of *Ciona intestinalis* and sperm of *Phallusia mamillata*. M. MILOLO: Avitaminosis and intoxications (3): Experimental syndrome from avitaminosis A and chemical intoxication from metals and metalloids. Oral administration to rats suffering from avitaminosis A, of a mixture of metallic and non-metallic compounds in doses non-toxic to the normal animals, causes neither acceleration nor inhibition of the effect of the food-deficiency. Moreover, the toxicity of the inorganic compounds is not enhanced under such conditions.

SYDNEY

Royal Society of New South Wales, June 7. G. HARKER: The decomposition of chloroform by radiations from radon. The decomposition produced in different thicknesses of chloroform with filtered and unfiltered radiation from radon has been studied. Excess decomposition is produced near the source with unfiltered radiation but rapidly falls off in amount. Minute traces of impurities greatly influence the decomposition. Expressed in terms of energy, the amounts of X- and Y-radiation necessary for the decomposition of one gram molecule of the same sample of chloroform differ greatly. The figures found were 29·800 calories for X-radiation and 251·300 calories for Y-radiation. E. H. BOOTH and J. M. RAYNER: A magnetic survey in the vicinity of a granite batholith. The paper deals with the north and east of Gulgong, New South Wales. The area covered by the survey is about eighty square miles. The contact is with Silurian (?) slates, the granite probably having intruded in later Devonian times. The contact is buried by about 100 ft. of alluvium, the gradient back to the exposed granite being slight (about 1:100). The contact is steep, the section passing off granite in half a mile or less, once the sharper fall commences. The maximum magnetic anomaly due to the granite is about 800 γ , the slates and soil being practically non-magnetic. A general geological and isodynamic map of the district is given, also six sections, magnetic and geological, across the area. The instruments were 'Askania' vertical magnetometers. The magnetic anomalies along the actual presumed line of contact are not readily interpreted.

Linnean Society of New South Wales, May 31. GERMAINE A. JOPLIN: The petrology of the Hartly district. (2). The metamorphosed gabbros and associated hybrid and contaminated rocks. The Cox's river intrusion, which occupies an area of about 900 acres, is situated on the river at a distance of about three miles below the crossing of the Jenolan Road. It has been shown that the differentiation of an earlier partial magma of gabbro gave rise to a slightly more acid core. The whole was then enveloped by a ring-like intrusion of a later more acid partial magma of quartz-mica-diorite, and as a result of this later intrusion the gabbros have suffered three types of metamorphism: (1) thermal metamorphism; (2) reaction or partial hybridisation; (3) hydrothermal metamorphism. H. J. CARTER: Australian Coleoptera. Notes and new species. (8). Thirty-six species are described as new—eight Buprestidae, nineteen Tenebrionidae, eight Cistelidae and one Cerambycidae. Tables are given for the species of *Cotulades* and *Byallius*. H. L. JENSEN:

Corynebacteria as an important group of soil micro-organisms. Bacteria possessing the characters of the genus *Corynebacterium* were found to occur as a numerically important group of micro-organisms in Australian soils, accounting for 8–65 per cent of the numbers of bacterial colonies developing on plates of dextrose-casein-agar. They appear to be active in the decomposition of organic matter in soil, particularly in the later stages of the process. They are probably identical with certain organisms previously recorded as rhizobia.

Forthcoming Events

Wednesday, Oct. 4

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN, at 3.—Prof. Henry E. Armstrong: Inaugural Sessional Address.

Friday, Oct. 6

PHYSICAL SOCIETY, at 5.45—(at the Royal Institution, 21, Albemarle Street, London, W.1).—Dr. Herbert E. Ives: "Thomas Young and the Simplification of the Artist's Palette" (Thomas Young Oration).

Official Publications Received

GREAT BRITAIN AND IRELAND

Air Ministry: Aeronautical Research Committee: Reports and Memoranda. No. 1491 (S. and C. 367, 368): Experiments on Swept-back and Swept-forward Aerofoils. By D. H. Williams and Dr. A. S. Halliday; with an Appendix by H. B. Irving. Pp. 22+19 plates. 1s. 3d. net. No. 1527 (T.3360): Binary Servo-Rudder Flutter. By Dr. W. J. Duncan and A. R. Collar. Pp. 23+2 plates. 1s. 3d. net. No. 1532 (T. 3308, 3308A): The Best Basis of Aircraft Performance Reduction. Part 1: Supercharged Engines, by J. L. Hutchinson and E. Finn; Part 2: Unsupercharged Engines, by E. Finn. Pp. 18+23 plates. 2s. 3d. net. (London: H.M. Stationery Office.)

Journal of the Marine Biological Association of the United Kingdom. New Series, Vol. 19, No. 1, August. Pp. 486. (Plymouth.) 19s. 6d.

Rothamsted Experimental Station, Harpenden: Lawes Agricultural Trust. Report for 1932. Pp. 227. (Harpenden.) 2s. 6d.

Proceedings of the Royal Society of Edinburgh, Session 1932-1933. Vol. 53, Part 3, No. 17: The Effect of Consanguineous Parentage upon Metrical Characters of the Offspring. By Prof. Lanclot Hogben. Pp. 239-251. 1s. 3d. Vol. 53, Part 3, No. 18: The Faecal Pellets of *Hippa asiatica*. By Dr. Hilary B. Moore. Pp. 252-254. 6d. Vol. 53, Part 3, No. 19: The Diffusion Coefficients of Bromine-Argon, Bromide-Methane, Bromide-Hydrogen Chloride, Bromine-Nitrous Oxide. By Dr. John E. Mackenzie and Dr. Harry W. Melville. Pp. 255-259. 6d. (Edinburgh: Robert Grant and Son; London: Williams and Norgate, Ltd.)

Proceedings of the Royal Society. Series A, Vol. 141, No. A845, September 1. Pp. 493-747+plates 10-17. 13s. Proceedings of the Royal Society. Series B, Vol. 113, No. B784, September 1. Pp. 345-495+plates 11-12. 10s. (London: Harrison and Sons, Ltd.)

Proceedings of the Royal Irish Academy. Vol. 41, Section B, Nos. 12, 13: On *Cleistopora geometrica* (Milne-Edwards and Haime), by Louis B. Smyth; On certain Carboniferous Corals with Epithecal Scales, by Louis B. Smyth. Pp. 167-178+plates 8-10. (Dublin: Hodges, Figgis and Co.; London: Williams and Norgate, Ltd.) 1s.

OTHER COUNTRIES

Indian Central Cotton Committee: Technological Laboratory. Technological Bulletin, Series B, No. 16: Fibre-Length Irregularity in Cotton. By Dr. Nazir Ahmad and Harirao Navkal. Pp. ii+10. (Bombay.) 8 annas.

Society of Biological Chemists, India. Biochemical and Allied Research in India in 1932. Pp. 86. (Bangalore.)

India: Meteorological Department: Scientific Notes. Vol. 5, No. 52: Thunderstorms in South India during the Post-Monsoon Months, October and November 1929. By S. P. Venkiteswaran. Pp. 63-68+8 plates. 1 rupee; 1s. 9d. Vol. 5, No. 53: A Note on the Rapid Fluctuations of Atmospheric Pressure and the Atmospheric Instability at Peshawar during 1928 and 1929. By S. Basu and S. K. Pramanik. Pp. 69-88+4 plates. 12 annas; 1s. 3d. (Delhi: Manager of Publications.)

Bulletin of the Madras Government Museum. New Series, Natural History Section, Vol. 3, Nos. 3 and 4: The Life-Histories of Decapod Crustacea from Madras, by M. Krishna Menon; Sagitta of the Madras Coast, by Dr. C. C. John. Pp. 55+11 plates. (Madras: Government Press.) 2.6 rupees.

The Indian Forest Records. Vol. 18, Part 7: Entomological Investigations on the Spike Disease of Sandal. 10: Melasidae and Elateridae (Col.). By E. Fleutiaux. Pp. 16. (Delhi: Manager of Publications.) 5 annas; 6d.

Conseil Permanent International pour l'Exploration de la Mer. Rapports et procès-verbaux des réunions, Vol. 85. 2^{ème} partie: Rapport administratif (1932-1933); 3^{ème} partie: Appendices. Pp. 75. (Copenhagen: Andre. Fred. Hest et fils.) 7.00 kr.