

however, the alkaloid is introduced into 200 c.c. of water, the minimum lethal dose is 3 mgm. Similar results are shown with caffeine. The frog evidently manifests a special affinity for the two alkaloids. **M. MIROLO**: Avitaminosis and intoxication. (2) Experimental scurvy and chemical intoxication by metals and metalloids. Ingestion, by a guinea-pig suffering from avitaminosis-C, of mixtures of salts of metals and metalloids in doses non-toxic to normal animals, enhances and accelerates the effect of the food-deficiency.

### Forthcoming Events

#### Saturday, April 1

ROYAL INSTITUTION, at 3.—Developments in Cinematography: A Display of Films, (3) Films in Relation to Aeronautical Research.

#### Monday, April 3

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—Rev. W. H. Murray Walton: "Among the Mountains and Head-Hunters of Formosa".

#### Tuesday, April 4

ROYAL AGRICULTURAL COLLEGE, CIRENCESTER.—Conference on: "The Breeding of Dairy Cattle".

#### Thursday, April 6

CHEMICAL SOCIETY, at 8.—Commemoration of the Bicentenary of Priestley. Papers by Prof. A. N. Meldrum, Sir Philip Hartog and Sir Harold Hartley.

#### Saturday, April 8

GILBERT WHITE FELLOWSHIP, at 2.30—(Annual General Meeting in the Hall of the Art-Worker's Guild, 6, Queen Square, W.C.1).—At 3, Sir John Russell: "Modern Trends in Agricultural Science".

INSTITUTION OF NAVAL ARCHITECTS, April 5-7.—(in the Lecture Hall of the Royal Society of Arts, John Street, Adelphi, W.C.2).—Annual Meeting.

### Official Publications Received

#### GREAT BRITAIN AND IRELAND

The Science Masters' Association. Report for 1932, with List of Members (correct to January 1, 1933), Statement of Accounts and Report of Business Meeting. Pp. 96. (Eton College.)  
 Liverpool Observatory and Tidal Institute. Annual Report 1932. Pp. 15. (Liverpool.)  
 Linen Industry Research Association. Report of the Thirteenth Annual General Meeting, December 12, 1932. Pp. 14. (Lambeg.)  
 Department of Scientific and Industrial Research. Building Science Abstracts. Vol. 6 (New Series), No. 1, January. Abstracts Nos. 1-1932. Pp. 36. (London: H.M. Stationery Office.) 1s. 6d. net.  
 London School of Hygiene and Tropical Medicine. Hand-List of Periodicals in the Library. Second edition. Pp. 44. (London.) 1s. 3d.  
 Proceedings of the Royal Society. Series A, Vol. 139, No. A839, March 3. Pp. 475-730. (London: Harrison and Sons, Ltd.) 12s.  
 The Journal of the Institution of Electrical Engineers. Edited by P. F. Rowell. Vol. 72, No. 435, March. Pp. 189-268+xvi. (London: E. and F. N. Spon, Ltd.) 10s. 6d.  
 University of Bristol. Annual Report of Council to Court, Session 1931-32. Pp. 45. (Bristol.)  
 The British Mycological Society. Transactions. Edited by J. Ramsbottom, B. F. Barnes and H. Wormald. Vol. 17, Part 4, 18 March. Pp. 237-371. (London: Cambridge University Press.) 7s. 6d.  
 Proceedings of the Society for Psychological Research. Part 129, Vol. 41, March. Pp. 121-138+8 plates. (London.) 3s.  
 Department of Scientific and Industrial Research. Report of the Water Pollution Research Board for the Year ended 30th June, 1932; with Report of the Director of Water Pollution Research. Pp. iii+55. (London: H.M. Stationery Office.) 1s. net.  
 Proceedings of the Royal Irish Academy. Vol. 41, Section B, No. 9: Colonization of a Disused Millpond at Hillsborough, Co. Down. By R. H. Common and H. Cairns. Pp. 146-154. (Dublin: Hodges, Figgis and Co.; London: Williams and Norgate, Ltd.) 1s.

Annotated Account of Fungi received at the Imperial Mycological Institute. List 2 (Fascicle 2.) By E. W. Mason. Pp. 67. (Kew.) 5s. net.

East African Agricultural Research Station, Amani. Fourth Annual Report, 1931-32. (Colonial No. 78.) Pp. 43. (London: H.M. Stationery Office.) 1s. net.

Journal of the Institution of Heating and Ventilating Engineers. Vol. 1, No. 1, March. Pp. 56+xxiv. (London.)

Imperial Agricultural Bureaux. Third Annual Report of the Executive Council, 1931-1932. Pp. 20. (London: H.M. Stationery Office.) 1s. net.

#### OTHER COUNTRIES

Bernice P. Bishop Museum. Bulletin 99: Ethnology of Manihiki and Rakahanga. By Te Rangi Hiroa (Peter H. Buck.) Pp. vi+238+11 plates. Bulletin 100: Archaeology of the Marianas Islands. By Laura Maud Thompson. Pp. ii+82+11 plates. (Honolulu.)

Bernice P. Bishop Museum: Occasional Papers. Vol. 9, No. 20: Fishes obtained at Fiji in 1929. By Henry W. Fowler. Pp. 13. Vol. 9, No. 21: Check List of Tipulidæ of Oceania. By Charles P. Alexander. (Pacific Entomological Survey: Publication 2.) Pp. 12. Vol. 9, No. 22: Traces of Suffixed Pronouns in Polynesian Languages. By Spencer Churchward. Pp. 6. Vol. 9, No. 23: Check List of the Elateridæ of Oceania. By R. H. Van Zwaluwenburg. (Pacific Entomological Survey: Publication 3.) Pp. 28. Vol. 9, No. 24: A Giant Latreilopsis from Hawaii. By Charles Howard Edmondson. Pp. 9. Vol. 9, No. 25: Fresh-Water Fishes from the Marquesas and Society Islands. By Henry W. Fowler. (Pacific Entomological Survey: Publication 4.) Pp. 11. Vol. 10, No. 1: Echinodermata from Pearl and Hermes Reef. By Maximilian Holly. Pp. 9. (Honolulu.)

Proceedings of the Academy of Natural Sciences of Philadelphia, Vol. 84. African and Malagasy Blattidæ (Orthoptera), Part 2. By James A. G. Rehn. Pp. 405-511+plates 30-33. (Philadelphia.)

Proceedings of the United States National Museum. Vol. 82, Art. 11: Five New Species of North American Ichneumon-Flies. By Frank D. De Gant. (No. 2952.) Pp. 6. (Washington, D.C.: Government Printing Office.)

U.S. Department of Commerce: Bureau of Standards. Bureau of Standards Journal of Research. Vol. 10, No. 2, February, R.P. Nos. 522-530. Pp. 151-287. (Washington, D.C.: Government Printing Office.) 25 cents.

The Imperial College of Tropical Agriculture. The Principal's Report for the Year 1931-32 and the Accounts for the Year ended August 31, 1932. Pp. 32. (Trinidad and London.)

The Indian Forest Records. Vol. 15, Part 7: Provisional Volume Tables and Diameter Growth Curves for *Holoptelea integrifolia* Planch. (*kaniju*) and *Treulia nudiflora* Linn. (*gutlet*). By Ishwar Das Mahendru. Pp. iv+34+2 plates. (Calcutta: Government of India Central Publication Branch.) 12 annas; 1s. 6d.

Department of Agriculture: Straits Settlements and Federated Malay States. General Series, No. 12: Technical Reports for the Year 1931. Pp. iii+87. (Kuala Lumpur.) 50 cents.

Japanese Journal of Mathematics. Transactions and Abstracts, Vol. 9, No. 3, December. Pp. 161-230. (Tokyo: National Research Council of Japan.)

Records of the Geological Survey of India. Vol. 66, Part 2, 1932. Pp. 181-256+plates 3-10. 2.12 rupees; 5s. Vol. 66, Part 3, 1932. Pp. 257-404+plates 11-21. 2.12 rupees; 5s. (Calcutta: Government of India Central Publication Branch.)

Department of Science and Agriculture, Jamaica. Microbiological Bulletin No. 1: Panama Disease of Bananas in Jamaica. By F. E. V. Smith. Pp. ii+22. (Jamaica: Government Printing Office.)

U.S. Department of Agriculture. Technical Bulletin No. 344: Petrographic Methods for Soil Laboratories. By W. H. Fry. Pp. 96. 10 cents. Technical Bulletin No. 350: Effect of Lead Arsenate Insecticides on Orange Trees in Florida. By R. L. Miller, Ione P. Bassett and W. W. Yothers. Pp. 20. 5 cents. (Washington, D.C.: Government Printing Office.)

Report of the President of the Carnegie Institution of Washington for the Year ending October 31, 1932. Pp. 59. (Washington, D.C.: Carnegie Institution.)

Carnegie Institution of Washington. Annual Report of the Director of the Department of Terrestrial Magnetism. (Reprinted from Year Book No. 31, for the Year 1931-32.) Pp. 223-277. (Washington, D.C.)

Technical Conferences of the East African Dependencies. Proceedings of a Conference of East African Soil Chemists held at the Agricultural Research Station, Amani, Tanganyika Territory, May 21st to 26th, 1932. Pp. 25. (Nairobi: Government Printer.)

Indian Journal of Physics, Vol. 7, Part 5, and Proceedings of the Indian Association for the Cultivation of Science, Vol. 16, Part 5. Conducted by Sir C. V. Raman. Pp. 353-490. (Calcutta.) 3 rupees; 4s.

Smithsonian Miscellaneous Collections. Vol. 89, No. 2: The Latitude Shift of the Storm Track in the 11-Year Solar Period; Storm Frequency Maps of the United States, 1883-1930. By C. J. Kullmer. (Publication 3188.) Pp. 34. (Washington, D.C.: Smithsonian Institution.)

U.S. Department of Commerce: Bureau of Standards. Research Paper No. 509: Deflection of Cosmic Rays by a Magnetic Field. By L. F. Curtiss. Pp. 815-823. (Washington, D.C.: Government Printing Office.) 5 cents.

Proceedings of the American Academy of Arts and Sciences, Vol. 67, No. 13: Records of Meetings 1931-32; Biographical Notices; Officers and Committees for 1932-1933; List of the Fellows and Foreign Honorary Members; Statutes and Standing Votes; Rumford Premium; Index. Pp. 577-668. (Boston, Mass.) 1.45 dollars.

Transactions of the Geological Society of South Africa. Vol. 35, January to December 1932. Pp. iv+198+15 plates. 42s. Proceedings of the Geological Society of South Africa. To accompany Vol. 35 of the Transactions. Pp. liii. (Johannesburg.)

History of Agriculture in the Southern United States to 1860. By Lewis Cecil Gray, assisted by Esther Katherine Thompson. (Publication No. 430.) Vol. 1. Pp. xix+567. Vol. 2. Pp. ix+569-1086. (Washington, D.C.: Carnegie Institution.)