

SCIENCE NOTES AND NEWS

Protection against Leeches.—Messrs. M. J. Narasimhan and M. J. Thirumalachar, Bangalore, write to us as follows:—

For people living in the tropical rain forest regions and plantation areas, leeches have been a source of trouble during wet weather and an uncontrollable source of worry to field workers. In the arecanut gardens and coffee plantations of Mysore, the workers and labour class suffer from leech-bites to a great extent resulting in bleeding and loss of blood and often suppuration of the wound. Many ingenious devices are taken against leech-bites such as tobacco, soap, lime solution, etc.; but, during the heavy monsoons owing to the splash of rain and slushy condition of the soil none of the precautions taken have proved really effective. The only effective way is to pick them off the leg and throw them away, but this leads to divided attention between work and leeches.

An ointment prepared by the School of Tropical Medicine, Calcutta (as reported in the *Plantens' Chronicle*, January 1, 1945) composed of 1 part of cinnamon oil and 7 parts of vaseline was found effective for 24 hours, but it has to be used with care, since it is an irritant to the mucous membrane.

The following preparation was given for trial to few members of Botanical excursions party, Central College, who recently went into a heavily leech-infested area. To 300 c.c. of hot castor oil or melted petroleum jelly, enough bees-wax is added to get the consistency of a paste on cooling. Just before this mixture hardens, 5 c.c. of pyridine (C_5H_5N) is added and stirred well to ensure thorough mixing up of the ingredients. The preparation is cooled and stored in well-stoppered bottles. For use, a small quantity of this paste is smeared on the surface of the boots or legs. It has been found that the leeches on approach, first get upon the boots and seem to get benumbed, for after a few seconds they drop on the ground falling as if in a stupor and do not recover for some time. When applied to bare feet, it does not seem to cause any irritation or injury to the skin at that concentration. Boots or shoes with a good coating of this paste (with higher concentration of pyridine if necessary) retain the repellent reaction for a fairly good number of days (as yet undetermined) and splashing through water or walking through slushy places does not in anyway appear to lower the repellent effect of the paste.

Mr. B. Krishnamurthy has asked us to insert the following:—

"The work of investigation published under the title 'Alternate media for large-scale rearing of the Rice-moth (*Corcyra cephalonica* St.) in the work of mass-production of the egg parasite *Trichogramma minutum* R.' in the October 1945 issue of *Current Science* was initiated by Mr. M. J. Narasimhan, Director of Agriculture in Mysore, who first suggested the use of Tapioca as the bulk food material in place of Jowar."

University of Bombay, Department of Chemical Technology.—The Annual Report for 1944-45 just received shows that two new sections of (1) Plastics, Paints and Varnishes, and (2) Oils, Fats and Soaps have started functioning from June 1945. "The Plastic Section will train graduates in chemistry in this new and increasingly important branch of technology, so that fully qualified personnel will be available for developing the Indian plastic industry. The object of the Oils Section is to assist the Indian fatty oil industry to expand in new directions and to utilise fully the fat resources of the country. The syllabuses provide for an adequate training in chemical engineering for the students of the two new sections."

During the year under review the construction of the buildings, and the equipment of the laboratories with gas, electricity, vacuum, etc., were completed, the laboratory plumbing, steam installations, and certain other items having been carried out departmentally.

A number of scholarships are awarded to the students by the Department (10), Sir Dorabji Tata Trust (5), and other charitable Trusts (10), and so also a large number of Fellowships for research.

Eleven original contributions were published during the year, and a number of others are ready for or awaiting publication. As usual a large number of papers deal with the chemistry of dyes, wetting agents, etc.; new lines of work are also reported on synthesis under high pressures and temperatures, and on foods and drugs.

Among the technical investigations completed may be mentioned the standardisation of natural indigo; as a result of numerous experiments, it has been possible to develop a process for preparing natural indigo in a standard form of uniform quality and strength. Other investigations deal with the suitability of electro-tin plate for storing hydrogenated oil, the examination of corrosion and scale formation in the boiler of one of the millis, etc.

Dr. Frans Verdoorn, Editor of *Chronica Botanica* and Botanical Adviser to the Board for the Netherlands Indies, writes that according to reports received from Holland, Australia and Java, the scientific institutions in the Buitenzorg area (West Java) are relatively in good condition. The classic collections in the herbarium, as well as the grounds of the famous Botanic Gardens at Buitenzorg, have not been damaged to any considerable extent (it also seems that herbarium material has not been transferred to Japan). The rich library of the Department of Economic Affairs and most of the experiment station buildings are also in tact. The following may be quoted from a letter from Dr. C. G. G. J. Van Steenis, the well-known authority on Malaysian botany, just received in the U.S.A.:— "I lost altogether one year work, but worked harder than in any other period ... finished several papers, and am almost ready with my

Cyclopædia of botanical collections, and book on Malaysian Plant-Life ... Was released as a prisoner of war, August 11, 1942, again in jail, December 14, 1942 to April 13, 1943, worked again to August 13, 1945. Now again interned ... The biologists, Dr. W. K. Huitema, Ir. P. H. Heckenberg, Dr. J. H. G. Ferman, Dr. M. P. Both, Ir. C. van der Giessen, and P. van der Groot, have died. Of many others, especially Dr. M. A. Donk, Dr. P. J. Eyma, and T. H. van der Honert, not yet any news. Dr. O. Posthumus, H. C. D. de Wit and my wife still working. Hope to be released soon ..."

National Institute of Sciences of India.—At a meeting of the Council of the National Institute of Sciences of India, held on Monday, the 19th November 1945, at the Delhi University, Delhi, the ballot papers were scrutinised and the following gentlemen were declared to have been elected Fellows of the Institute:—

Ordinary Fellows.—(1) Dr. I. Banerji, D.Sc., Lecturer in Botany, Calcutta University; (2) Dr. P. B. Ganguli, D.Sc., Principal, Science College, Patna; (3) Dr. S. Ghosh, D.Sc., Professor of Chemistry, School of Tropical Medicine, Calcutta; (4) Dr. P. S. Gill, Ph.D., Professor, Forman Christian College, Lahore; (5) Dr. J. C. Gupta, M.B., Professor of Pharmacology, School of Tropical Medicine, Calcutta; (6) Dr. S. S. Joshi, D.Sc., Principal, College of Science, Benares Hindu University; (7) Dr. B. C. Kundu, Ph.D., F.L.S., Professor of Botany, Presidency College, Calcutta; (8) Dr. C. Mahadevan, D.Sc., Assistant Superintendent, Hyderabad Geological Survey, Hyderabad—Deccan; (9) Dr. P. C. Mahanti, D.Sc., F.Inst.P., Lecturer in Applied Physics, Calcutta University; (10) Dr. U. S. Nayar, M.A., Ph.D., Head of the Department of Statistics, Travancore University, Trivandrum; (11) Dr. M. V. Radhakrishna Rao, M.B., B.S., Ph.D., Clinical Research Officer, Haffkine Institute, Parel, Bombay; (12) Dr. M. L. Roonwal, Ph.D., Assistant Superintendent, Zoological Survey of India, Benares Cantt.; (13) Dr. R. E. M. Wheeler, D.Litt., Hon. D.Litt., Director-General of Archaeology in India, Simla.

Honorary Fellows.—(1) Prof. A. F. Blakeslee, Smith College, Northampton, U.S.A.; (2) Dr. R. A. Millikan, President of the California Institute of Technology; (3) Prof. P. Niggli, Professor of Mineralogy and Petrology, Federal Polytechnical University and University of Zurich.

The Bombay Metallurgical Society.—A Society of the above name has been established at Bombay with 77 members, 11 associates and 18 firms engaged in metallurgical work, as subscribers. **President:** Prof. N. P. Gandhi, formerly of the Benares Hindu University; **Secretary:** Mr. Y. M. Mehta, Partner, The Standard Plaster Works, Bombay. Those interested may obtain further particulars from the Secretary, Kennaway House, Proctor Road, Girgaon, Bombay 4.

The Meteorological Office Colloquium, Poona.—Mr. P. R. Pisharoti spoke on "The Theory of Cyclones" on 2nd and 9th November 1945,

and Dr. R. Ananthakrishnan "On Fluctuations of pressure and temperature in the atmosphere" on 23rd and 30th November 1945.

SIR M. VISVESVARAYA, K.C.I.E., LL.D., has been re-elected unanimously as President of the All-India Manufacturers' Organization for the year 1946.

The Sixth Annual Conference of the All-India Manufacturers' Organization will be held on Friday, 28th, and Saturday, 29th December 1945, in Madras at the Banqueting Hall, Government House, under the Presidentship of Sir M. Visvesvaraya, K.C.I.E., LL.D. The first day's session starts at 3 p.m. on Friday, 28th December 1945. The Conference will have special importance in view of the fact that with the cessation of the war many vital transition problems connected with the industrialization of the country which are engaging the attention of the Government and the industrialists will be discussed.

Imperial Chemical Industries (India) Research Fellowship.—The Council of the National Institute of Sciences of India, Calcutta, has awarded an Imperial Chemical Industries (India) Research Fellowship, carrying a stipend of Rs. 400 per month, to Mr. Rama Nagina Singh, M.Sc., to conduct research work on Algology under the direction of Dr. Yajnavalkya Bharadwaja, University Professor of Botany, Benares Hindu University, for two years in the first instance.

In 1938 the Burmah Oil Co., Ltd., embarked upon a large-scale survey, employing the latest known methods in the world, and at the outbreak of war, they had as many as seventeen separate geophysical parties at work in India and Burma. The survey had covered 330,000 square miles, 22,000 observation stations had been set up from which gravity measurements were made and the cost so far has been Rs. 45 lakhs. As soon as conditions permit, the B.O.C. are planning to employ the latest methods to try to find new oilfields. Amongst other companies, who engaged in oil exploration in India, is the Attock Oil Company.

ERRATA

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Page 229, Note on "Quantum Mechanical Theory of the Joshi Effect," column 1, line 21: read "ionised" for "isolated".

Page 245, Note on "Apparent Carotene and Vitamin C in Dehydrated Vegetables", in Table I heading, read "moisture-free basis" for "moisture basis".

Vol. 14, No. 10 (October 1945)

Page 261, Note on "A Relation between the Sheer Constant C_{44} ... Metals", column 2, last line of the table, under the heading ($r \times 10^8$ Calculated), the figure for K should be 4.87 in place of 8.87.

Page 276, Review of the book *A Class-Book of Botany*, para 2, line 15 (running on p. 277), read "petaloideæ" for "uitaloideæ".