clarify the taxonomic positions of *Lilium bulbiferum* and its varieties, by Dr. Fred Stoker, *L. myriophyllum*, by Mr. A. D. Cotton, and *L. pardalinum* and its allies, by Dr. Vollmer. A happy personal note is struck by Mr. A. D. Cotton, in a biography of the late Dr. E. H. Wilson, a vigorous botanical explorer who contributed greatly to liliaceous garden beauty. Capt. F. Kingdon Ward describes a new lily which he discovered in the Assam Himalayas, and Mr. M. Ogilvie-Grant has collected several new fritillaries in Greece. Other papers deal with the cultivation and horticultural grouping of the lilies which are now well-tried favourites of our gardens. Scientific work upon lily matters does not appear to have been great in amount. Dr. M. A. H. Tincker describes the rates of growth of roots in several species, and there is an account of a discussion on propagation. The net result, however, is to show the need for more accurate scientific knowledge of all phases of lily horticulture—the relation of lilies to soil conditions, to nutrition in general, to pests and diseases. There are, indeed, sufficient unanswered questions in the book to employ a lily research station for a considerable period.

Plant Growth-Substances

A RECENT report in the *Kew Bulletin* describes experiments conducted in co-operation with the garden staff but designed by Dr. C. R. Metcalfe and Dr. W. G. Templeman to test the influence of synthetic growth-substances upon the rooting of cuttings of many plants ("Experiments with Plant Growth-Substances for the Rooting of Cuttings". By C. R. Metcalfe and W. G. Templeman. *Bull. Misc. Information*, No. 8; 1939). Their results show that some 45 per cent of the species they selected have responded favourably to one or other of the treatments, which included the use of solutions of indolylacetic acid, indolylbutyric acid, and α-naphthylacetic acid, at different concentrations. The list of plants is a thoroughly representative one including many well known to practical propagators to be exceedingly difficult to root from cuttings. Their successes include some seventeen plants already listed by the Plant Hormone Committee as difficult to propagate in this way, but their results also show that other difficult plants have failed to respond to the treatments. The tabular presentation of the data affords ready reference, and many nurserymen and gardeners generally will consult their list, which, however, contains records of failures with a few species which have been successfully propagated elsewhere at perhaps other seasons of the year. It is hoped that this work will be extended to include tests of these substances applied in powder form.

Plant Disease Nomenclature

THE "List of Common Names of British Plant Diseases" compiled by a sub-committee of the British Mycological Society's plant pathology committee has been accepted by the principal societies and institutes in Great Britain which need to use such names. A certain number of emendations to the second edition are published in the Society's *Transactions* (23, Pt. 3; October 1939). No major correction appears to be necessary; the changes are such as give increased exactitude about the authorities for the names adopted, or which remove doubts previously felt about the nature of some diseases. Reasons and references are given for the more significant changes, and any mycologist interested further in this standard nomenclature may obtain additional information from Dr. G. C. Ainsworth, secretary of the Plant Pathology Committee, Imperial Mycological Institute, Kew, Surrey.

Demography of Dublin

IN the recently published report on the State of Public Health of Dublin for the year 1938 the Medical Officer of Health, Dr. Matthew Russell, states that the estimated population of the city was 477,000, the density of the population being 25·4 per acre, compared with 40·4 in 1929. The birth-rate, which was 24·4 per 1000 of the population, has shown a continuous decline since the beginning of the century, when the rate was 33 per 1000. The death-rate has shown a continuous but greater decline. In 1900 it was 30·5, whereas in 1938 it was 13·31, a drop of approximately 57 per cent. The infant mortality, while showing a considerable decline from that in the previous two years, was 98 per 1000 births, as compared with 106 in 1937 and 115 in 1936, is higher than the average—97—for the previous ten years. In 1934 the figure was as low as 74. The maternal mortality in childbirth showed a rate of 2·5 per 1000 births; the average rate for the previous ten years had been 3·07.

Earthquakes Registered at Kew

DURING November 1939 eleven earthquakes were registered on the seismograms at Kew Observatory, this number being probably fewer than the average. Nine of these are reported to have been small or confused by microseisms, and the other two both occurred on November 21. The first was received at 8h. 55m. 8s. G.M.T. with the *P* and *S* waves of small amplitude followed by large amplitude surface waves, and is stated to have been destructive in north-east Anatolia. The second was registered at 11h. 10m. 30s. G.M.T. and has been estimated to have occurred about 85 degrees distant in a direction north-east of Kew, with a deep focus, approximately 175–200 km. below the earth's surface.

Earthquake in New England

ON November 15 at about 3h. G.M.T. an earthquake was registered on the seismograms at the observatories of Weston, Georgetown, Ottawa, Pittsburgh, Fordham, Williamstown and Philadelphia. The United States Coast and Geodetic Survey, in co-operation with Science Service and the Jesuit Seismological Association, has determined the probable epicentre of this shock to have been near latitude 39° 45′ N., longitude 75° 18′ W., and that it had an origin time 2h. 53m. 48s. G.M.T. with a depth of focus near 25 km. below the earth's surface. Large earthquakes are very rare in these regions,

though small shocks and tremors have occurred very occasionally in the past. That the present shock released only a very small amount of energy, thus being no exception, is shown by the facts that no damage has been reported in this well-populated region, and that the earthquake was not registered on the seismograms obtained at Kew.

American Association: Columbus Meeting

THE one hundred and fifth meeting of the American Association for the Advancement of Science is being held during December 27–January 2 at Columbus, Ohio. General sessions will be held on December 27, when Dr. Wesley C. Mitchell, of Columbia University, will deliver an address as retiring president of the Association on "The Public Relations of Science"; on December 28, when Dr. Kirtley F. Mather, of Harvard University, will deliver the annual address arranged jointly by the Association and the Society of Sigma Xi, taking as his subject "The Future of Man as an Inhabitant of the Earth"; on December 29, when Dr. Julian S. Huxley will deliver the first address in the United States under the arrangement between the American and British Associations to provide lecturers in alternate years, speaking on "Science, War and Reconstruction"; and on December 29, when Dean Marjorie Nicolson of Smith College, will deliver the annual address under the auspices of the United Chapters of Phi Beta Kappa, and will speak on "Science and Literature". Symposia have been arranged on "Isotopes", "Photosynthesis", "Speciation", "The Relation of Ecology to Human Welfare", "Defence Mechanisms in Plants and Animals", "The Internal Environment and Behaviour", "Effects of Science upon Human Beings" and "Blood, Heart and Circulation", among other topics.

Awards of the Geological Society

THE following awards of the Geological Society of London have recently been announced: the Wollaston Medal to Mr. Henry Woods, formerly University lecturer in palæontology in the University of Cambridge, in recognition of the value of his researches into the mineral structure of the earth, especially his studies of fossil Mollusca and Crustacea from the Cretaceous formations of Great Britain, Africa and New Zealand; the Murchison Medal to Prof. Arthur Holmes, professor of geology in the University of Durham, in recognition of the value of his petrological researches and of his stimulating studies concerning the composition and physical state of the earth's interior; the Lyell Medal to Prof. H. L. Hawkins, professor of geology in the University of Reading, for his eminence in palæontology, particularly in his studies of the Echinoidea, and for his researches in Eocene stratigraphy; the Wollaston Fund to Miss Dorothea M. A. Bate for her investigations of Pleistocene mammalian faunas in Palestine and the Mediterranean; the Murchison Fund to Archibald Gordon Macgregor, for his petrological researches into Scottish rocks and his work on the geology of Monserrat; a moiety of the Lyell Fund to Miss Dorothy Hill, for her researches on Palæozoic corals; another moiety of the Lyell Fund to Mr. L. H. Tonks, for his work on the Carboniferous rocks of Lancashire and Northumberland.

Announcements

PROF. F. G. DONNAN, emeritus professor of chemistry in the University of London, has had conferred on him the honorary degree of D.Sc. of the National University of Ireland.

DR. MARY EVELYN LAING MCBAIN, formerly of the University of Bristol and now of Stanford University, California, has been elected national president of the American Women's Chemical Honor Society, Iota Sigma Pi, for the new triennium. The Society comprises 2,500 women chemists. The new secretary is Dr. I. Macy Hoobler, director of the Research Laboratory for the Children's Fund of Michigan.

A UNIVERSITY OF POLAND ABROAD was instituted at a meeting held in the Polish Library, Paris, on December 1.

IT is reported in *The Times* that many of the staff and students of the University of Poznan are being held under arrest as hostages. It is believed that the intention is to repress Polish culture and science in this overwhelmingly Polish province.

THE University of Bern has awarded the first international prize for researches on encephalitis to the Italian neurologist, Dr. Beppino Disertori.

THE January meeting of the Pathological Society of Great Britain and Ireland will be held on January 12 in the Department of Pathology at Cambridge and not at Guy's Hospital.

THE London Scientific Film Society proposes to open its 1939–40 season early in the New Year. The Society would be glad to hear from readers of NATURE of films on scientific subjects, either completed or in the process of production, which could be considered for inclusion in the Society's programmes. Applications for membership should be sent to the Secretary, L.S.F.S., 30 Bedford Row, London, W.C.1. The subscription for the season is 10*s.* or 15*s.*, the higher rate entitling the subscriber to the better seats at the shows of the Society.

ERRATUM.—Referring to his communication entitled "A Peculiar Phenomenon Observed in Larval Populations of the Flour Beetle *Tribolium confusum* Duv.", Prof. John Stanley writes that the appearances of the various larval instars as indicated in Fig. 1 were given incorrectly in his original communication. They should read as follows: first instar 6·04 days, second instar 8·47, third instar 12·10, fourth instar 15·13, fifth instar 18·40, sixth instar 21·74.