

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 *Trans-*

actions (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,