spraying. The nitrogen content of sugar-beet plants was increased equally by spraying with solutions supplying ammonium sulphate, calcium nitrate or urea in equivalent concentrations. It was observed that nutrient uptake from solutions sprayed on leaves influenced uptake by the roots, so that the additional amounts of nutrient contained in sprayed plants may be greater or smaller than the amount absorbed from the spray by the leaves.

### Triploid Dactylorchid Hybrids

PROF. J. HESLOP-HARRISON (Ann. Bot., N.S., 17, 68 and 539; 1953) has reported on the cytology of some triploid daetylorchid hybrids. During meiosis in naturally occurring triploid hybrids between the diploid  $Orchis\ fuchsii\ Druce\ (2n=40)$  and the two tetraploids, O. purpurella Steph. and O. praetermissa Druce (2n = 80), there is a regular formation of twenty bivalents and twenty univalents. Since the two tetraploid species themselves show typical 'diploid' behaviour in synapsis and fertility, they are considered to be allopolyploids, and the hybrid pairing to be alloyndetic. The implication is therefore that both tetraploids are amphidiploids of which O. fuchsii has been one progenitor. It is suggested that varieties of the polytypic diploid O. latifolia L. sec. Pugsl. may have been the other progenitors. A feature of interest in the microsporogenesis of both parents and hybrids is the close synchronization of nuclear events in the pollen massulæ, which behave as physiological units throughout meiosis and pollen-mitosis. In the triploids, although numerous dysploid nuclei are produced, none dies prematurely, probably because of mutual compensation within what is, in effect, a common cytoplasmic matrix.

#### Earthquakes during April

DURING the month of April twenty-seven strong earthquakes were recorded, including seven shocks of magnitude 6 or greater. The greatest had magnitude  $7\frac{1}{2}$  but only did minor damage in western Mexico on April 29 (epicentre at lat.  $29\frac{1}{2}$ ° N., long. 112½° W.). The shocks of deepest focus occurred on April 5 on the Argentine-Bolivia-Chile borders (epicentre at lat. 23° S., long. 67½° W., depth of focus 150 km.) and on April 13 in Catamarca Province, Argentine (epicentre at lat.  $27\frac{1}{2}^{\circ}$  S., long.  $66^{\circ}$  W., depth of focus 200 km.). All other earthquakes had intermediate or shallow foci. The greatest damage was done by the earthquakes in central Greece, beginning on April 30 (see Nature, May 29, p. 1024). Minor damage was done at Watsonville and Gilroy by an earthquake on April 25 in central California. Several of the shocks were felt, including one on April 4 in the south-west Alps near Onstmettingen, Tailfingen and Pfeffingen, one on April 5 near Rastatt (both with Modified Mercalli scale intensity 5), and one on April 25 near Friuli (Italy).

# University of London: Appointments

The following appointments have been made in the University of London: Prof. R. M. Barrer, professor of chemistry in the University of Aberdeen, to the University chair of physical chemistry tenable at the Imperial College of Science and Technology; Dr. C. Domb, lecturer in mathematics in the University of Cambridge, to the University chair of theoretical physics tenable at King's College; Dr. J. A. C. Knox, lecturer in King's College, London, to the University chair of physiology tenable at Queen Elizabeth College; Dr. D. R. Wilkie, Locke Research

Fellow of the Royal Society, to the University readership in experimental physiology tenable at University College; and Dr. M. J. Wise, lecturer in geography in the London School of Economics and Political Science, to the Sir Ernest Cassel readership in economic geography tenable at that School.

#### Ramsay Memorial Fellowships for 1954-55

RAMSAY MEMORIAL FELLOWSHIPS for research in chemistry have been awarded for 1954-55 to the following: J. R. Anderson, British Fellowship at the University of Cambridge; G. A. Sim, Glasgow Fellowship; Dr. J. A. Davies, Canadian Fellowship at the University of Leeds; G. Moralli, French Fellowship at King's College, Newcastle upon Tyne; Dr. C. Alfonso, Spanish Fellowship at the University of Birmingham; Dr. H. Jucker, Swiss Fellowship at King's College, London; and Dr. O. R. Rodig, United States Fellowship at the University of Manchester. The following Fellowships have been renewed for a year: G. T. Rogers, British Fellowship at the University of Cambridge; Dr. K. Saito, Japanese Fellowship at University College London; W. G. Hanger, New Zealand Fellowship at the University of Cambridge; S. Amer, Spanish Fellowship at the University of Cambridge; and R. H. Doremus, United States Fellowship at the University of Cambridge.

## Salters' Company: Awards for 1954-55

THE Court of the Salters' Company has elected G. Hetherington to be a Salters' Fellow for the year 1954-55 and has extended the fellowship held by P. P. Manning for a second year. Mr. Hetherington, who held a Salters' Scholarship during 1953-54, has been working in the Chemistry Department at King's College, Newcastle upon Tyne, on the chemistry of nitryl fluoride; Mr. Manning has been carrying out research work in the Chemistry Department of the University of Leeds on chemical kinetics of cyclic monomers forming linear polymers, and theoretical studies on the polymerization of olefines. The following have been elected Salters' Scholars for the year 1954-55: C. P. Brown (University of Nottingham), M. McLeman (Imperial College of Science and Technology, London), A. D. Shipman (University of Bristol), H. Spoel (University of Oxford), and W. L. Wilkinson (University of Cambridge).

#### Inter-African Soils Conference in Léopoldville. Belgian Congo

The second Inter-African Soils Conference will be held in Léopoldville, Belgian Congo, during August 9-15. A number of specialists in agronomy, soil science and conservation, not exceeding eighty in number, will be present at the Conference as delegates of the participating countries and, in addition, there will be some representatives from interested organizations. The work of the Conference will be divided into three sections: the characterization, classification and mapping of African soils; physical, chemical and biological research concerning these soils; and soil conservation. In general, a review will be made of the work accomplished following the recommendations of the previous Conference, held in Goma. The stability and agricultural characteristics of African soils and the formation of hardpan and lateritic crusts will be considered, and in the sessions on soil conservation and utilization the following topics will be discussed: various causes of erosion; means and methods used in the control of erosion;