

C.P.", H. Herre has given new and interesting information concerning this remarkable plant (*J. South Afric. Bot.*, 22, 1, 23; 1954). In and near Angola, where the species occurs, it is stated that plants are not at all rare; also, farther to the north, plants are to be found growing freely among grasses and small bushes and are not necessarily confined to desert-like areas. H. Herre states that the local inhabitants use the dry parts of the leaves for fire-making and the bigger stems as chairs. The plants typically grow in old river beds and may develop very extensive root systems, up to 60 ft. long. Young plants apparently depend on mists for their main supply of moisture. The plants are exceedingly slow in their growth and it is estimated that very large specimens, with a stem diameter of 10–15 ft., may well be as much as a thousand years old. Some twenty-five years ago seeds were first germinated in the Stellenbosch Botanic Garden. It was observed that seedlings, immediately on germination, form a long tap-root and two cotyledons. The cotyledons are followed by two leaves; these persist throughout the life of the plant and are, in fact, the only leaves the plant ever has. They wear away at the tips and are constantly renewed by growth at the leaf-base. The flowers, which are dioecious, are produced annually. Under Stellenbosch conditions, twenty-three years elapsed before the first (female) flower appeared. Some details of the floral development and pollination are given, a brown bug being the agent of pollination in the plant's natural habitat. The paper is illustrated by some good photographs.

Vegetative Proliferation in Grass Spikelets

THE proliferation of spikelets in grasses other than those races which are habitually viviparous, and the factors which induce proliferation under experimental conditions in *Cynosurus cristatus* and other species, have been discussed by P. R. Wycherley (*Ann. Bot.*, N.S., 18, Jan. 1954). It is concluded that the evidence favours the hypothesis that in the viviparous races a considerably greater minimal concentration of the putative flowering hormone is required for flower induction than for culm initiation, whereas in the seminiferous races this difference is not so great. In the viviparous races, the threshold for flower initiation is rarely exceeded so that perfect flowers appear only occasionally, while in the normally seminiferous races the conditions arise only rarely where an amount of hormone is produced sufficient to initiate culms but insufficient to promote flowering.

Fuel Research Board: Report for 1953

IN these days when public attention is being focused from many directions on questions relating to fuel, its use and misuse, the report for 1953 of the Fuel Research Board with the report of the Director of Fuel Research (pp. 68 + 4 plates. London: H.M.S.O., 1954; 2s. 6d. net) is particularly opportune. One of the fields of misuse became the subject of public attention as the result of the persistent and highly polluted fog experienced in London in December 1952, and as a result the Government instituted a special inquiry into the broad aspects of the problem of atmospheric pollution and the preventive measures necessary to abate its effects on health and property. (No. 95 of "Reports on Public Health and Medical Subjects", which deals with the great fog of December 1952, has now been published; pp. 61 (London: H.M.S.O., 1954); 2s. 6d. net.) In the report of the

Fuel Research Board will be found many references to the nation-wide surveys of pollution and to the research work which has been prosecuted by the Board for some time into the problems involved. It is opportune, too, that there should be recognition that these matters have not been neglected, and that, in addition, the problem is associated with the work of many other organizations—indeed, with the daily work of almost everyone who is concerned technically with the use of fuel of any type. Most interesting is the statement that the work on the programme of domestic heating has become intensified, for nearly one-half of the pollution by smoke arises from the use of coal in household grates, and this aspect of smoke pollution involves the most difficult problems in the application of preventive measures. Many other fields of fuel research are dealt with in the report, including work on the chemical and physical examination of coal, carbonization, gasification, the synthesis of oil and chemicals from coal, fuel oils, boilers and steam-raising, and the combustion in the coal-fired gas turbine; indeed, the multitude of activities must involve considerable co-ordination with other more specialized organizations also dealing with these aspects of fuel research.

Bibliography of Colour Television

THE Television Society has recently published a most useful "Bibliography of Colour Television" (pp. 16; from the Television Society, 164 Shaftesbury Avenue, London, W.C.2; 1954; 2s. 6d. post free), which was prepared in November 1953 by Mrs. K. Bourton, librarian of Ultra Electric, Ltd., and circulated among members of the radio industry. The bibliography is divided into two sections: optical and electrical. The former starts with a reference to a paper by J. Clerk Maxwell, "On the Theory of Compound Colours and their Relation to the Colours of the Spectrum" (*Phil. Trans. Roy. Soc.*, 1860), and continues with sixty-eight references to papers and books published up to 1952. The electrical section contains 313 references to papers and books, arranged in chronological order from 1934 to 1954. A list of abbreviations used and an alphabetical list of authors are included. This brochure should prove most useful to all those engaged in the science and future development of colour television.

Fourteenth Congress of Pure and Applied Chemistry, Zurich

THE Fourteenth International Congress of Pure and Applied Chemistry will be held in Zurich during July 20–28, 1955, under the presidency of Prof. P. Karrer (Zurich). At the same time, during July 21–27, the opportunity will be taken to hold the Eighteenth Conference of the International Union of Pure and Applied Chemistry, under the presidency of Prof. A. Tiselius (Uppsala). Further information regarding the Conference can be obtained from Prof. R. Delaby, 4 Avenue de l'Observatoire, Paris 6^e. The Congress will be concerned exclusively with pure and applied organic chemistry and has been provisionally subdivided into three main sections: theoretical and physical organic chemistry (molecular structure, stereochemistry and reaction mechanisms); natural products (aliphatic and alicyclic compounds, including terpenes and steroids, carbohydrates, amino-acids, aromatic and heterocyclic compounds, alkaloids and glycosides); and synthetic, industrial and analytical organic chemistry (dyestuffs, plastics, tanning agents, synthetic resins, and synthetic and analytical