has affinities with *Sequoia*, but I maintain, from detailed comparison with the living material of *Cryptomeria*, that our fossil is exceedingly like this living genus.

The general conclusion reached by Prof. Jeffrey is that 'it is clear that regions so widely separated geographically as Southern New England and Northern Japan were characterized during the Cretaceous period by a similar and characteristic Coniferous flora'. The pairs of genera above considered are from different horizons in different continents, and the fructifications are unknown. Palaeobotanists have been too much given in the past to generalizations from data of this sort. Prof. Jeffrey adds, 'The validity of this conclusion is much strengthened by the nature of the Abietineous remains recently described by Miss Stopes from the same deposits, since these correspond closely, so far as they go, with remains . . . from . . . Kreischerville.' Now, one of the two Abietineous leaves I then described from my Japanese material is notable in being exactly like the leaf of a modern *Pinus*, transfusion tissue, endodermis, infolded mesophyll and all (see Stopes and Kershaw, Ann. Bot., xxiv, p. 399 et seq.). The facts in this paper go directly against the previous conclusions of Prof. Jeffrey, who (Ann. Bot., 1908) had said for the study of the American leaves, 'One feature which, in general, serves to distinguish all of the Cretaceous Pines thus far examined . . . is the very wide zone of transfusion tissue surrounding the leaf-bundles', and other features of endodermis, mesophyll, &c., unlike modern pines.

It must be obvious that the time is not yet ripe for 'general conclusions' about the flora of the Cretaceous epoch.

M. C. STOPES.

THE UNIVERSITY, MANCHESTER.

A NEW PARASITIC FUNGUS FOUND IN THE ROOTS OF GRASSES.—
PRELIMINARY NOTICE.—I have found tubercles or swellings on the roots of *Poa annua* and other grasses. These tubercles, and to a greater extent the roots themselves, when microscopically examined, revealed the presence of a fungoid parasite allied to *Sorosphaera Junci*. This fungus, which is, I believe, new to botanical science, I propose to call *Sorosphaera Graminis*. There are several interesting points of difference between these two parasites, the amoebae of the latter of which, for instance, send out protoplasmic threads which penetrate through the cell-wall from one cell into its neighbour. One means by which infection is effected is by the entrance of an amoeba into a root-hair.

I hope shortly to publish a detailed account of the life-history of *S. Graminis*, including its cytology, which in most respects agrees with that of other members of the Plasmodiophoraceae.

E. J. SCHWARTZ.

Schwartz, E. J. 1911. "A new parasitic fungus found in the roots of grasses.—Preliminary notice." *Annals of botany* 25, 270–270.

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