Foresters as well as forests share in the proscription. Epithets applied to them range from the familiar one which the author indicates by a long blank line, to the entirely new one "Puginesque." All foresters will be grateful for this addition to their vocabulary ; the more so because, had a forester written the book, he would probably have reversed the procedure and used the line for the new word, whilst penning the familiar one in full. Could anything illustrate more clearly the irreconcilability of the author's outlook and the forester's ?

C.M.S.

The Physical Basis of Mycotrophy in Pinus—A. B. Hatch, Ph.D. pp. 168 : 16 plates : 21 figures—Published by The Black Rock Forest, Cornwall-on-the-Hudson, New York. (Bulletin No. 6) 1937.

Students of mycotrophy and foresters generally will be indebted to Dr. Hatch for this valuable contribution towards a better understanding of tree mycorrhizae.

Claiming that the experimental approach is the only one that appears capable of yielding conclusive results, the author describes a series of experiments conducted between 1929 and 1935, at first in Sweden (under the influence of Dr. Elias Melin) and later in America.

Of the many experiments described, the confirmation of Stahl's theory (1900) is perhaps of outstanding interest ; the author has convincingly proved that mycorrhizae occur only under conditions of nutrient deficiency in the soil, whilst in all but fertile agricultural soils (characterized by nutrient sufficiency) pines, and other trees which form ectotrophic mycorrhizae, are incapable of existence without mycorrhizae.

In a brief chapter entitled "Significance in forestry," the author strongly emphasizes the need for "precise information on the influence of different species of mycorrhizal fungi upon the growth of our most important trees planted in a wide variety of habitats," but does not dwell upon the methods of approach, merely hinting that "this knowledge once gained may prove more useful in forestry than has a similar knowledge of the root-nodule habit of legumes in agriculture."

The inoculation of virgin nursery soils with mycorrhizal fungi is now in most countries (including New Zealand) a routine practice and although frequently successful does not invariably provide the final solution, since, as pointed out by Dr. Hatch, mycorrhizal fungi are more exacting in their site requirements than the trees with which they are associated ; in the reviewer's experience this applies particularly to Douglas fir in New Zealand.

The correlation of gradually accumulated evidence bearing on the mycorrhizal requirements of forest trees is possible only with a background of fundamental research such as that under review. This bulletin, splendidly illustrated, and with a bibliography of over 200 citations, constitutes a valuable addition to forest literature.

T.C.B.