

## BOOK NOTICES.

Several pamphlets have been sent to the editor, which will be noticed as space and occasion permit. The following will be of interest to fruit-growers :—

“The composition of Apple-tree Leaves” by F. T. Shutt, M.A., F.I.C., F.C.S., Chemist to the Dominion Experimental Farms. The above is the title of a useful paper, the separates of which have just been distributed, that was read by Mr. Shutt before the convention of fruit-growers of the Dominion, held at Ottawa in February last. The work was undertaken with the object of suggesting a rational method for the application of fertilizers to apple orchards. Analyses are given of the leaves of five of the best known varieties, at two different stages of growth—on 25th May when the leaves were just unfolded and on 20th September when they had fully matured. The results are given in tabular form, arranged under the following heads :—i. Composition of Leaf, showing the percentages of moisture, organic matter and ash. ii. Percentage composition of important constituents in Ash, giving the amount of phosphoric acid, potash, lime, magnesia, oxide of iron and silica. iii. Nitrogen in Organic matter. iv. Weight of Fertilizing Constituents in 1,000 lbs. of Leaves, namely, Nitrogen, Phosphoric Acid and Potash.

From the data in the above table we ascertain the extent to which the soil is exhausted by the apple-tree as regards its leaves. This is valuable knowledge. We are told that Mr. Shutt intends to make a complete series of analyses of the apple tree in which the old and young wood as well as the fruit will be included. We shall then have definite knowledge by which the fruit grower will be able to obtain the best results, and will be able to carry on his operations with precision and without doubt as to the results. Below are Mr. Shutt's conclusions, founded upon his scientific investigation, and it will be seen that they coincide exactly with the results which have been arrived at by practical orchardists after many years of experience and trial, with the important difference that the scientific man knows that his results must be accurate, while the man who has only his practical experience to back him only thinks he is right without knowing the reason why :—